Section 1 Executive Summary

1.1 INTRODUCTION AND PROJECT OVERVIEW

This Proponent's Environmental Assessment ("PEA") has been prepared to support the applications by Gill Ranch Gas Storage, LLC ("GRS") and Pacific Gas and Electric Company ("PG&E") to the California Public Utilities Commission ("Commission" or "CPUC") for Certificates of Public Convenience and Necessity ("CPCN") authorizing the development, construction, and operation of the Gill Ranch Gas Storage Project (the "Project"), which is a planned underground natural gas storage facility to be located primarily in Madera County. PG&E's application also requests a Permit to Construct an electric substation and the 115 kV electric power line that will deliver electricity to the Project's central compressor station and other facilities at the compressor station site. The electric line will be co-located with existing PG&E distribution lines located along county roads in PG&E franchise areas for nearly 80 percent of the route. GRS and PG&E are referred to collectively herein as the "Applicants." The GRS and PG&E applications are referred to collectively herein as the "CPCN Applications."

The Project will utilize depleted reservoirs in an existing gas field, the Gill Ranch Gas Field ("Gas Field"), which is primarily located in Madera County, in the central San Joaquin Valley, approximately 25 miles west of the City of Fresno. The Gill Ranch Storage Field ("Storage Field") is located within the Gas Field. The land surface within the boundary of the Storage Field is approximately 5,020 acres ("Storage Field Boundary").

The Project is designed for storage of 20 billion cubic feet ("Bcf") of working gas and 650 million cubic feet per day ("MMcfd") of peak deliverability. The Project is located in a rural agricultural area, with historic and ongoing gas operations. Gas production continues from two wells in the Storage Field. There are limited agricultural buildings on the surface of the Storage Field. The nearest residence to the compressor site is just over one mile away. Figure 1.1-1 shows the Project location.

GRS and PG&E signed a Joint Project Agreement setting forth the terms and conditions pursuant to which GRS and PG&E propose to own and develop the Project.[1] Under the Joint Project Agreement, GRS shall own a 75% undivided interest in the Project and PG&E shall own a 25% undivided interest. GRS and PG&E have also entered into an Operator Agreement, which designates GRS as the operator of the Project during the development, permitting, and construction phases, and for at least three years from the date commercial operation begins. GRS and PG&E are not partners, joint venturers, or affiliates with respect to the Project, or for any other purpose. GRS and PG&E will each separately market its share of Project storage capacity and thus will be competitors in the provision of gas storage services in California.

[1] GRS is a wholly-owned subsidiary of Northwest Natural Gas Company ("NW Natural"), a 149-year-old local natural gas distribution company based in Oregon. NW Natural is not authorized to and does not provide natural gas local distribution, storage, transmission, or any other services in California. NW Natural provides natural gas local distribution services to its customers in Oregon and southwest Washington. GRS is a separate legal entity from NW Natural and is dedicated exclusively to serving the California market.

