

Comments from Public Meeting on the Draft EIR

**Lodi, California
October 13, 1999**

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Comments from Mr. Wirtz

1. Will the pipeline be marked with aboveground markers?

Aboveground markers will be placed along the pipeline corridor.

2. What types of trees will be planted around the compression facilities?

The specific species, density, and size of trees to be planted around the compressor facility to establish an effective landscaping buffer will be part of the site design and landscaping program that LGS will submit to the CPUC for review and approval. As presented in Mitigation Measure 3.12-1, LGS will consider using evergreen trees and shrubs because they tend to be fast growing and would provide year round screening of project facilities.

Comments from Mr. Padden

1. Avoid construction from mid-September to the end of February because this is the time of year that the sandhill cranes are present.

Mitigation Measure 3.7-6 has been revised. See Chapter 3, "Revisions to the Draft EIR", in this final EIR.

Comments from Mr. Van Axil

1. Is there a way to avoid impacting the businesses and homes on the east of Interstate 5?

The preferred alternative follows a different alignment for the pipeline than did the proposed project. In the area east of Interstate 5, the preferred alternative is largely in road rights-of-way and impacts on homes and businesses would be short-term during project construction only.

- 2. I am concerned about the devaluation of my property due to numerous easements on my property and the potential for an eminent domain action against my land.**

The preferred alternative is almost entirely within existing road rights-of-way in the area east of Interstate 5 as are the other project alternatives as well. Therefore, there will be only easement requirements for the pipeline in this portion of the project area.

Comments from Mr. Corgorno

- 1. Maps in the EIR need to show the three high pressure gas mains on my property.**

The presence of three high-pressure gas lines on the property owned by Mr. Corgorno is noted

Comments from Mr. Wirtz

- 1. How long will it take to trench, lay the pipe, and close the trench?**

The length of time that the trench remains open depends on the complexity of the particular pipe segment. For example it may take several days to work around existing buried infrastructure. In other areas, a mile or more may be completed in a day. Because the pipeline arrives at the site in 40-foot segments and is welded together as it is placed in the trench, there will always be a portion of trench open along the alignment during the construction period during daytime hours.

Comments from Mr. McGhie

- 1. The redtail hawk described in the Applicant's PEA is in the tree closest to the road.**

Comment noted. As described on page 3.7-20, the Applicant will be required to conduct preconstruction surveys for nesting raptors and establish buffers around the nest until the young have fledged.

- 2. What would be the impact of a train derailment on a completed pipeline? Will there be a warning system?**

As described on page 2-29 of the DEIR, steel or concrete casings would be used to protect the pipeline at railroad crossings. Under the worst case situation, a train derailment, could result in a rupture of the pipeline and a fire. As described on page 2-33 of the DEIR, a leak detection system would identify the sudden loss of pressure and automatically close isolation valves and shut down operations of the project facilities. Gas in the ruptured segment would vent to the atmosphere.

3. Who would be liable in the event of pipeline rupture or damage, or potential contamination caused by the project?

LGS and/or the party causing any damage would likely be liable, depending on the specific circumstances..

Comments from Mr. Ruhl

1. I Think that the project is not feasible because it impacts so many people.

The opinion of the commenter regarding project feasibility is noted. Public controversy is one of many elements considered by the CPUC in its decision-making role.

2. I do not want to see a company make money off the storage of gas.

As described on page 1-2, Section 1.2.1, “Background”, there is limited pipeline capacity bringing gas in to California. Therefore, in periods of high demand, the state experiences shortages, which have significant air quality and cost implications to the people of California. The CPUC and the California Legislature determined that providing additional gas storage in the state was desirable method of addressing this shortage. For competition to increase in the natural gas storage market, there must be some financial incentive for private utilities to take the risks necessary to implement such a project.

Comments from Mr. Moore

1. With approximately 900 feet of separation between water wells and the natural gas storage pockets, will natural gas injection affect the underground water aquifer?

Because the Lodi natural gas field still retains some gas and recently safely contained substantially more gas than it currently contains, there is no reason to believe that the field cannot be safely used for storage. In addition, because the distance between the top of the storage facility and the bottom of the potable water (approximately 500 feet below ground surface [page 3.4-6 of the DEIR]) is almost 1,500 feet, it is highly improbable that a water-well driller would inadvertently drill into the storage reservoir.

