

APPENDIX A

October 2012

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PROJECT INFORMATION IN SUPPORT OF CATEGORICAL EXEMPTION

1.0 PROJECT DESCRIPTION

Wild Goose Storage, LLC (WGS) is seeking approval from the California Public Utilities Commission (CPUC) to increase the working gas capacity (WGC) of its existing underground natural gas storage facility from 50 to 75 billion cubic feet (bcf). While the WGC increase (WGCI) will require changes to existing operations, no construction, expansion, or alterations of facilities, pipelines, or equipment will be required, and only the previously certificated reservoirs will be utilized. The gas injection and withdrawal rates will remain unchanged, but the duration of gas flow into and out of the field will increase. WGS will continue to operate the storage reservoir below the maximum allowable pressure gradient that has been established for the facility by the California Department of Conservation's Division of Oil, Gas & Geothermal Resources (DOGGR). Increasing the operating capacity from 50 to 75 bcf will not require any additional injection and withdrawal wells beyond what have already been approved by the CPUC and DOGGR.

1.1 Background

Wild Goose constructed and currently operates the Wild Goose Natural Gas Storage Facility (the "Facility") in Butte County, California. The approved Facility is comprised of (1) project components authorized by the CPUC in its issuance of a CPCN to Wild Goose in Decision 97-06-091 following preparation of an Initial Study and Mitigated Negative Declaration as required by the California Environmental Quality Act (CEQA) (the "Base Project"); (2) additional project components approved by the CPUC in Decision 02-07-036 following certification of the Wild Goose Storage, Inc. Expansion Project Environmental Impact Report (EIR) (the "Expansion"); and (3) additional project components approved by the Commission in Decision 10-12-025 following certification of the Wild Goose Phase 3 Gas Storage Expansion Supplemental EIR. ("Phase 3 Expansion").

Existing Facilities Currently Installed

The Facility includes the following components that are currently in place:

- A natural gas field made up of 12 reservoirs (approximately 2550 to 3450 feet deep), with 3 of the 12 zones currently used for storage
- An 8.5-acre Well Pad Site (WPS) with 17 injection/withdrawal wells and four observation wells at the location of the abandoned Wild Goose Gas Field production compression facility
- A Remote Facility Site (RFS) with eight gas-fueled engines and compressors with natural gas coolers yielding 27,900 horsepower (HP), two dehydration units/gas process trains, six water storage tanks, water disposal pump skid, and water injection well
- 4.5-miles each of 18-inch and 24-inch natural gas pipelines between the WPS and RFS

- Pipeline interconnects from the RFS to the existing Line 167 and Lines 400/401 of PG&E's transmission system, which includes a 25.5-mile, 30-inch diameter bi-directional pipeline
- An automated mid-valve station located approximately 11.5 miles west of the RFS, which provides a means of stopping gas flow through the 30-inch pipeline, and segregating the east and west portion of the line
- An approximately 70-foot-by-100-foot interconnect facility (Gridley Meter Station) with valves, metering and pressure monitoring equipment, situated in the northeast corner of the RFS, operated by PG&E
- An approximately 140-foot-by-200-foot interconnect facility (Delevan Meter Station) with valves, metering, and pressure monitoring equipment along the access road to PG&E's Delevan Compressor Station, operated jointly by WGS and PG&E
- Two fiber optic communication cables, one primary and one spare, located in the trench with the pipe, between both the WPS/RFS and RFS/Delevan Interconnect Site, to allow remote operation of valves and data acquisition by WGS

Approved Facilities for Future Build

In addition to the items listed above, Wild Goose's CPCN, as amended, also allows for the following components that will be added in the future:

- Two additional compressors (7,100 HP total) and a process train at the RFS
- Three additional wells at the WPS (totaling 24 wells)

1.2 Formation Information

The Wild Goose Gas Field was discovered in 1951 and produced in excess of 100 bcf of natural gas from 9 primary wells that tapped each of the 12 reservoirs. The Kione Formation is a compact domal structure that covers approximately 1 square mile in area. Regionally, the Kione Formation is a deltaic succession that was deposited in the Sacramento Basin. The top of the Kione formation sits at 2,480 feet depth below ground level in the Wild Goose Field. The total thickness of the Kione interval is 950 feet, with individual sandstones up to 100 feet thick. The Kione Formation is overlain by approximately 50 feet of Sacramento shale, which forms the top seal for the reservoir. An additional 300 to 350 feet of Capay shale overlies the Sacramento Formation either directly or separated by a thin (less than 10 feet) intervening-zone called the Hangtown.

1.3 Reservoir Information

The Wild Goose Gas Field consists of 12 distinct underground porous rock reservoirs located at depths ranging from 2,550 to 3,450 feet below the ground surface. The WGS reservoirs have strong water drive mechanisms; meaning the storage gas bubble is pushed towards the wells at the top of the structure by water pressure from the bottom or sides of the reservoir. The advantage of a water drive is that it helps maintain reservoir pressure and therefore well

deliverability. Of the 12 reservoirs, the L-1, L-4, U-1, and U-2 were determined to have the optimum combination of permeability and strong water drive that are suitable for conversion to storage service. Since storage operations commenced in the L-4 formation in 1998 and the L-1 formation in 2002, the entire WGS sand section has been assessed for sub-surface structural variation, thickness, lithologic distribution, and caprock continuity. Core and log data—combined with storage performance measurements and analysis—support a reservoir characterization of similar lithology throughout the entire reservoir, with permeability in the range of several darcies¹.

High deliverability capability provided by the prolific WGS reservoirs is facilitated by large diameter horizontal wellbores ranging in lateral length from 400 to 600 feet. The L-4 zone is equipped with 5 horizontal wellbores, the L-1 zone with 7 horizontal wellbores, and the U-2 zone with 5 horizontal wellbores. All the injection / withdrawal wellbores are gravel packed within a formation that is predominantly unconsolidated sand, and charged with a strong aquifer drive. The horizontal gravel pack completion allows for high rate flow at a low drawdown pressure at the sandface, while keeping the production of both sand and water in check.

1.4 Purpose and Need

The purpose of the WGCI is to:

- provide flexible natural gas storage services to a greater variety of customers, and
- increase storage service without adding new equipment or facilities.

Increasing the capacity of competitive gas storage services in California offers many benefits, including improved reliability of natural gas supplies, reduced price volatility, and a reduced need for incremental gas transmission service. Continued growth of electric generation capacity in California necessitates growth of gas infrastructure, and increased storage is an important component. For additional information regarding the purpose and need of the project, refer to the Application.

