CHAPTER 4. CUMULATIVE AND GROWTH-INDUCING IMPACTS

4.1 CUMULATIVE IMPACTS

Section 15355 of the State CEQA Guidelines defines "cumulative impacts" as referring to two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts.

Section 15130(a) of the State CEQA Guidelines states that;

An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable.... Where a lead agency is examining a project with an incremental effect that is not 'cumulatively considerable,' a lead agency need not consider that effect significant, but shall briefly described its basis for concluding that the incremental effect is not cumulatively considerable.

The State CEQA Guidelines (Section 15130) suggest that potential cumulative impacts be assessed by either developing a list of past, present, and probable future projects producing related or cumulative effects, or a summary of projections contained in an adopted general plan or related planning document. The CPUC has determined that, because of the somewhat unique nature of the project, neither of these approaches would be entirely appropriate to fully address the potential for cumulative effects. In addition, because of their general similarities, each of the alternatives would result in essentially identical cumulative effects. The CPUC has therefore determined that an issue-by-issue examination of potential cumulative effects on resources in the project area is the most expedient and appropriate method for addressing cumulative effects.

The discussions below describe the potential cumulative impacts for each resource topic. For the most part, the project is determined to have very little potential for cumulatively considerable effects as defined in Section 15065(c) of the State CEQA Guidelines. Most of the project's effects are temporary and many of the long-term effects are either not additive to the effects of other projects, or are so minor as to be not cumulatively considerable. For purposes of this analysis, the geographic scope of this impact assessment is limited to the areas immediately adjacent to and surrounding the project sites. Air quality issues, however, are examined in the context of the entire San Joaquin Valley air basin.

4.1.1 LAND USE

As described in Section 3.1, "Land Use", implementation of the project would result in the permanent loss of approximately 2-12 acres of Prime Farmland and 8-13 acres of various farmland categories depending on the alternative resulting from construction of permanent project features such as the compressor station, separation facility, and well pads. Although the loss of prime farmland is an

important issue statewide, there are approximately 4.3 million acres of designated prime farmland in the state (California Department of Conservation, 1998) and the loss of 2-12 acres of prime farmland scattered over the project area is not a cumulatively considerable effect. Similarly, the project's effects on agricultural production in the project area are primarily temporary and minor and would not contribute to any ongoing cumulative effect on land use.

4.1.2 POPULATION AND HOUSING

As described in Section 3.2, "Population and Housing", all of the alternatives considered in this EIR would have only minor and temporary effects on population and housing demand. No identified ongoing cumulative effects are related to these issues. The project would not contribute to any cumulative effects on population and housing.

4.1.3 GEOLOGY, SOIL, AND PALEONTOLOGY

As described in Section 3.3, "Geology, Soil, and Paleontology", all of the alternatives considered in this EIR would have only minor and temporary effects on geology and soils. No identified ongoing cumulative effects are related to these issues and the effects of the proposed project would be temporary and minor. The project would not contribute to any cumulative effects on geology, soil and paleontology.

4.1.4 HYDROLOGY

As described in Section 3.4, "Hydrology", all of the alternatives considered in this EIR would have no long-term effects on hydrology and would meet all applicable water quality-related requirements during construction and pipeline testing. These potential water quality effects would be temporary and minor and would not contribute to any ongoing cumulative effects. During project operation under all of the alternatives, water produced with withdrawn gas would be injected back into the source aquifer and would not degrade or otherwise affect the aquifer, which is more than 2,000 feet deep, brackish, and not used for any potable or irrigation purposes.

4.1.5 AIR QUALITY

As described in Section 3.5, "Air Quality", all of the alternatives considered in this EIR would result in temporary increases in emissions during construction. These emissions are considered significant and, for some pollutants, unavoidable impacts, in part because of already degraded air quality conditions in the region. Mitigation was incorporated into the proposed project by the Applicant and additional mitigation measures are discussed in Section 3.5, "Air Quality". However, as these effects are temporary, there would be no long-term contribution to ongoing cumulative effects on air quality.

