2.5 Construction Methods

c) **Best Management Practices:** Have the engineering and geology studies required by DOGGR and described on page 2-20, last paragraph, been completed? If so, are copies available for review?

Response:

• The engineering and geology studies required by the DOGGR are anticipated to be completed in September 2007. The application to the DOGGR to establish the Florin Field as a Gas Storage Project will be filed subsequently. The DOGGR has indicated that they will require a month for review and approval.

Status:

• Provided on 10/15/07.

3.0 ENVIRONMENTAL ANALYSIS

3.2 Air Quality

b) **Impact Assessment Results**

iii. Kirby Hills emission data is used in the PEA; however, project-specific information (i.e. equipment, sensitive receptors) needs to be provided, along with supporting calculations, to conclude that the emissions would be the same. If basic equipment and their corresponding emissions are the same for both projects, this should be indicated.

Response:

• The requested data will be provided in a subsequent submission anticipated to be completed during September 2007.

Status:

- Work in progress; anticipated to be submitted in October 2007.
- v. Page 3.3-17: Use of the Kirby Hills project in lieu of providing project-specific estimates for the assessment of health impacts is not adequate for the Initial Study. In addition to potentially different emissions, another concern is that the area surrounding the SNGS facility appears to have relatively close residential uses to the west of the compression station. A project-specific health risk

assessment, including Toxic Air Contaminant (TAC) calculations is needed to determine the affects of the project on nearby residents, schools, and businesses.

Response:

• A project-specific analysis will be provided in a subsequent submission anticipated to be completed during September 2007.

Status:

- Work in progress; anticipated to be submitted in October 2007.
- vi. Please quantify and provide greenhouse gas emissions.

Response:

• The requested information will be provided in a subsequent submission anticipated to be completed during September 2007.

Status:

• Submitted in PEA Addendum filed October 9, 2007.

3.3 Biological Resources

a) Environmental Setting

i. Please provide the limits of all jurisdictional wetlands and waterbodies within and adjacent to the proposed project areas.

Response:

 Delineations of jurisdictional waters are scheduled to be completed by the end of September 2007.

Status:

• Not yet completed.

3.4 Cultural Resources

a) The information relating to cultural resources provided in the PEA is inadequate in that it does not provide sufficient baseline information needed to determine if the project would have an impact on archaeological and/or historic resources. Many of the technical studies (archaeological surveys) cited in the PEA that are within, or within a ¼ mile proximity to, the project area are in excess of 20 years old. While professional archaeological survey methods have changed little in the past two decades, there is the possibility that some of these technical studies may (1) not have used methodologies consistent with current archaeological professional standards, and/or (2) may have "passed over" potentially

unique historic archaeological resources that were not 50 years of age at the time of those studies. It was also noted in the PEA that there are significant portions of the project area and/or pipeline alignment and alternatives that have not been subject to any archaeological survey.

- b) A qualified archaeologist who meets the Secretary of Interior's Standards for Archaeology (Archaeologist) needs to define the vertical and horizontal archaeological study area for the proposes of CEQA. The Archaeologist will need to conduct a peer review of all previous archaeological technical studies within the project study area and determine if the methodologies used are consistent with today's professional practice standards. In particular, a review of how the potential for buried archaeological resources were addressed in a geomorphology section (if any) of the technical reports needs to be conducted.
- c) Any areas of the project site, pipeline route, and/or alternative pipeline routes that have not been subject to previous archaeological survey or have been determined by a qualified archaeologist to require re-survey due to inadequate methodologies should be subjected to a new pedestrian archaeological reconnaissance survey.
- d) A technical archaeological survey report should be prepared that documents (1) a detailed definition and map depicting the vertical and horizontal study area for potentially ground disturbing activities including pipelines, wellheads, compression station, staging area(s), and directional drilling preparation areas, (2) detailed peer review of previous technical studies, (3) professionally defensible justification for not resurveying areas that were previously surveyed, (4) a discussion and assessment of the potential for buried archaeological deposits at the maximum depth to be impacted by project trenching and directional drilling activities, (5) a thorough discussion of the methods and results of the previous cultural resource studies that were conducted at the proposed compressor station on the former Sacramento Army Depot site, and (6) report on the results of a new pedestrian archaeological reconnaissance survey of the remaining unsurveyed and/or resurveyed lands to determine if unique archaeological resources are present in the study area.

Response:

• The requests for information track the mitigation measures set forth in the PEA. This information will be developed as a part of the National Historic Preserve Act Section 106 analysis, which is anticipated to be completed in October 2007.

Status:

• Not yet completed.

3.5 Geology, Soils, and Paleontology

d) Please provide any geotechnical studies that have been conducted for the wellhead, compressor station and pipeline routes.

Response

Geotechnical studies are planned to be conducted early in September 2007 to support
the final engineering designs for each site. The studies will be provided upon
completion.

Status:

• Work in progress; anticipated to be submitted in November 2007.

3.6 Hydrology and Water Quality

a) What is the status of the studies described on pages 3.8-35 to 3.8-39 that are intended to determine and mitigate the potential for aquifer contamination?

Response

• The referenced studies are planned to be completed in time to support the filing with DOGGR September 2007 of an application to convert the field to use for storage of natural gas. The application materials will be provided.

Status:

• Provided on 10/15/07.

3.11 Public Health and Safety

a) **Project Description**

i. Additional information is needed on the pipeline ROW limits and centerline in order to conduct the quantitative risk assessment. Please provide preliminary pipeline alignment drawings for the proposed and alternative pipeline routes. These drawings should include an aerial photograph depicting the proposed pipeline alignment within approximately 300-feet on either side of the proposed routes.