1.5 Existing Operations

Gas Injection Operations

During injection operations, natural gas flows from the PG&E Line 400 Delevan Interconnect Site through the 30-inch 25.5-mile pipeline to the RFS compressor station. Gas pressure is boosted to desired levels and continues through the bi-directional 14-inch and 24-inch 4.5-mile pipelines to the WPS for injection into the reservoir. Typically, natural gas is taken from PG&E's Line 400 at pressures ranging from approximately 650 to 1,000 pounds per square inch gauge (psig) and injected into the reservoir to a maximum design surface pressure of 2,000 psig. The current injection is certificated to 650 millions of cubic feet per day (MMcfd) and will not change with the WGCI.

¹ A darcy is defined as a unit of permeability that measures the ability of fluid to flow through rock.

Note that at the time of this application, PG&E is in the final stage of completing modifications to the Delevan Meter Station which were approved under the Phase 3 Expansion. Completion of such modifications, which is expected by mid-November 2012, will allow full access to both Lines 400 and 401. Line 401 operating conditions are expected to be very similar to Line 400.

Withdrawal Operations

During withdrawal operations, natural gas flows from the WPS back through the RFS and on to PG&E's Line 167 and/or Lines 400. The wellhead surface pressures under withdrawal conditions typically range from 1,650 psig to approximately 500 psig, and will dictate the use of compression during the withdrawal mode. The gas is routed through inlet separation, filtration, and dehydration to achieve the desired gas quality specification prior to free flow, or compressed flow, onto PG&E's system.

The volume of daily, weekly, and monthly injections and withdrawals varies with customer demand, and flow capability is mainly dependent on reservoir inventory/pressure level at that point in time. All injections and withdrawals will continue to be operationally dispatched and controlled by facility personnel working at the RFS. The current withdrawal capability is certificated to 1,200 MMcfd and will not change with the WGCI, though the additional working gas will allow WGS to sustain a longer period of high-rate, free-flow withdrawal.

Produced Water and Other Associated Products

When natural gas is withdrawn from the reservoirs, small amounts of water from deep saline aquifers connected to the storage reservoir may also be withdrawn with the gas, especially during the latter part of the withdrawal cycle, when the working gas inventory in the reservoir is near depletion. This "produced water" is temporarily stored in a tank farm at the RFS before being disposed of in a water injection well at the RFS. The water separation, storage, and disposal system is setup to automatically handle the produced water that accompanies the gas stream. Reservoir operation at low-gas-inventory levels, which is the period during which water production occurs, will remain the same as in the past. Thus, the WGCI is not expected to increase the quantity of water produced because the gas is being added to the top end.

Cushion Gas Injection

No additional cushion gas volume beyond that which was previously approved in Decision 02-07-036 will be required to support the WGCI.

1.6 Proposed Operational Changes

The only operational change associated with the WGCI will be longer flow periods to accommodate the additional gas that will be injected and withdrawn. All surface equipment, operations personnel, and work procedures/practices will remain the same. Below is a summary of the current operating system.

General System Monitoring and Control

The control room at the RFS serves as the focal point for monitoring, control, and operation of the Facility. The monitoring and control functions for the WPS, pipeline, Mid-Valve Station, and PG&E Meter Station are all connected to the control room computer system by the fiber optic communication system. In addition, PG&E monitors total facility natural gas flow and quality through equipment located in its metering buildings at the Line 167 and Line 400/401 Interconnect Sites. Control and monitoring functions for equipment and operations within the RFS associated with injection and withdrawal operations are via hardwired electric systems to the control room computer system. The fiber optic cables installed with the Line 400/401 Connection Pipeline and the 18-inch/24-inch storage pipelines are used for remote data gathering and control with the WPS, Mid-Valve Station, and the Delevan Interconnect Site facilities and valves.

Remote Facility Site Monitoring and Control Systems

Redundant safety systems were installed in the existing facilities at the RFS. Natural gas, fire, and vibration sensors monitor all equipment and will automatically shut down the facility if abnormal operating conditions are detected. The facility is staffed with a day shift only, seven days a week. Automatic call-out to the operators occurs when any unusual circumstances arise during non-work hours. When paged by the automatic call-out system, the on-call operator, using a lap-top computer, dials up the telephone modem at the control room. Once the connection is made, the operator has the same graphic displays on the lap-top computer as in the control room and can make all the same operations and equipment adjustments and changes described below.

Control Room Technology

The heart of the control room consists of personal computers and Programmable Logic Controllers (PLC), which provide automation of the control and monitoring functions as well as data collection, recording, and storage (the Supervisory Control and Data Acquisition [SCADA] system). This system provides continuous monitoring of critical systems parameters of all facilities, ensuring the alarm and/or shutdown of process equipment and/or piping areas is engaged when specific operating conditions are detected. The system is connected to four graphic display monitors in the operator's console. One monitor provides a simplified flow diagram and operating status of the entire system. Each of the monitors has the ability to gain access to any part of the RFS, WPS and Delevan Meter Station site. This provides operators the flexibility for viewing the operating conditions of individual process areas, or the specific valve line-up or sequencing required for various operations of the system.

System operating parameters that are continuously monitored include flow, temperature, and pressure of natural gas movements between PG&E's system, the RFS, and the WPS. In addition, major valve status or position for pressure control, flow control, and emergency shutdown valves on the pipelines and well heads is indicated and monitored.

Equipment Operation

From the control room, the operator is able to provide valve line-up and sequencing for natural gas movement between PG&E's system, the RFS, and the WPS, in addition to storage well selection. Valves are open or closed to accommodate the desired flow path for the specific mode of operation. The various operating modes include free flow withdrawal, withdrawal with compression, free flow injection, and injection with compression. The flow path, and the amount of process system being utilized, also depends on the flow nomination for that particular day, the operating pressure on PG&E's Line 167 and Line 400/401 transmission systems, and the L-1, L-4, U-1/U-2 reservoir pressure. The start-up of major pieces of equipment, such as compressors, coolers, and dehydrators is done manually by an operator from local control panels in the equipment building. This assures that the operators regularly inspect the condition and operation of the equipment and facilities.

Inspection and Maintenance

Maintenance of the sites, equipment, and facilities is a daily part of the operations of this type of facility. Minimum requirements for the maintenance, repair, and record keeping of natural gas pipelines and compressor stations are also established by 49 CFR Part 192, Subpart 605a, and have been included in the Operating and Maintenance Plan. Routine and scheduled site maintenance of site access roads, drainage facilities, fencing, site lighting, landscaping, and painting of equipment and aboveground piping will not be affected by the WGCI.