2. What will the impact be on local growers if natural gas chimneys leak into deep water wells?

Natural gas chimneys were not investigated. It is possible for wells to penetrate shallow deposits of natural gas. It is common for natural gas to move through fractures in bedrock. However, there is no evidence that formation proposed for storage is fractured and leaking.

3. Are there other aquifers that these storage pockets might affect like the one in the vicinity of Linden?

Wells drilled in Linden are not similar to this project because of different geological conditions. Linden is approximately 15 miles southeast of the Lodi Gas field. In that area, being closer to the foothills, it is likely that the valley fill deposits are much shallower and the well driller encountered the basement bedrock formation.

4. Please describe in detail how you will monitor and test for impacts on groundwater.

The groundwater monitoring program is described on page 2-45 of the draft EIR.

Comments from Ms. Ost

1. What will the compressor site smell like and how will it vent?

The comment concerns compressor venting and potential for odors resulting from operation of the project. The potential for objectionable odors is analyzed in Section 3.5, "Air Quality". Venting of the compressor is discussed in Chapter 2, "Clarification of Major Issues", of this final EIR.

Comments from Mr. Klauer

1. Why wasn't the pipeline continued along Peltier Road?

Based on professional judgement, the alternative pipeline alignments were not continued along Peltier Road because there would be substantial impacts on traffic. Peltier provides one of the few crossings of the Mokelumne River and it was determined that disrupting the traffic would have adverse regional effects, therefore not meeting the routing criteria of minimizing effects on agriculture, and conflicts with residential land uses.

2. How much permanent footage is needed, after construction, to maintain the right-of-way on the pipeline?

As described on page 2-23 of the DEIR a permanent easement of 30 feet will required for the pipelines. However the applicant will permit reestablishment of agricultural uses over the pipeline.

Comments from Mr. Allen

- 1. What will Lodi Gas Storage do about any odors or leaks that occur as a result of the project? Are there things they can do to prevent leaks or rectify the smell?**

The comment concerns the potential for odors resulting from operation of the project and compressor venting procedures. The potential for objectionable odors is analyzed in Section 3.5, “Air Quality” in the draft EIR, and discussed in Chapter 2, “Clarification of Major Issues”, of this final EIR.

- 2. Who will Lodi Gas Storage notify if there’s a problem? How are they going to notify homeowners?**

LGS will coordinate with local emergency service providers to establish communications links and protocols for notification and response in the event of emergencies. These protocols will include notification lists of residents in the immediate vicinity of project facilities. In the event of an emergency, LGS will contact local emergency service providers, including local fire districts, law enforcement personnel, and emergency medical response agencies, as necessary. Based on the nature and severity of the emergency, as determined by the local emergency service providers, the established notification protocol will be used to inform potentially affected residences of emergency situations.

- 3. How noisy will the compression facility be?**

Noise impacts of the project are analyzed in Section 3.10, “Noise” of the draft EIR.

- 4. Will Lodi Gas Storage be installing any warning devices if the pipeline ruptures?**

As described on page 2-33 of the DEIR, the leak detection system and other safety systems would identify the sudden loss of pressure or other abnormalities and automatically close isolation valves and shut down operations of the project facilities. The applicant will report the incident to the U.S. Office of Pipeline Safety and the California Office of Emergency Services which will coordinate any necessary response.

Comments from Mr. Leventini

- 1. What will the compressor site smell like and how will it be vented? How long will it vent? How much noise is associated with venting?**

The comment concerns the potential for odors resulting from operation of the project, compressor venting procedures, and noise associated with venting. The potential for objectionable odors is analyzed in Section 3.5, “Air Quality” in the draft EIR. Possible noise impacts are analyzed in Section 3.10, “Noise” in the draft EIR. Odors resulting from operation of the compressor facility, and an explanation of venting procedures and associated noise levels are also discussed in Chapter 2, “Clarification of Major Issues”, of this final EIR.

Comments from Ms. Laird

1. Why would the CPUC approve a project that is opposed by local residents?

The CPUC will take local opinion into account in making its decision on the project.

Comments from Ms. Leventini

1. What will the compressor site smell like and how will it be vented? How long will it vent? How much noise is associated with venting? Is there a way to notify the residents about venting?