Primary Project Components

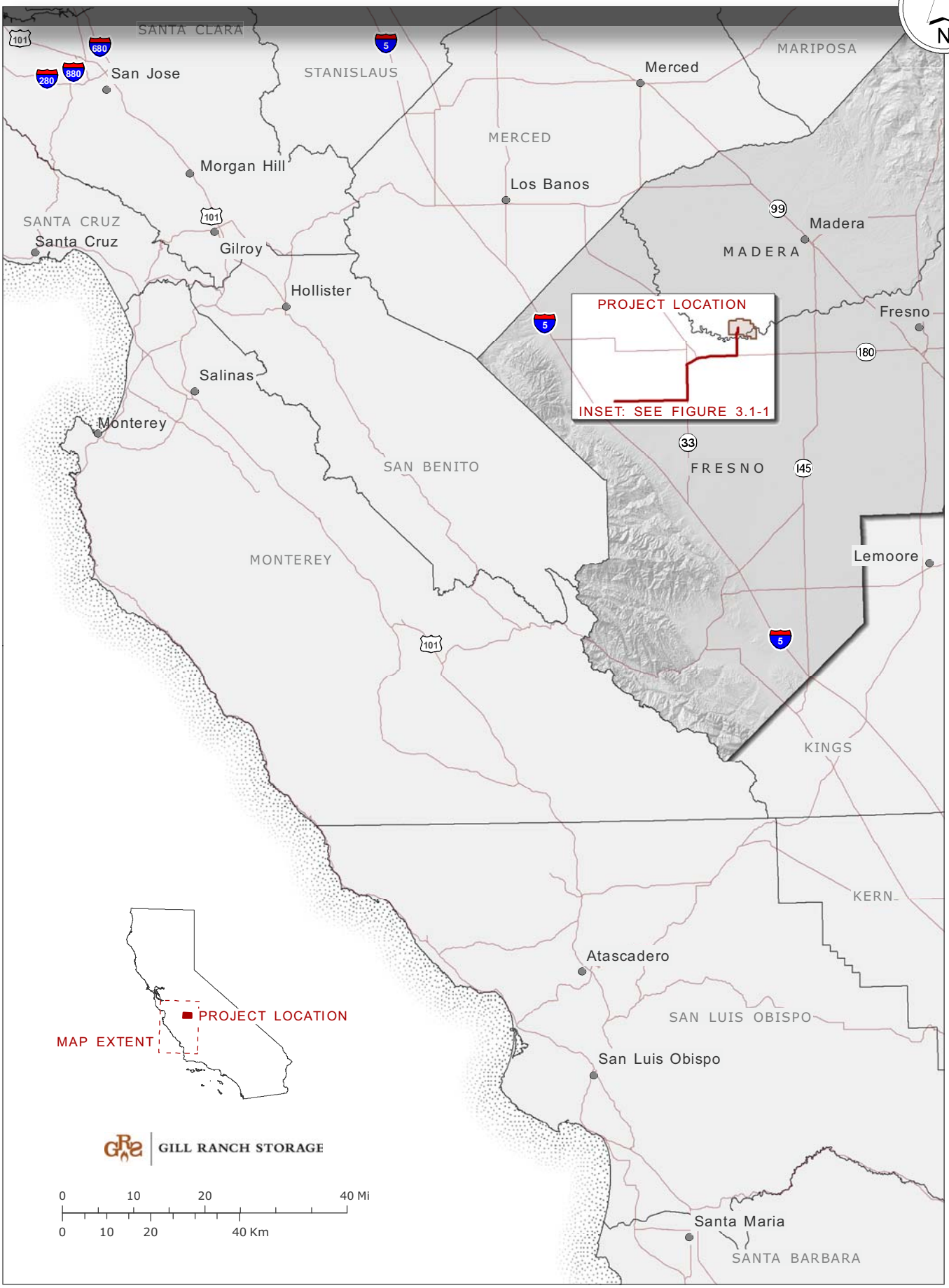
The Project, as presently configured, consists of the following components, which are described in detail in Section 3 of this PEA:

- Depleted gas reservoirs in the First and Second Starkey Formations;
- Injection/withdrawal (IW) wells within the Storage Field;
- Observation and monitoring (OM) wells within the Storage Field;
- Flow lines connecting the IW wells to the central compressor station;
- Central compression and dehydration station within the Storage Field;
- Water injection well and associated pipelines;
- Control center and maintenance building (located at central compressor site);
- An approximately 9 mile single circuit 115 kV electric power line, which will be co-located with existing PG&E distribution lines for nearly 80 percent of the route (the remainder will be located along existing roadways), extending from the central compressor station site to a tie-in with an existing PG&E 115 kV line;
- A gas transmission pipeline extending approximately 27 miles between PG&E's Line 401 and the central compressor station; and
- A gas metering station at the tie-in to PG&E's Line 401.

Figure 3.1-1 in Section 3 shows the proposed pipeline route. Figure 3.1-2 shows the proposed surface facility sites at the Storage Field. Figure 3.1-3 shows the proposed electric power line route.

Various design, construction, management, and operations measures, best management practices ("BMPs"), and applicant-proposed mitigation measures will be implemented to avoid and minimize Project effects on environmental resources. These measures and practices are described in detail in Section 3 of this PEA, and include:

- Use of electric-driven compressor engines to minimize air emissions;
- Pipeline routing on existing rights-of-way, along existing utility corridors, and along property boundaries to minimize environmental and agricultural impacts;
- Use of existing well pads and directional well drilling;



ENTRIX

Environmental and Natural Resource Management Consultants

Proponent's Environmental Assessment

GILL RANCH GAS STORAGE

FIGURE 1.1-1 | PROJECT LOCATION

- Use of horizontal directional drilling techniques to avoid impacts to sensitive resources and transportation infrastructure along the pipeline corridor;
- An electric power line that will be co-located with existing PG&E distribution lines;
- Designated work zones to avoid sensitive areas; and
- Agricultural Impact Mitigation Plan, Construction Traffic Plan, and other management plans to minimize construction and operation impacts.