Maintenance, repair, overhaul, testing, and replacement of equipment assemblies and subassemblies will be conducted at more frequent intervals under the WGCI due to greater run time. Routine operations are conducted by site personnel at the RFS. Major equipment assemblies and subassemblies that require extensive repair, rebuilding, and testing beyond the capabilities of operation's on-site equipment, will be removed from service. This equipment will either be completely replaced or repaired on site by the maintenance contractor, or shipped to a qualified service center depending on service tools and/or parts required for the refurbishment. During equipment repairs, the Facility will either operate with the backup or redundant equipment, at reduced capacity, in only one mode (injection or withdrawal), or be completely out of service. The implementation of scheduled maintenance and refurbishment of the equipment reduces the chances of complete system downtime by scheduling major repairs during non-operational periods. During the injection season, equipment associated with the withdrawal cycle is serviced, and vice versa. As such, a complete plant shutdown for maintenance is usually not necessary.

2.0 ENVIRONMENTAL INFORMATION

WGS believes that the WGCI qualifies for either a Class 1 Categorical Exemption under Section 15301 of the CEQA Guidelines because increasing the working gas capacity is a minor alteration of an existing facility, or an exemption under 15061(b)(3) because "it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment." To assist the Commission in confirming that the WGCI would not trigger any of the exceptions to the categorical exemptions identified in the Section 15300.2 of the CEQA Guidelines, WGS has compiled the following information to verify that the WGCI will not have

a significant effect on the environment due to unusual circumstances. The results of outreach conducted to regulatory agencies are presented in Exhibit 1. The following analysis mirrors the significance thresholds from the CEQA Appendix G Checklist, which were used in the Expansion Environmental Impact Report (EIR) and the subsequent Phase 3 Supplemental EIR.

2.1 Aesthetics

Increasing the working gas capacity of the storage reservoir will not result in any changes in the physical appearance of the WPS or any other component of the Facility. There will be no additional sources of light or glare and the Facility is not located near a scenic highway. Therefore, there will be no impact to aesthetics.

2.2 Agricultural and Forest Resources

The WGCI will not change the physical footprint of existing facilities; and therefore, will have no impact to agricultural and forest resources.

2.3 Air Quality and Greenhouse Gas Emissions

The WGCI will not require the addition of any emissions sources. The existing emissions sources will not be modified in any way due to the WGCI. The only WGCI parameter that will affect emissions of criteria pollutants, toxic air pollutants (TAP), and greenhouse gases (GHG) is the increased duration of gas flow into- and out-of the storage field.

Emissions of criteria pollutants, TAP, and GHG resulting from operation of the existing Facility were estimated and presented in the Phase 3 Expansion Supplemental EIR. These emissions were estimated for each source on a Potential-to-Emit (PTE) basis. Using the PTE based on permitted fuel and emissions limits resulted in a very conservative estimate because historically the facility has combusted approximately 1/3 of the permitted fuel limit and demonstrated emissions rates well below those permitted for criteria pollutants. Table 1 outlines the assumptions considered to determine the PTE emissions for each source.

Table 1: Assumptions Considered for PTE Emission Estimates

Source	Assumption(s)
Compressor Engines	<ul style="list-style-type: none"> All emissions based on Annual Permitted Fuel Limit Criteria pollutant emissions based on Permitted Emissions Limits
Dehydration Systems	<ul style="list-style-type: none"> All emissions based on Annual Permitted Fuel Limit
Fugitive Natural Gas Releases	<ul style="list-style-type: none"> GHG and TAP emissions based on number of process components
Blowdown Natural Gas Releases	<ul style="list-style-type: none"> GHG and TAP emissions based on blowdown frequency
Mobile Sources	<ul style="list-style-type: none"> All emissions based on annual vehicle miles driven

Even with the proposed increase in the working gas capacity, WGS does not anticipate exceeding any of the assumptions used during the Phase 3 Expansion emissions estimation because the PTE assumptions were very conservative and would still encompass the additional equipment run time needed to process an increased quantity of working gas. For this reason, emissions from the WGCI will remain below what was previously assumed for the Phase 3 Expansion.

For the stationary combustion sources (compressor engines, dehydration systems) the Butte County Air Quality Management District has limited annual fuel consumption through the Facility's air quality permit. These fuel limits were used as the worst-case scenario during the emissions estimation effort. WGS will continue to operate under these fuel restrictions after the approval of the WGCI. By operating under the current air quality permit fuel consumption limits, WGS will ensure that emissions from the WGCI will remain below what was previously assumed for the Phase 3 Expansion air permitting and CEQA review.

The air quality permit issued by the Butte County Air quality Management District has limited the emissions rates of carbon monoxide (CO), oxides of nitrogen (NO_x) and reactive organic gases (ROG) from the compressor engines. These rates were used in the worst-case scenario during the emissions estimation effort. WGS will remain in compliance with these emissions rate limitations and continue to demonstrate compliance as required in the air quality permit after the approval of the WGCI. By operating under the current air quality permit emissions limits, WGS will ensure that emissions from the WGCI will remain below what was previously assumed for the Phase 3 Expansion air permitting and CEQA review.

Fugitive emissions from process components for the Phase 3 Expansion were estimated using conservative, component-count based methodologies. A count of the actual number of each component in each emissions category was used. The physical configuration of the Facility will not change during the WGCI and the actual number of process components will not increase. Since the number of components will not increase, the emissions from the WGCI will remain below what was previously assumed for the Phase 3 Expansion.

Emissions from process blowdowns were estimated for the Phase 3 Expansion using actual event data from Plant One and Plant Two operations. Blowdown events occur when the mode of operation changes between withdrawal, injection, and no-flow periods. Since the increased duration of gas flow under the WGCI scenario will reduce the number of low flow/stagnant intervals, the number of blowdowns is expected to decrease. As a result, emissions from the project will remain below what was previously assumed for the Phase 3 Expansion.

Emissions from mobile sources were estimated based on annual mileage estimates provided by WGS personnel. These emissions are a small fraction of total emissions for all pollutants. Although there is a potential for operators to be called out more frequently due to the increase of equipment operations, the same number of personnel and vehicles will be utilized to operate the facility. WGS does not anticipate a substantial increase in operator vehicle miles and associated emissions from the WGCI.

2.4 Biological Resources

Increasing the working gas capacity of the storage reservoir will not increase the physical footprint of existing facilities, will not involve any construction activities, and will not directly or indirectly affect fish, wildlife, or plants, or any sensitive species or habitat. Wild Goose has consulted with the U.S. Fish and Wildlife, the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and the California Department of Fish and Game (CDFG) regarding the proposed operational changes at the facility (see Exhibit A).