The comment concerns the potential for odors resulting from operation of the project, compressor venting procedures, and noise associated with venting. The potential for objectionable odors is analyzed in Section 3.5, “Air Quality” in the draft EIR. Possible noise impacts are analyzed in Section 3.10, “Noise” in the draft EIR. Odors resulting from operation of the compressor facility, and an explanation of venting procedures and associated noise levels are also discussed in Chapter 2, “Clarification of Major Issues”, of this final EIR.

Comments from Ms. Jenkins

1. Please describe the mitigation monitoring for air quality impacts in detail. Who will monitor air quality? If there are violations, how long does Lodi Gas Storage have to fix the violations? How will Lodi Gas Storage finance the corrections? What happens if Lodi Gas Storage does not fix the violations?

Monitoring of emissions during project operations will be the responsibility of the San Joaquin Valley United Air Pollution Control District. The details of required monitoring and reporting will be described in permit documents issued by the Air District.

Comments from Mr. Seifert

1. What are the emergency response implications for this project? Specifically, the possible need for evacuation, fire containment, or other issues?

This comment concerns the emergency response implications of the project. As discussed in Section 3.11, “Public Services and Socioeconomics” of the draft EIR, the project would result in the temporary increase in demand for emergency services during project construction as construction activities could result in injuries to construction workers. Emergency service providers in the area would be able to respond to these construction-related injuries because they are located within an appropriate distance. Increased demand for emergency response related to the risk of fire at the compressor or separation facility would be offset by LGS’s commitment familiarize fire department personnel with project facilities, assist in training local fire

department personnel to respond to fires involving natural gas facilities, and providing equipment, as necessary, to respond to potential emergencies at project facilities. The CPUC has also proposed an additional mitigation measure to address this concern. See Chapter 3, “Revisions to the Draft EIR”, in this final EIR.

2. Does the compressor facility pose similar implications?

This comment concerns the emergency response implications of the compressor facility. Please see the response to Comment 1 above.

Comments from Mr. Simffenderfer

1. How much pressure will the gas be under inside the pipeline on a daily basis?

The pressure in the pipeline at any particular location will very depending on the operation of the system. The system will normally at a pressure similar to the pressure of the PG&E lines that the project will connect to. The PG&E line 401 is operated at approximately 750 pounds per square inch (psi). The typical operating pressure of the pipeline between line 401 and the compressor is 935 psi. The typical pressure between the compressor and the well field would be 1,400 psi.

2. Please describe the air quality impacts of the compressor facility and its impacts on adjacent residents and residential populations.

This comment concerns the potential for the project to result in the emission of toxic air pollutants, specifically formaldehyde. As part of the air quality analysis for this project, a screening level health risk assessment was conducted based on methodology recommended by the California Air Pollution Control Officers Association. This analysis is presented on pages 3.5-14 through 3.5-15 of the draft EIR. The analysis found that the highest estimated cancer risk would result from the exposure to formaldehyde emissions and equals a cancer risk of 3.4 per million people which is less than the San Joaquin Air District threshold of 10 per million people.

Using extremely conservative air quality dispersion modeling, formaldehyde concentrations from the proposed project were estimated to equal a maximum of 14.28 micrograms per cubic meter (ug/m^3) averaged over 1 hour and 0.57 ug/m^3 averaged over one year. The annual concentration of 14.28 ug/m^3 is associated with an increased cancer risk of 3.4 per million people.

Formaldehyde is normally present a low levels in both outdoor and indoor air. Residences or offices that contain products that release formaldehyde to the air can have formaldehyde levels of more than 375 ug/m^3 . Products that add formaldehyde to the air include particle board, fiberboard, and urea-formaldehyde as insulation (EPA web site: <http://www.epa.gov/iedweb00/formalde.html>).

No federal standard has been set for indoor air concentrations of formaldehyde; however, the Occupational Safety and Health Administration (OSHA) now regulates formaldehyde as a

carcinogen. Some states have established a standard of 499 ug/m³ in their residential building codes while California has established a much lower recommendation of 62 ug/m³. Consequently, the standards set for indoor air concentrations of formaldehyde at the federal and California levels are well above the incremental increase in outdoor concentrations that would result from the proposed project.