Response

• The pipeline right-of-way routing, limits and centerline determinations are not yet completed. Final pipeline alignment information, including an aerial photograph of the alignment, will be provided in a later submission planned to be completed in October 2007.

Status:

- The final pipeline engineering design is now anticipated to be completed in November 2007.
- iv. Please provide a copy of any qualitative or quantitative risk assessment which may have been conducted to assess potential risks to the public resulting from unintentional releases and subsequent fires and explosions. Please also provide the significance criteria used for evaluating individual and societal risks.

Response:

• SNGS has engaged Sierra Energy and Risk Assessment, Inc. (per Robert K. Weatherwax) to perform a qualitative and quantitative risk assessment to assess potential risks to the public resulting from the SNGS project. The assessments will be completed following completion of the final engineering design (including the "HazOps" study to be performed by the systems engineering firm in determining the final engineering design), which is anticipated to be available in October 2007. The assessments will provide statements of criteria used for evaluating risks.

Status:

- The final engineering design (including the HazOps study) is now anticipated to be completed in December 2007; the risk assessment is anticipated to be completed in February 2008.
- vi. Page 2-21, please provide a detailed description of the proposed leak detection system, automated systems, shut-down system and other controls being proposed.

Response

• See corresponding Response elements under 3.11.b.ii below.

Status:

• The final engineering design for the wellhead site and compressor station (including the HazOps study) is now anticipated to be completed in December 2007.

b) **Existing Conditions**

- ii. Please provide a detailed description of the proposed pipeline components. For example:
 - What are the proposed wall thicknesses, pipe grades, external coating types, etc.?

Response:

• The requested information will be determined in the final engineering design process; the information is anticipated to be provided in October 2007.

Status:

- The final pipeline engineering design is now anticipated to be completed in November 2007.
 - How and where will the tie-ins will be made to the existing lines in Fruitridge Road? Will these connections be made in vaults beneath the street? Please provide conceptual drawings of the tie-in facilities to each line.

Response:

• The tie-in to SMUD Line 700A will be made with a non-vaulted "hot-tap" below Fruitridge road. Final engineering of the tie-ins is expected to be completed in October 2007.

Status:

- The final pipeline engineering design is now anticipated to be completed in November 2007.
 - Provide a description of the proposed pipeline leak detection system. What type of software will be used? What is the sensitivity and anticipated performance of the system (e.g., time to alarm for various leak flow rates)?

Response

• The requested information will be determined in the final engineering design process; the information is anticipated to be provided in October 2007.

Status:

- The final pipeline engineering design is now anticipated to be completed in November 2007.
 - Describe any remotely operated or automatically operated valves or automated pipeline control systems. These should include any remotely or automatically operated valves, emergency blow-down (de-pressurization) facilities, etc.

Response December

• See Attachment 17 for representative valves and control philosophy. Final design details will be determined in the final engineering design process; the information is anticipated to be provided in October 2007.

Status:

- The final engineering design for the wellhead site and compressor station (including the HazOps study) is now anticipated to be completed in December 2007.
 - What type of cathodic protection system (impressed current or sacrificial anodes) will be used? If an impressed current system is planned, where will the rectifier be located?

Response

• The method of cathodic protection will be determined as part of the final pipeline engineering package, expected to be completed in October 2007.

Status:

- The final pipeline engineering design is now anticipated to be completed in November 2007.
 - Please provide a description of the proposed compressor station safety equipment. For example, will motion detectors, release monitors, fire detection equipment, security cameras, etc. be installed to monitor this location? Please explain the extent of any such equipment both inside the compressor building, as well as outside the building.

Response

• A combination of fire and gas detection, site access controls, and camera systems will be utilized to secure the compression site. It is expected the fire and gas detection will be installed inside the compressor building. Further details of these systems will be determined in the final engineering design process; the information is anticipated to be provided in October 2007.

Status:

- The final engineering design for the wellhead site and compressor station (including the HazOps study) is now anticipated to be completed in December 2007.
 - What safety systems are proposed to protect the public at the wellhead and compressor sites (e.g., fire or blast walls, sound walls, etc.)?

Response:

• The wellhead site will be isolated from the public by a combination of solid masonry, chain link and barbed wire fencing. Access will be controlled through locked/limited access gates. Cameras will also be utilized to monitor the site. Further details of these systems will be determined in the final engineering design process; the information is anticipated to be provided in October 2007.

Status:

- The final engineering design for the wellhead site and compressor station (including the HazOps study) is now anticipated to be completed in December 2007.
 - Describe the control systems for each site.

Response:

• An Allen-Bradley PLC system will be installed at the facilities for system controls. In general each skid mounted unit (compressor, dehydration unit, etc,) will have a unit control panel (UCP) which controls the individual unit, i.e. starts, stops and monitors. These UCP's will be tied into a station control panel (SCP) which controls the over all operation of the facility. A representative example of a control philosophy and cause-and-affect chart is included in **Attachment 19** to the Response. Final details of these systems will be determined in the final engineering design process; the information is anticipated to be provided in October 2007.

Status:

- The final engineering design for the wellhead site and compressor station (including the HazOps study) is now anticipated to be completed in December 2007.
 - Describe the emergency shutdown system for each facility.

Response

• The ESD is performed by the SCP. The SCP is programmed to initiate an ESD sequence in each UCP. Each UCP is programmed to shut down the individual piece of equipment it operates, in a safe and expeditious manner, when and ESD signal is received. Final details of this system will be determined in the final engineering design process; the information is anticipated to be provided in October 2007.

Status:

• The final engineering design for the wellhead site and compressor station (including the HazOps study) is now anticipated to be completed in December 2007.