Agency representatives generally concurred that the capacity increase would not affect biological or water resources (see Exhibit 1). Jenny Marr with the CDFG suggested that we review the potential for impacts of noise from operations that could result in stress to breeding birds near the RFS. The Phase 3 Expansion FSEIR stated: “Noise from operational activities, such as blow-down venting, may cause nesting birds to temporarily leave nests, which would be considered potentially significant.” Through all phases of the Wild Goose project, applicant proposed measures (APMs) and mitigation measures have been implemented to reduce the level of noise from operations. The FSEIR concluded that implementation of the measures adopted for the Phase 2 Expansion, applicable APMs, and MM BIO-2 of the Phase 3 Expansion would reduce operation impacts from noise to less than significant levels. These measures are:

- Operations blowdowns and emergency shutdown valve blowdowns shall be routed into silencers.
- The applicant will reduce the gas/volume in the pipeline to a minimum prior to a planned maintenance blowdown.

There are eleven silenced blowdown vents in place or approved for installation at the RFS. In addition, other noise attenuation features that were designed into the RFS include walls and doors lined with acoustically absorbent materials, acoustically lined plenums in the building cooling air inlet and exhaust ports, and mufflers for all compressor engine exhaust gas.

Operational changes under the WGCI will not result in an increase of ambient noise levels or an increase in the number of blowdowns. While the duration of equipment in operation at the RFS will increase, the existing noise attenuation features will ensure that the WGCI will not result in impacts on wildlife from noise. In addition, as noted below in Section 2.11, the WGCI will likely result in fewer blowdowns and will not result in additional impacts from noise at the WPS.

2.5 Cultural and Paleontological Resources

The WGCI will not require any earthwork or construction; therefore, there will be no impact to cultural, historic, or paleontological resources.

2.6 Geology and Soils

Increasing the working gas capacity of the field will not require construction of any structures or facilities that would be exposed to geological hazards or expansive soils; therefore, there will be no impact.

2.7 Hazards and Hazardous Materials

The Phase 3 Expansion Supplemental EIR determined that there is low potential for accidental release to the public or the environment during transport, use, or disposal of hazardous materials, as well as low potential for exposure of sensitive receptors to a natural gas release hazard. Since the commencement of operations of the Facility, there has been no indication of gas migration from the gas storage reservoir to neighboring formations or to the surface through manmade or natural pathways. Increasing the working gas capacity of the field will not require a substantial change in operation of the facility such that the public or the environment would have increased exposure to hazardous materials or a natural gas release. WGS will remain within the CPUC-approved withdrawal capacity of 1,200 MMcfd and the CPUC-approved injection capacity of 650 MMcfd.

DOGGR issues permits for natural gas storage wells and establishes, as a condition of the permit, the maximum storage level that may be safely maintained in the reservoir. Before the original facility began construction in 1997, DOGGR established an injection pressure gradient limit of 0.7 pounds per square inch (psi) per foot of depth for the storage reservoir based on historical production of the field and available geotechnical information. This constitutes a 30 percent safety margin over the theoretical fracture pressure gradient for sedimentary rock of 1.0 psi per foot of rock.

Prior to approving the first expansion of the Facility in 2002, the CPUC required WGS to perform substantial additional geotechnical studies to verify the storage capacity and integrity of the field and to confirm that the field was not leaking gas from any of the abandoned gas extraction wells. Mitigation measure 3.7-1 specified core sampling requirements to confirm the cap rock integrity. The protocols were implemented and the report was submitted to both the CPUC and DOGGR, and DOGGR confirmed that the injection pressure gradient limit of 0.7 psi was still appropriate for the safe operation of the field. Mitigation measure 3.7-2 required inspection and testing of the Brady Well to determine if there was any evidence of gas migration through this abandoned well. The well was located and evaluated in 2003 and no evidence of leaking was detected.

Since the Facility began operations in 1999, WGS has never exceeded the injection pressure gradient limit of 0.7 psi. While unlikely, if pressure limits were to ever approach that limit, the Facility has a monitoring system that automatically shuts down injection operations.

The Facility has in no way posed a hazard to public health or the environment. Continuous monitoring of reservoir pressure, regular updates to a reservoir simulation model, and well inspection logging has provided a means of detecting if any anomalies exist within the reservoir or wellbore. In addition, WGS has successfully fully cycled the L-1, L-4 and U-2 reservoirs down to cushion gas level, which indicates that all injected gas is being retained within the confines of the reservoir.

The Wild Goose Gas Field originally held dry natural gas for millions of years. This indicates that the cap rock is capable of preventing the migration of stored gas. Escape through manmade wellbores or alongside these wellbores, which is typically the main avenue for potential gas

migration from a storage field is not likely. WGS utilizes premium casing, modern cementing practices, and regular casing inspection in its well design and operations.

As required by mitigation measure 3.7-3 of the WGS Expansion EIR, WGS operating procedures have included annual monitoring of surface locations at all abandoned wells in the field with a gas detection device. All measurements have detected zero presence of gas, and no evidence of a leak.

Based on 13 years of operational data from the facility and detailed modeling studies, WGS has confirmed that the working gas capacity of the field can be increased to 75 bcf without exceeding the 0.7 psi/ft limit. WGS's analytical reservoir simulation model has accurately predicted the performance of the reservoir during past operations. This provides an excellent tool for forecasting the impact of change in operating conditions, such as an increase in WGC. The model indicates that at peak inventory levels, all four reservoirs will be within the 0.7 psi/ft limit. This is consistent with the fact that the Kione formation historically produced 100 bcf of natural gas, which is 25 bcf above the maximum capacity that is being requested in this application. Of the four reservoirs approved for gas storage use, only the L-1, L-4 and U-2 have been used to store the currently approved 50 bcf of WGC. The U-1 reservoir has not been developed yet, and the simulation model indicates that the three reservoirs currently in use can easily manage an increase in capacity.

Existing permitted equipment may run more frequently and may require more frequent routine maintenance. As a result, there will be a slight increase in waste, but WGS's existing procedures for hazardous materials transport, use, and disposal will ensure that there will be no impact to the public or the environment. Based on a query of the ENVIROSTOR and GEOTRACKER databases, the WPS is not on any site compiled pursuant to subsection 65962.5 of the California government code.

The storage field is located in a remote area of Butte County, the nearest populated area of Gridley being approximately 12 miles to the east. The Wild Goose Expansion EIR from 2002 identified five hunting club lodges (four with residences) and one residence within approximately 4,400 feet of the gas storage field.

Therefore, an increase in the working gas capacity will not increase the already low potential for accidental release to the public or environment during transport, use, or disposal of hazardous materials. A storage capacity increase will not change the potential for exposure of sensitive receptors to a natural gas release hazard. The WGCI will not directly or indirectly have a substantial adverse effect on human beings. Therefore there will be no impact from the proposed increase in working gas.