3. Please describe exactly how the compressor facility will be operated. How many hours per day will it operate? Will it operate at full capacity?

The comment concerns the plant operating time factor (“load factor”) of 40% noted in Table 3.5-5 and the reality of this operating time factor given the project objective to be able to inject/withdraw natural gas 3-2 times per day. LGS does plan to use 100% of the capacity of the compressor facility when required (e.g., when LGS needs to flow the maximum flowrate of gas within the minimum suction pressure and maximum discharge pressure); however, the load factor is different from engine capacity. While the term “load factor” refers to operating restrictions which could result in the occasional operation of the compressors at a maximum capacity, it is likely that most of the time conditions will be such that the compressors are not operating at maximum capacity. LGS has modeled the proposed system and has determined that the predicted load factor for the compressors is somewhat less than 40%. This implies that the compressors operate at less than capacity some of the time, at capacity some of the time, and are idle some of the time. Consequently, the emission estimates for the proposed project assume a 40% load factor. If, during a one-year period, fuel usage reaches an amount close to 40% load factor, the Air District will require LGS to reduce or stop operation of the engines for the remainder of the year.

4. How much noise will the compressor facility create? (Please show in decibels on a radius map).

This comment concerns noise levels resulting from operation of the compressor. Noise impacts resulting from operating the compressor are disclosed in Section, 3.10, “Noise” of the draft EIR. The results of a worst-case analysis of compressor operation, which assumed that all four engine-driven gas compressors would operate at full load conditions and that all auxiliary equipment would be operating simultaneously and additionally assumed full implementation of the noise-reduction measures identified by the applicant (summarized in Section 2.4.13, “Mitigation Measures Proposed by the Applicant”), indicated that expected noise levels would be approximately 45 dBA. This noise level is substantially lower than existing ambient noise levels (which range from 58- to 68-dBA) at the nearest sensitive receptors (located adjacent to Highway 99) and would therefore not be noticeable. Noise level contribution to other sensitive receptors located slightly farther away from the compressor site were predicted to be between 40 and 45 dBA. Existing noise levels at these receptors range from 40- to 45-dBA. Noise levels associated with infrequent venting of the compressor are discussed in Chapter 2, “Clarification of Major Issues”, of this final EIR.

Comments from Ms. Seifert

1. How many wells, injection and pumping, will be located on our property?

The applicant will negotiate the specific location of the individual well pads and well construction sites with each affected landowner. Recently, the Applicant has negotiated with this landowner to combine well construction sites 1 and 2 at construction site 2, as shown on Figure 2-2 of the draft EIR. Four of the 10, or up to 11 proposed injection/withdrawal wells will be located within construction site 2. This project change, also reflected in Chapter 3, "Revisions to the Draft EIR", reduces potential adverse effects on the landowner's dairy operations. The change may also reduce potential noise impacts, described in the draft EIR, to residents located on Collier Road.

2. Where will the pipeline go across the property, in the middle or along the edge?

To the extent feasible the pipeline will be located along farm roads, property boundaries, the edges of fields, and within turning rows to minimize disruption to agricultural operations during construction and to facilitate efficient monitoring and maintenance during project operation.

3. Will access roads or other access be needed to the pipeline?

Access roads may be required during construction of the pipeline to facilitate access by construction equipment. Crop production would be allowed to be reestablished along the pipeline corridor and access roads after construction is completed.

4. I am concerned about the effects on our dairy and cattle.

As discussed in Section 3.1, "Land Use, Planning, and Agricultural Resources" of the draft EIR, numerous measures have been incorporated into the project to minimize disruption to agricultural operations in the project area. These measures range from locating the pipeline along farm roads and field edges, to avoiding construction in vineyards during harvesting season, to burying the pipeline at a sufficient depth so as to not preclude future agricultural uses. Mitigation measures proposed by the Applicant together with mitigation measures identified in the draft EIR will minimize the project's disruption to agricultural operations. In addition, LGS has relocated wells based on negotiations with the landowners. See Chapter 3, "Revisions to the Draft EIR", of this final EIR.

Comments from Ms. Sorour

- 1. What gives this company the right to come to Lodi and develop this facility? I oppose the project and would like to see it in a more remote area.**

This comment is outside the scope of the EIR, which focuses on the environmental impacts of the project, and therefore no response is required. The commenter's opposition to the project is noted.