As was the case with the Wild Goose Storage, Inc. ("Wild Goose") and Lodi Gas Storage, L.L.C. ("LGS") facilities, there is the potential for future expansion at the Gill Ranch Gas Field. Based on current information, the Applicants estimate that any such future expansion could add between 20 and 25 Bcf of working gas capacity to the Project. The Applicants will not have the technical or demand information necessary to investigate whether to pursue an expansion of the Project until it is developed and operating. Under the Joint Project Agreement, GRS and PG&E each have the option to participate or not in any future expansion. Any such future expansion would be subject to Commission approval, including any appropriate additional environmental review under CEQA.

This PEA describes the Project components, facilities, and construction methods and schedule, as well as the BMPs and applicant-proposed mitigation measures that will be implemented to avoid and minimize effects of the Project on environmental resources.

Purpose and Approach of the PEA

The CPUC will serve as the lead agency under CEQA for purposes of environmental review of the Project. GRS and PG&E have authorized preparation of this PEA pursuant to CPUC Rule 2.4. This PEA has been prepared in conformity with the Information and Criteria List promulgated by the Commission.[2] The purpose of the PEA is to provide a means by which the Commission can quickly focus upon any environmental impacts of the Project, and to serve as an aid in preparing the Commission's CEQA document.[3] This PEA contains the Project information and studies required by the Commission's Rules of Practice and Procedure, the Information and Criteria List, and, where applicable, Energy Division's January 11, 2008, Working Draft Proponent's Environmental Checklist for Transmission line and Substation Projects.[4]

GRS and PG&E have designed the Project in a way that avoids significant adverse impacts on the environment. Where, as here, there will be no significant adverse environmental effects, a

2 *See www.cpuc.ca.gov/PUC/energy/electric/Environment/inforcrit.htm* ("Information and Criteria List").
3 Information and Criteria List, § V, 2.
4 http://docs.cpuc.ca.gov/PUBLISHED/GRAPHICS/77813.PDF.

PEA is properly limited to a statement that there is no possibility that a project will have a significant adverse effect on the environment.[5]

Based on the information, analysis, and conclusions set forth in this PEA, the Commission should find that there is no possibility that the Project may have any significant adverse effect on the environment. As directed by the Information and Criteria List, this PEA includes the explanation and information necessary for the Commission to conduct an independent evaluation of this conclusion.[6]

GRS and PG&E recognize that the Commission's independent evaluation may lead to a different conclusion. Therefore, to facilitate an efficient CEQA process, this PEA includes all of the information and studies required by the Information and Criteria List. The PEA is also intended to expedite the Commission's review of the Project in order to allow for start of construction during the summer of 2009 and commencement of Project operation during the summer of 2010, in time to help meet California's energy needs during the high-demand winter season.[7]

Consistent with GRS' and PG&E's core value of environmental protection, the Applicants propose design features and BMPs that will avoid or minimize the potential effects of the Project on the environment. In cases where there may be significant impacts, this PEA proposes feasible applicant proposed mitigation measures that will reduce the impacts to a less than significant level.

Potentially significant impacts and applicant proposed mitigation measures are summarized in Table ES-1.

Major Areas of Impact and Conclusions of the PEA

The PEA concludes that there are no potentially significant areas of impact that cannot be reduced to less than significant levels through design, construction, management, and operations measures, BMPs, and applicant-proposed mitigation measures. See Table ES-1. The Project has been designed in a manner that avoids or minimizes the potential for environmental disturbance. The Project is located in a rural area with a history of gas production operations. The Project will provide additional storage capacity to help meet the energy needs of California customers. The Project's central California location will help diversify the location of storage facilities in California, which presently are focused in Northern California. The Project will provide local benefits. To date, the Applicants have identified no areas of controversy through their community outreach efforts.