2.8 Hydrology and Water Quality

Increasing the working gas capacity of the field will not involve any earthwork or require the discharge or use of water. As described in Section 1.5, when stored gas is withdrawn from the field, produced water must be separated and removed from the gas stream with the use of an inlet separator and a dehydration system. Increased gas flow with the same amount of equipment will

result in less cycling between injection and withdrawal, because a greater volume of working gas will be processed during the injection and withdrawal seasons. Therefore, the produced water volume is expected to be the same or lower as a result of less cycling and there will be no impact.

2.9 Land Use and Planning

The WGCI will involve no changes to the existing land use; therefore there will be no impact.

2.10 Mineral Resources

The WGCI will not change the footprint of the existing facilities and will not affect known mineral resources; therefore there will be no impact.

2.11 Noise

With an increase in the WGC, WGS will operate the wells at the WPS with increased frequency, but will remain within the approved injection and withdrawal rates established in the Wild Goose Phase 3 Expansion Supplemental EIR.

As described in Appendix C (Noise Study) of the Wild Goose Phase 3 Expansion Supplemental EIR, gas flow through the wells and other equipment at the WPS generates noise. The Supplemental EIR used a threshold of significance based on the U.S. Environmental Protection Agency's (USEPA) suggested outdoor noise threshold, 55 A-weighted decibels (dBA) measured at 100 yards from the WPS berms, and did not include a limit on the number of days that the wells could operate (i.e., impacts would be considered less than significant if noise levels remained below 55 dBA regardless of how frequently the wells operated).

The Wild Goose Phase 3 Expansion Supplemental EIR impact analysis concluded that “under predicted operating conditions, the Phase 3 Expansion could result in a minor (1 dBA) increase in noise outside of the WPS area (at a location 100 yards from the WPS berm).” However, the Supplemental EIR further concluded that there was a possibility that a 55 dBA threshold limit could be exceeded when fewer than 20 wells were in operation. To reduce this potential impact to less than significant, the CPUC required the following mitigation measure:

“Phase 3 Mitigation Measure (MM) NOI-2: After full buildout of the Phase 3 Expansion, the applicant will employ the following noise reduction and control practices during operations at the WPS that could produce noise levels above the 55 dBA maximum-noise-level threshold at a location 100 yards from the WPS berm:

- *During periods when fewer than 20 wells are in operation at the WPS, the applicant will record sound pressure levels on a once-a-week basis at a location 100 yards from the WPS berm.*

- *If noise levels exceed 55 dBA at a location 100 yards from the WPS berm, the applicant shall implement measures at the WPS to reduce noise levels to 55 dBA at this distance. Measures could include:*
 1. *Increasing the WPS berm in height by 2 feet (estimated total minimum noise reduction: 5 dBA);*
 2. *Increasing the WPS berm in height by 4 feet (estimated total minimum noise reduction: 10 dBA);*
 3. *Application of sound insulating lagging to well lines and valves (estimated total noise reduction: 12 to 24 dBA); or*
 4. *Installation of a cinder block (or other noise-absorbing material) enclosure or wall around the WPS equipment array (estimated total minimum noise reduction: 25 dBA)."*

The Phase 3 Expansion is not yet fully built and therefore noise testing "after full buildout" has not yet been possible.

However, as further evidence that operation of the Facility does not affect ambient noise levels measured from 100 yards, WGS has compiled one year of noise data during existing operations. Ballard Acoustical Consultants conducted noise monitoring at the WPS from January 11, 2011 to January 23, 2012. The monitoring results concluded that injection and withdrawal operations at the WPS did not result in an increase in ambient noise levels at locations 100 yards from the WPS boundary.

Once all the currently approved build out is completed, WGS will monitor noise as required by MM NOI-2 and implement the required measures if sound levels are exceeded. Maintenance of the approved injection and withdrawal rates will ensure that noise levels will not change as a result of the WGCI. Therefore, increasing the WGC to 75 bcf will not affect the noise thresholds, impact analysis, or mitigation measures established for the Phase 3 Expansion and, therefore, will result in no noise-related impacts.

2.12 Population and Housing

The WGCI will not displace people or housing, nor will it involve construction of housing or generate additional jobs in the local area that would affect population growth. While increased competitive natural gas storage will provide an overall benefit to energy markets in California, natural gas storage capacity is not a constraint to development so expansion of the working gas capacity will not induce population growth. Therefore, there will be no impact to population and housing.

2.13 Public Services

The WGCI will not require new development that would affect service levels for fire, police, schools, or parks; therefore there will be no impact to public services.

2.14 Recreation

The WGCI will not require new development that would require additional recreational facilities. Increasing the WGC will not affect hunting opportunities at the private gun clubs that underlie the gas storage reservoir because WGS will continue to operate below the noise levels that were established for the Phase 3 Expansion.

2.15 Transportation and Traffic

The WGCI will not require any notable increase in vehicle trips on any roads in the local area and will not in any way affect air traffic, vehicle traffic, or related policies and plans. Therefore, there will be no impact to transportation and traffic.

2.16 Utilities and Service Systems

The WGCI will not involve any surface disturbance that would change existing storm water flows. The WGCI will not use additional water or generate additional sewage or solid waste. Any additional produced water generated from increased processing of working gas through the facility will be disposed of using the existing produced water injection well. As discussed in Section 2.8, it is anticipated that the produced water volume will be very similar to what is currently encountered. However, the existing water injection pump and disposal well capacity is oversized, so even in the unlikely event of an increase in produced water volume, the existing disposal system will be sufficient. Therefore, there will be no impact to utilities and service systems.

2.17 Cumulative Impacts

Cumulative impacts are those that result from the incremental impacts of an action added to other past, present, and reasonably foreseeable future actions, regardless of who is responsible for such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The gas storage reservoir is largely beneath the Butte Sink and the area is surrounded by other wetlands and rice fields, so future developments in this area are highly unlikely. Increasing the WGC will not have any impacts, so therefore, there will not be any cumulative impacts.