- 2. Concerned about the possibility of eminent domain.**

See Chapter 2, "Clarification of Major Issues", of this final EIR.

- 3. Who will purchase the gas? Is the project needed if Lodi already has an adequate supply?**

The need for the project is based on LGS's market analysis of the natural gas supply, storage, and distribution market. As discussed in Section 1.2.2, "Background", population growth in California and the conversion of electric power plants from oil to natural gas to reduce air emissions has increased the demand for natural gas. On occasion, especially during periods of cold weather, pipeline companies cannot get enough gas into their pipelines to meet the demand and are forced to cut off supplies. The issue of natural gas pipeline capacity and the ability to meet increasing demand is a state-wide issue and not specific to the Lodi area. With the passage of recent legislation encouraging the development of independent gas storage facilities, LGS's project objectives include providing multiple-turn gas storage that allows for the injection and withdrawal of gas several times within a day, real time balancing of gas supply to meet customer needs, and market-based pricing of gas storage services. These objectives focus on large commercial and industrial customers and groups of smaller customers who arrange on their own or through agents to purchase their own natural gas supplies directly from gas producers, then pay pipeline companies and local gas utilities to delivery the purchased gas to the customer's facilities. These customers may benefit from purchasing natural gas storage service, as they could purchase and store gas when prices are relatively low and supplies are relatively high and then withdraw the gas from storage for use when supplies are low and prices are high.

- 4. Maps should show existing gas lines.**

This information was requested from the San Joaquin Department of Public Works during preparation of the draft EIR, but was unavailable and therefore not included in the draft EIR.

Comments from Ms. Wells

- 1. Why is the pipeline only 8 feet deep? I am concerned that it is not deep enough and that farmers could hit it.**

Mitigation Measure 3.1-2 addresses this issue. A depth of 8 feet is adequate in most cases to provide for deep ripping of soils. This mitigation measure has also been revised to further address this issue. See Chapter 3, “Revisions to the Draft EIR”.

- 2. Is there a way to protect the pipeline by enclosing it in another pipe or concrete?**

The pipeline will be designed in accordance with federal and state regulations. Only in some special locations, such as railroad crossings, will pipeline be encased to provide extra protection from damage. The pipeline is approximately ½ inch thick and will be difficult to damage with normal farm implements.

Comments from Ms. Leventini

- 1. I believe the land uses along Highway 99 adjacent to the compressor facility are commercial and not industrial, and therefore the use is incompatible.**

See response I21-17 in the individual response to comments.

- 2. I believe that the alternative analysis is incomplete and that the project only seriously considered several compressor facility sites and several reservoir sites. I also feel that several alternatives were removed due to cost, which is not acceptable under CEQA, and that a no-project alternative needs to be analyzed.**

See response I21-6 in the individual response to comments.

- 3. I believe that the EIR conflicts with itself by allowing placement of the compressor facility near Highway 99, but later saying the project will not result in similar projects in the future.**

There is no information that suggests that the location of the compressor facility will influence the location of other similar projects in the future.

- 4. Do pollution credits really offset project impacts?**

The comment concerns the emission of ozone. Ozone is a regional rather than a microscale pollutant. Emissions of ROG and NO_x by the proposed project will result in increases in regional ozone concentrations downwind of the project rather than in the immediate vicinity of the project site. Emissions of ozone precursors (ROG and NO_x) undergo a chemical reaction in the presence of sunlight, forming ozone several miles downwind of the emission points. Consequently, emission offsets are an effective way to reduce regional ozone concentrations.

Additionally, in response to this comment “hot spot” modeling of NO₂ was conducted to estimate local concentrations of NO₂ during project operation. Using the results of the health risk assessment, a worse case estimate of NO₂ concentrations was developed assuming that all NO_x is NO₂, which is not the case. These estimates were then compared to the state and federal NO₂ standards. The results of the NO₂ modeling for the project and related standards are presented below.

1-hour worst case concentration: 7.1 micrograms/cubic meter
1-hour California standard: 470 micrograms/cubic meter

Annual worst case concentration: 0.71 micrograms/cubic meter
Annual federal standard 100 micrograms/cubic meter

As indicated by these screening-level modeling results, the project would not result in exceedances of either the 1-hour California standard or the annual federal standard.