Similarly, operation of the project under any of the alternatives would result in emissions of pollutants that could potentially contribute to ongoing cumulative effects. However, the contribution of the project to these effects would be exceedingly minor (see Section 3.5, "Air Quality") and not cumulatively considerable. In addition, the stationary source permitting process in San Joaquin Valley Unified Air Pollution Control District requires new sources to provide complete offsets for any new air quality effects that exceeds its significance thresholds, meaning that the project would result in no net increase in emissions in the air basin. Therefore, the project would ultimately result in no net increase or even a net decrease in cumulative air quality effects.

4.1.6 TRANSPORTATION AND CIRCULATION

As described in Section 3.6, "Transportation and Circulation", all of the alternatives would result in temporary increases in traffic and effects on circulation patterns during construction. Roadways affected by the alternatives are not currently experiencing significant traffic volumes and construction of any of the alternatives would not contribute to any cumulative effects. During project operation under all of the alternatives, a very small number of trips would result from employee transportation to and from the site and from inspection of project facilities. Again, the number of trips associated with these activities is exceedingly small and there are no identified ongoing cumulative effects on transportation and circulation.

4.1.7 BIOLOGICAL RESOURCES

As described in Section 3.7, "Biological Resources", each of the alternatives would potentially result in some temporary effects on biological resources. These effects would be highly localized, minor, and temporary. There are no identified ongoing cumulative effects on biological resources to which any of the alternatives would contribute.

4.1.8 ENERGY AND MINERAL RESOURCES

As described in Section 3.8, "Energy and Mineral Resources", the alternatives considered in this EIR would have no effect on energy or mineral resources. Therefore, the project would not contribute to any cumulative effects on energy and mineral resources.

4.1.9 PUBLIC HEALTH AND SAFETY

As described in Section 3.9, "Public Health and Safety", the alternatives considered in this EIR may result in some increase in hazards in the project area resulting from the operation of a high-pressure natural gas pipeline. However, there are no identified ongoing cumulative effects on public health and safety to which the alternatives would contribute.

4.1.10 NOISE

As described in Section 3.10, "Noise", the alternatives considered in this EIR would result in some increases in noise in the project area. However, the project would be designed to meet all applicable noise standards and ordinances and any resulting increase in noise levels would be minor and localized. Therefore, the project would not contribute substantially to any existing cumulative noise effects.

4.1.11 PUBLIC SERVICES AND SOCIOECONOMICS

As described in Section 3.11, "Public Services and Socioeconomics", the alternatives considered in this EIR would result in only very minor increases in the demand for public services. Increases in the demand for public services would primarily result from an emergency at a project facility requiring response from police or fire protection services. However, this increased demand would be highly unlikely and attempting to quantify any such effect would be speculative. This potential effect on public services is therefore found to be not cumulatively considerable.

4.1.12 VISUAL RESOURCES

As described in Section 3.12, "Visual Resources", the alternatives considered in this EIR would result in minor effects on the visual character of the project area. However, the project area is not highly sensitive and the introduction of project facilities is generally consistent with existing facilities located throughout the project area. The project would therefore not contribute to cumulatively considerable visual effects.

4.1.13 CULTURAL RESOURCES

As described in Section 3.13, "Cultural Resources", the alternatives considered in this EIR would not affect any known cultural resources. Therefore, the project would not contribute to any cumulative effects on cultural resources.

4.2 GROWTH-INDUCING EFFECTS

Section 15126.2(d) of the State CEQA Guidelines requires that an EIR consider the growth-inducing impact of a proposed project. This section states in part that an EIR should:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth. The proposed project would provide a major underground storage facility for natural gas purveyors. This would facilitate the maintenance of a more consistent supply of natural gas for delivery to customers statewide, reducing the potential for periodic shortages. This increased availability of a steady supply of natural gas is not likely to remove obstacles to growth. The increased availability is more likely to increase competitiveness among energy providers in the deregulated market and possibly reduce reliance on less clean sources of fuel and energy, such as oil, that are currently used during periods of natural gas shortage. Therefore, the project is not expected to induce economic or population growth.