EXHIBIT 1

Wild Goose Working Gas Capacity Increase

Agency Contact List					
Agency/ Company	Name/Contact	Address	Phone Office/Cell	e-mail	Contact Results
U.S. Fish & Wildlife Service, Sacramento Fish and Wildlife Office	Jason Hanni	2800 Cottage Way Room W2605 Sacramento, CA 95825-1846	916-414-6656	Jason_Hanni@fws.gov	Phone call 9/18: Concurred there would be no impact to snake. We should follow up with email for record and include Corps. 10/4: Sent email.
California Department of Fish & Game	Jenny Marr Env. Specialist	P.O. Box 300 Chico, CA 95927	530.895.4267 / 530-520-2469	jmarr@dfg.ca.gov	9/17: Jenny is out until 9/24. Phone call 9/26: Jenny suggested we evaluate if additional noise will impact wildlife, and in particular, waterfowl. Suggested that we speak with Andy Atkinson of Gray Lodge. 10/4: Sent email.
California Department of Fish & Game, Gray Lodge	Andy Atkinson	California Department of Fish and Game 3207 Rutherford Road Gridley, CA 95965	(530) 846-7501	AAtkinson@dfg.ca.gov	10/1: Left message. 10/4: Sent email. 10/10: Left message.
U.S. Army Corps of Engineers	Will Ness	Sacramento District, Regulatory Division 1325 J Street, Room 1350, Sacramento, CA 95814-2922	916-557-5268 Public service hours: 9 – 3:00	William.W.Ness@usace.army.mil	Phone call 9/20: could not say without first having a written description but if it's just operational, he would not think they'd have jurisdictional concerns. 10/4: Sent email.
Central Valley Regional Water Quality Control Board	Scott A. Zaitz	415 Knollcrest Drive, Suite 100, Redding, California 96002	(530) 224-4784	szaitz@waterboards.ca.gov	Phone call 9/18: on the face of it, sounds like there would be no water quality impact. If Corps wants to change their description, then they would probably mimic it. 10/4: Sent email. 10/9: Received email reply – no new water quality issues would arise.

California Regional Water Quality Control Board Central Valley Region - Redding Office	Gregory D. Cash, P.G. Senior Engineering Geologist Chief, South Regulatory Unit Heidi Bauer	415 Knollcrest Drive, Suite 100 Redding, CA 96002	(530) 224-3208 front desk: (530) 224-4845 530-224-4996	gdcash@waterboards.ca.gov hbauer@waterboards.ca.gov	Phone call by MCC 9/27: Heidi did not have any concerns and did not think we would need anything from them. F/U call from Heidi on 10/18: She had a call from the County inquiring about the produced water; she is looking into their regulatory responsibility.
Division of Oil, Gas, and Geothermal Resources (DOGGR) District 6	Mike Woods District Deputy	801 K. Street, MS 20-20 Sacramento, CA 95814-3530	916-322-1110	Mike.Woods@conservation.ca.gov	10/05: Mike Woods confirmed that since the reservoirs were previously approved, and total WGC is below historical production, all that's required is an application identifying proposed WGCI, new water- gas contact, and identification of any other changes. WGS has made tentative arrangements with DOGGR to meet ~ mid Nov/12 and provide overview of project, and discuss application in greater detail. A new approval letter will be issued once DOGGR has reviewed and accepted the changes.
Butte County Air Quality Management District	David Lusk Engineer	2525 Dominic Drive Suite 5 Chico, CA 95928	855-332-9400 x107	dlusk@bcagmd.org	9/26: Gail Williams is no longer with the AQMD. Phone call by Mike Riley 9-27: David agrees that WGS should be able to operate below the permitted limits under the new operating scenario, and that no new impacts should result. 10/10: send email. 10/11: email reply from David Lusk -- appears reasonable to conclude that no additional impact to air quality will result.
Butte County Department of Water & Resource Conservation	Paul Gosselin Director Water and Resource Cons.	308 Nelson Ave, Oroville, CA 95965	530-538-4343	bcwater@buttecounty.net	Phone call by MCC 9/25: they would not have jurisdiction so they'd just wait to see what the CPUC does for CEQA. He'll speak with their development department and public works. Asked for an email describing it. 10/4: Sent email.
Butte County Public Health Department Division of Environmental Health	Michael Huerta, Butte Co. EHD Program Manager CUPA/LEA	202 Mira Loma Dr. Oroville CA 95965	(530)538-7281 front desk (530)538-5328 direct	mhuerta@buttecounty.net	Phone call and email to MCC 10/9: Mr. Huerta stated that the facility would need to update the Business Plan and other CUPA related documents; he would like to receive the public notice.

Appendix B

State of California



SECRETARY OF STATE CERTIFICATE OF STATUS FOREIGN CORPORATION

I, **BILL JONES**, Secretary of State of the State of California, hereby certify:

That on the 16th day of July, 1996,

WILD GOOSE STORAGE INC.

a corporation organized and existing under the laws of Delaware,
complied with the requirements of California law in effect on that date for the purpose of
qualifying to transact intrastate business in this State; and

That the above corporation is entitled to transact intrastate business in the State of
California as of the date of this certificate, however, subject to any licensing requirements
otherwise imposed by the laws of this State; and

That no information is available in this office on the financial condition, business activity
or practices of this corporation.



IN WITNESS WHEREOF, I execute
this certificate and affix the Great
Seal of the State of California this
10th day of September, 1996.

Bill Jones
Secretary of State

State of California

1974223

SECRETARY OF STATE

CORPORATION DIVISION

I, *BILL JONES*, Secretary of State of the State of California, hereby certify:

That the annexed transcript has been compared with the corporate record on file in this office, of which it purports to be a copy, and that same is full, true and correct.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this

JUL 17 1996



Bill Jones

Secretary of State

1974223

ENDORSED
FILED
In the office of the Secretary of State
of the State of California

JUL 16 1996

Bill Jones
BILL JONES, Secretary of State

STATEMENT AND DESIGNATION
BY
FOREIGN CORPORATION

WILD GOOSE STORAGE INC.

(Name of Corporation)

_____ a corporation organized
and existing under the laws of Delaware makes the following
(State or Place of Incorporation)
statements and designation:

1. The address of its principal executive office is 3900, 421 - 7th Avenue S.W.
Calgary, Alberta Canada T2P 4K9

(Insert complete address of principal executive office wherever located.)

DO NOT USE POST OFFICE BOX

2. The address of its principal office in the State of California is c/o CT Corporation
System, 400, 6033 West Century Boulevard, Los Angeles, California 90045

(Insert complete address of principal office in California.)

DO NOT USE POST OFFICE BOX

DESIGNATION OF AGENT FOR SERVICE OF PROCESS IN THE STATE OF CALIFORNIA
(Complete Either Item 3 or Item 4)

3. (Use this paragraph if the process agent is a natural person.)

N/A

_____ a natural person residing in the State of California, whose complete address
is _____

DO NOT USE POST OFFICE BOX

is designated as agent upon whom process directed to the undersigned corporation
may be served within the State of California, in the manner provided by law.

4. (Use this paragraph if the process agent is a corporation.)

C T CORPORATION SYSTEM

_____ a corporation organized
and existing under the laws of DELAWARE is designated as agent upon
whom process directed to the undersigned corporation may be served within the
State of California, in the manner provided by law.