5 Information and Criteria List, § V, 3.

6 Id., § V, 3.

7 Assembly Bill 2744 (1992 Statutes, Chapter 1337), which expresses the Legislature's formal natural gas policy, calls for expedited consideration of applications for CPCNs filed by independent storage providers to assure such facilities will begin operating within a time frame reasonably consistent with the initiation of unbundled investor owned utility gas storage service.

List of other State, Local, and Federal Permits Required

A list of permits and approvals that may be required for the Project is included as Table 3.10-1.

Public Outreach

GRS and PG&E have actively communicated information regarding the Project to the local community. The Applicants began communicating with local landowners regarding the Project more than a year ago. The Applicants have held several open houses in the towns of Madera, Mendota, and Kerman to provide information to local community members regarding the Project and the CPUC CPCN and CEQA processes.

The Applicants have also been in contact with state and local agencies and elected officials. They have had discussions with the Madera County and Fresno County Planning Departments, the California Department of Fish and Game, the United States Fish and Wildlife Service, and the Bureau of Reclamation. The Applicants will continue to work with these and other agencies interested in the Project as the Project moves forward.

Project representatives have met with Madera County Supervisor Frank Bigelow and Fresno County Supervisor Phil Larson to brief them regarding the Project. The Applicants also met with the City Managers of the Cities of Kerman, Mendota, and Firebaugh and made a presentation to the Kerman City Council. The GRS and PG&E have also met with various state elected officials or their staffs to provide information regarding the Project, including Assemblyman Juan Arambula and Senator Dean Florez. Project representatives have also been in contact with Congressman Jim Costa and Congressman George Radanovich, whose districts encompass the Project area.

The Applicants are also reaching out to other stakeholders who may be affected by the Project. For example, the Applicants have made presentations to the Boards of Directors of the Madera County and Fresno County Farm Bureaus, and the Westlands Water District. To date, the response to the Project has been favorable. The Applicants will continue to make every effort to communicate with the community and local, state, and federal elected and appointed officials, and other stakeholders regarding Project developments, through completion of the CPUC process and during the operation phase.

1.2 ORGANIZATION OF THE PEA AND CHAPTER DESCRIPTION

This PEA has been organized into the following sections:

Section 1. Executive Summary: The Executive Summary summarizes the major conclusions of the PEA and issues that must be resolved (including the choice among reasonably feasible alternatives).

Section 2. Project Purpose and Need: Section 2 describes the purpose and need for the Project, including the Project objectives and an analysis of the reasons why attaining these objectives is necessary and desirable.

Section 3. Project Description: Section 3 describes the Project area, facilities and routes, evaluation process for Project components, construction methods, operations and maintenance programs, and required permits and approvals expected for the Project.

Section 4. Environmental Assessment: Section 4 describes existing conditions, design features and BMPs; evaluates the environmental impacts of the Project; and identifies applicant-proposed mitigation measures for any potentially significant impacts. Section 4 also considers whether the Project, when considered with other closely related past, present, and reasonably foreseeable probable future projects, results in cumulative impacts.

Section 5. Alternatives: Section 5 describes the alternatives that were considered for the various Project components, including the "no-project" alternative; alternative technologies to achieve the Project objectives; alternative surface facility locations; alternative pipeline and electric power line routing; and alternative design features.

Section 6. References: Section 6 lists the references and personal communications cited in the various resource sections.

Section 7. Report Preparation: Section 7 lists the people who prepared the report.

Appendices: The appendices provide additional Project description details (Appendix A); additional environmental information (Appendix B), and required landowner information (Appendix C).