The same procedures cannot be used to estimate local concentrations of ROG. Because they are “reactive” organic gases, ROG concentrations cannot be accurately estimated with nonreactive models such as SCREEN3 (the model used to conduct the health risk assessment). Additionally, there are no ambient standards for ROG, so even if accurate modeling methodology was available, the resulting information would be meaningless without comparison to adopted standards. It is also important to note that local concentrations of ROG were indirectly addressed in the screening level health risk analysis in that all of the constituents of ROG were considered a potential health risk and analyzed as part of the health risk analysis. Constituents of ROG were found not to present a health risk to nearby residents.

5. I believe there were omissions, contradictions, and errors and will submit comments in writing.

Comment noted. No response is required.

Comments from Mr. Fuhs

1. I am concerned about the potential for eminent domain.

The question of the proposed project resulting in local land owner impacts including hardships resulting from the process of eminent domain in the context of the public benefit of the project, is outside the scope of the environmental impact report; however, this concern along with other social and economic project issues are considered by the CPUC in its decision-making process. Section 1.6, “CPUC Application Process” describes this process and opportunities for public participation. The process of eminent domain is described in Chapter 2, “Clarification of Major Issues”, of this final EIR.

2. I would like to see the company change their corporate designation so they are no longer a limited-liability corporation.

The CPUC does not have the authority to regulate the formation of corporations seeking to receive a Certificate of Public Convenience and Necessity. Various state and federal laws govern corporations. It should be noted that the project proponent has committed to retaining an extensive insurance policy and to post performance bonds to ensure that any issues arising from operation and decommissioning.

3. Is the project more about storage or compression of natural gas?

The proposed project is a gas storage project. In order to distribute the gas stored in the proposed natural gas storage reservoir, the gas must be withdrawn from the reservoir. In the process of withdrawing this gas, water trapped in the storage reservoir could also be withdrawn, therefore the withdrawn gas/water mixture is piped to a separation facility, where the water is separated from the gas. This removed water (commonly referred to as produced water) is reinjected back into the reservoir via reinjection wells. The gas is then further dehydrated and compressed at the compressor facility to allow the gas to be transported via pipeline to PG&E interconnect sites.

4. Why did Lodi Gas Storage reduce the size of their pipeline to 24 inches? Were there safety concerns with the larger pipeline?

The field pipeline is 30 inches in diameter and the transmission pipeline is 24 inches in diameter. The required pressure and flow rates dictate the necessary pipe diameter need to convey a given volume of gas.

5. How safe is the project from accidents, natural disasters, and terrorist threats, and is there a plan to handle an emergency?

The draft EIR describes numerous safety features designed to reduce or eliminate accidents and reduce damages from natural disasters (earthquakes, floods, etc). As described on page 2-33 of the draft EIR, the leak detection system and other safety systems would identify the sudden loss of pressure or other abnormalities and automatically close isolation valves and shut down operations of the project facilities. The Applicant will report all incidents to the California Office of Emergency Services which will coordinate emergency response. Normal security lighting and fencing will be installed at all project sites.

Comments from Ms. Erbele

- 1. Does the airport land use plan prohibit gas pipelines and facilities due to public safety? And if this is the case, how would amending the plan help mitigate the impact to public safety?**

During preparation of the DEIR, the Airport Land Use Plan (ALUP) was carefully reviewed. The CPUC understands that the ALUP was developed to limit new aboveground facilities that would be a hazard to aviation (ie, obstruct view or encroaches into the Federal Aviation Administration (FAA) mandated control surfaces) or would be a hazard to surrounding land uses in the event of a crash. The ALUP doesn't regulate land uses that existed within the plan area (i.e. propane distribution facility at SR 99 and Peltier Road, aboveground or underground fuel storage tanks, existing PG&E natural gas distribution lines, etc.) when the plan was formulated.

Although a portion of the proposed and alternative pipeline facilities would cross the runway approach zones, the alternative compressor facility would not be located within the approach zones. Furthermore, since publication of the DEIR, the applicant has received a determination from the FAA that the alternative compressor site would not interfere with general aviation activities. This issue is further discussed in Chapter 2, "Clarifications of Major Issues", of this final EIR.