NOTE: Before a corporation may be designated by any other corporation as an agent
for service of process, a corporate agent must have complied with Section
1505, California Corporations Code.

5. The undersigned corporation hereby irrevocably consents to service of process
directed to it upon the agent designated above, and to service of process on the
Secretary of State of the State of California if the agent so designated or the agent's
successor is no longer authorized to act or cannot be found at the address given.

WILD GOOSE STORAGE INC.

(Name of Corporation)



(Signature of Corporate Officer)

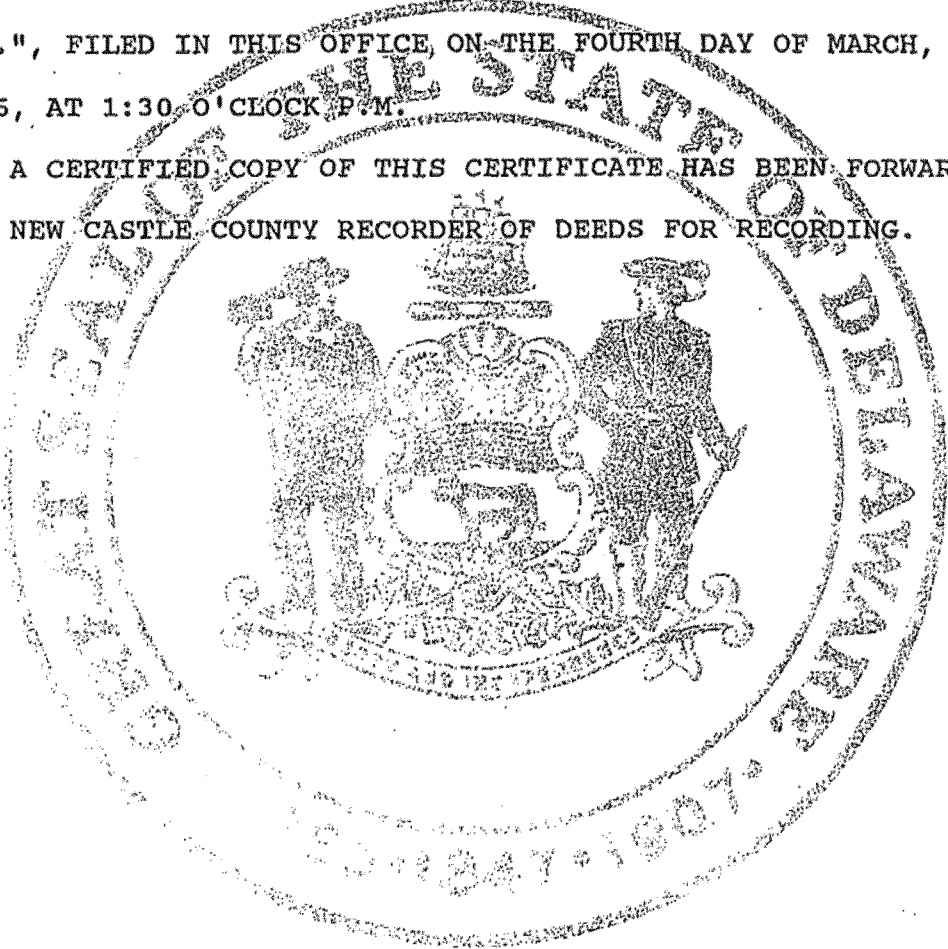
P. H. Davies - Secretary

(Typed Name and Title of Officer Signing)

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF INCORPORATION OF "WILD GOOSE STORAGE INC.", FILED IN THIS OFFICE, ON THE FOURTH DAY OF MARCH, A.D. 1996, AT 1:30 O'CLOCK P.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.



Edward J. Freel

Edward J. Freel, Secretary of State

2594859 8100

960062772

AUTHENTICATION:

DATE:

7851744

03-04-96

CERTIFICATE OF INCORPORATION

OF

WILD GOOSE STORAGE INC.

1. The name of the corporation is

Wild Goose Storage Inc.

2. The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

3. The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

4. The total number of shares of stock which the corporation shall have authority to issue is One Hundred Thousand (100,000) of which Fifty Thousand (50,000) shares are common stock without par value (the "Common Stock") and Fifty Thousand (50,000) shares are preferred stock with a par value of Ten Dollars (\$10.00) per share (the "Preferred Stock"). Such shares shall have no preemptive or preferential rights of

subscription concerning further issuance or authorization of any of the Corporation's shares.

The Common Stock may be issued from time to time in one or more series.

The Preferred Stock may be issued from time to time in one or more series consisting of such number of shares (which number may be increased or decreased, but not below the number of shares thereof then outstanding) and with such distinctive serial designations as shall be stated and expressed in the resolution or resolutions creating such series adopted by the Board of Directors; and such series (a) may have such voting powers, full or limited, or may be without voting powers; (b) may be redeemable for cash, property or rights, including securities of any other corporation, at the option of either the holder or the Corporation or upon the happening of a specified event, at such time or times, such price or prices, or such rate or rates; (c) may be entitled to receive dividends (which may be cumulative or non-cumulative) at such rate or rates, on such conditions, at such times, and payable in preference and priority to the common stock and on a par with, or in such relation to, the dividends payable on any other class or classes or series of stock; (d) may have such rights upon the dissolution of, or upon any distribution of the assets of, the Corporation, including the right to receive such distribution in preference to the common stock, and on a par with, or in such relation to, the distribution to any other class or classes or series of stock; (e) may be made convertible into, or exchangeable for, at the option of either the holder or the corporation or upon the happening of a specified event, shares of any other class or classes or any other series

or the same or any other class or classes of stock of the Corporation, at such price or prices or at such rate or rates of exchange; and (f) may have such other powers, preferences and relative, participating, optional or special rights and qualifications, limitations or restrictions thereof, all as shall hereafter be stated and expressed in the resolution or resolutions providing for the creation of each such series of preferred stock from time to time adopted by the Board of Directors pursuant to authority so to do which is hereby expressly vested in the Board of Directors.

5. The Board of Directors is authorized to make, alter or repeal the Bylaws of the Corporation. Election of Directors need not be by ballot.