Table ES-1: Summary of Potential Significant Impacts and Mitigation Measures

Potential Impacts	Mitigation Measures	Significance after Mitigation
BIOLOGICAL RESOURCES		
BIO-2 Construction could result in impacts to native plant communities and special-status plant species.	BIO-8 Construction site restoration and revegetation in natural areas BIO-9 Seed bank retention and noxious weed containment in natural areas.	Less than significant
BIO-4 Grading and trenching could result in impacts to special-status vernal pool invertebrates.	BIO-10 Protection of wetlands and vernally wet Areas; seasonal construction exclusion	Less than significant
BIO-5 Construction and maintenance could result in impacts to Valley Elderberry Longhorn Beetle.	BIO-2 Work area enforcement and exclusion Area BIO-12 Valley elderberry longhorn beetle impact avoidance and compensation	Less than significant
BIO-7 Construction could result in impacts to California tiger salamander from injury, fatality, or temporary habitat loss.	BIO-2 Work area enforcement and exclusion Area BIO-7 Pre-construction wildlife surveys BIO-8 Construction site restoration and revegetation in natural areas BIO-10 Protection of wetlands and vernally wet Areas; seasonal construction exclusion	Less than significant
BIO-8 Construction could result in impacts to Blunt-nosed leopard lizard from injury, fatality, or temporary habitat loss.	BIO-1. Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) BIO-2. Work area enforcement and exclusion area BIO-3. Worker Environmental Awareness Program BIO-4 Biological monitoring during construction BIO-5 Wildlife entrapment prevention measures during construction BIO-6 Erosion control and sedimentation measures during construction BIO-7 Pre-construction wildlife surveys BIO-8. Construction site restoration and revegetation in natural areas	Less than significant

Table ES-1: Summary of Potential Significant Impacts and Mitigation Measures

Potential Impacts	Mitigation Measures	Significance after Mitigation
	BIO-14 Pre-construction surveys for Blunt-nosed leopard lizard	
BIO-9 Construction could result in impacts to Giant garter snake from vibrations caused by boring activities.	BIO-1 through BIO-8 (see mitigation descriptions above)	Less than significant
BIO-10 Construction could result in impacts to special-status bird species.	BIO-1 through BIO-8 (see mitigation descriptions above) BIO-15 Pre-Construction nesting bird surveys	Less than significant
BIO-11 Construction could result in impacts to Western Burrowing Owl from injury or temporary habitat loss during construction.	BIO-1 BRMIMP BIO-16 Burrowing owl surveys	Less than significant
BIO-12 Construction could result in impacts to Fresno kangaroo rat from injury or temporary habitat loss	BIO-1 through BIO-8 (see mitigation descriptions above) BIO-17 Fresno kangaroo rat surveys	Less than significant
BIO-13 Construction could result in impacts to San Joaquin Kit Fox from injury or temporary habitat loss.	BIO-1 through BIO-8 (see mitigation descriptions above) BIO-19 Pre-construction San Joaquin kit fox surveys	Less than significant
BIO-14 Construction could result in impacts to Nelson's antelope ground squirrel from injury or temporary habitat loss.	BIO-1 through BIO-8 (see mitigation descriptions above) BIO-18 Pre-construction Nelson's antelope ground squirrel surveys	Less than significant
BIO-16 Construction could result in temporary impact to potentially jurisdictional wetlands and other waters.	BIO-8. Construction site restoration and revegetation in natural areas BIO-10 Protection of wetlands and vernally wet Areas; seasonal construction exclusion	Less than significant
BIO-17 Construction, operation and maintenance activities could disturb, injure or kill nesting birds, their eggs or young, as well as alter foraging and nesting habitat.	BIO-4 Biological monitoring during construction BIO-15 Pre-Construction nesting bird surveys BIO-16 Burrowing owl surveys	Less than significant
BIO-19 Construction of the project could impede the movement of native resident or migratory fish or wildlife.	BIO-1 through BIO-8 (see mitigation descriptions above)	Less than significant
BIO-21 Project construction could result in the removal or death of a protected tree.	BIO-1 through BIO-8 (see mitigation descriptions above)	Less than significant
CULTURAL RESOURCES		
CR-1 Project development could cause a substantial adverse change in the significance of a previously identified cultural resource which may qualify as	CR-1 Additional studies of previously identified cultural resources.	Less than significant

Table ES-1: Summary of Potential Significant Impacts and Mitigation Measures

Potential Impacts	Mitigation Measures	Significance after Mitigation
historical resources.		
CR-2 Project development may cause a substantial adverse change in the significance of a buried historical resource.	CR-2 Buried site testing (BST) program in sensitive cultural resource areas.	Less than significant
CR-3 Project development may cause a substantial adverse change in the significance of historical resources discovered during construction.	CR-3 Cultural resources monitoring program.	Less than significant
CR-4 Historic or prehistoric interments identified at archaeological sites within the Project area or discovered during construction may be affected by the proposed construction.	CR-4 Handling of human remains discovered during construction.	Less than significant

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