6. The name and mailing address of the Incorporator is as follows:

<u>NAME</u>	<u>MAILING ADDRESS</u>
Phillip H. Davies	#3900, 421 - 7th Ave. SW Calgary, Alberta T2P 4K9

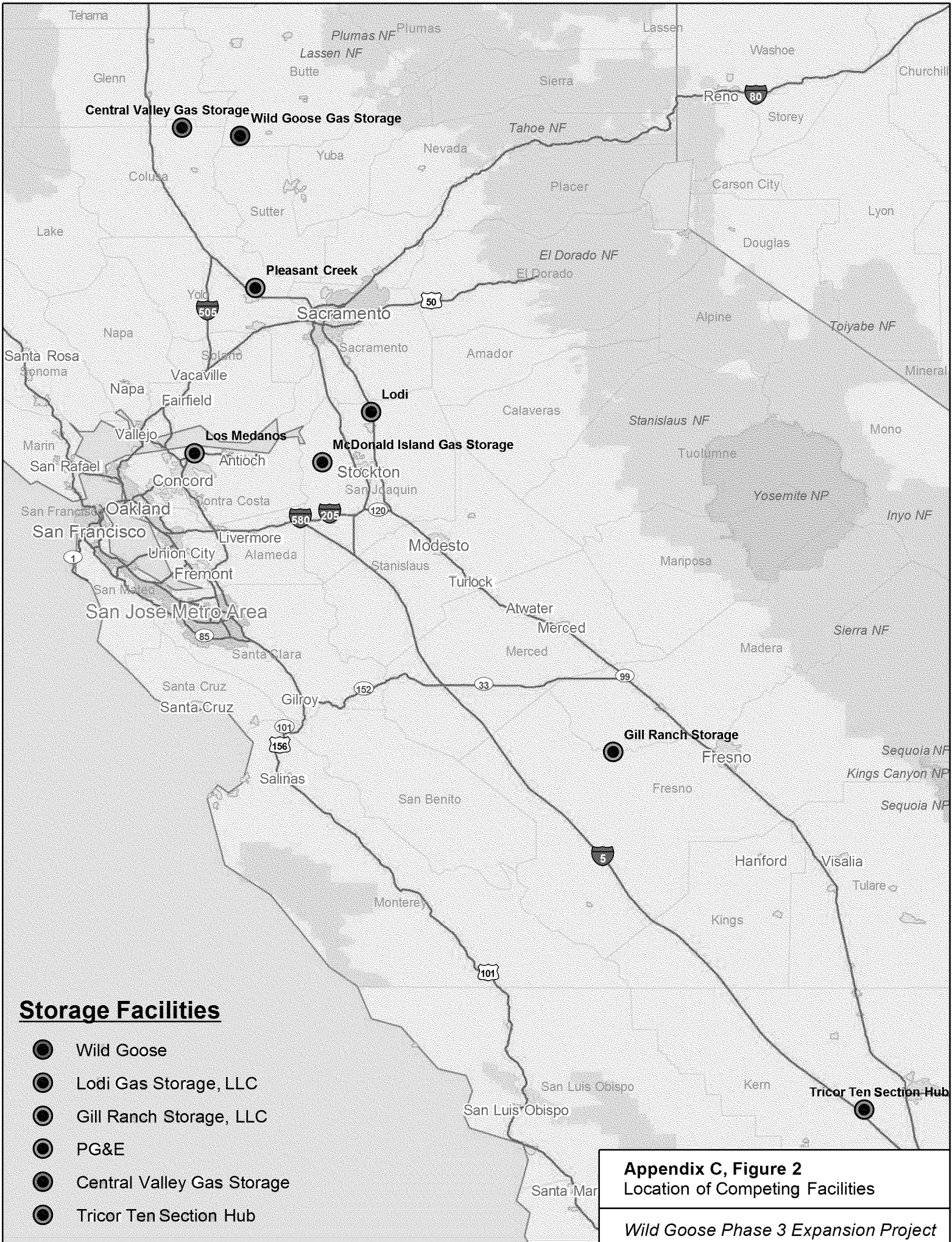
7. A Director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director, except for liability (i) for any breach of the Director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the General Corporation Law of Delaware, or (iv) for any transaction from which the Director derived any improper personal benefit. If the General Corporation Law of Delaware is hereafter

amended to authorize, with the approval of a corporation's stockholders, further reductions in the liability of the corporation's directors for breach of fiduciary duty, then a Director of the Corporation shall not be liable for any such breach to the fullest extent permitted by the General Corporation Law of Delaware as so amended. Any repeal or modification of the foregoing provisions of this Section 7 by the stockholders of the Corporation shall not adversely affect any right or protection of a Director of the Corporation existing at the time of such repeal or modification.

I, THE UNDERSIGNED, being the incorporator hereinbefore named, for the purpose of forming a corporation pursuant to the General Corporation Law of the State of Delaware, do make this certificate, hereby declaring and certifying that this is my act and deed and the facts herein stated are true, and accordingly have hereunto set my hand this 07 day of MARCH, 1998.


Philip H. Davies, Incorporator

APPENDIX C



APPENDIX D

WILD GOOSE GAS STORAGE PHASE 3 EXPANSION PROJECT

Permits and Authorizations

Permit	Agency	Jurisdiction/Purpose
<i>Federal</i>		
Section 404 Individual Permit	U.S. Army Corps of Engineers	Waters of the U.S. (temporary construction access at RFS) and National Environmental Policy Act (NEPA) lead agency
Section 7 Consultation (through Corps permit process)	U.S. Fish and Wildlife Service & National Marine Fisheries Service	Threatened and Endangered Species Biological Opinion and Take Authorization
<i>State</i>		
Certificate of Public Convenience and Necessity	California Public Utilities Commission	Overall Project approval and CEQA lead agency
Project approval for a “significant expansion”	California Division of Oil, Gas, and Geothermal Resources	Supervision of the drilling, operation, maintenance, and plugging and abandonment of oil and gas wells and attendant facilities, including tanks and pipelines
NPDES Construction Storm Water General Permit	State Water Resources Control Board	Surface disturbance greater than 1 acre
NPDES Industrial Storm Water General Permit	State Water Resources Control Board	Industrial storm water discharges
NPDES General Permit for Discharges From Utility Vaults and Other Underground Structures	State Water Resources Control Board	Short-term intermittent discharges from utility vaults to Waters of the U.S.

Permit	Agency	Jurisdiction/Purpose
NPDES General Permit covering Dewatering and Other Low Threat Discharges to Surface Waters	State Water Resources Control Board	Short-term discharges from construction dewatering, pipeline/tank pressure testing, pipeline/tank flushing or dewatering, miscellaneous dewatering
Section 401 Certification and Low Threat Discharge Permit	Regional Water Quality Control Board	Water quality certification, hydrotest water discharge, and dewatering
Streambed Alteration Agreement	Department of Fish & Game	Waterways and adjacent wildlife habitat areas (temporary construction access at RFS); wetland mitigation site
Section 2081(b)/2080.1 Permit	Department of Fish & Game	State-listed Endangered Species Take Authorization
Cultural Resource Section 106 Consultation (if required for the Corps permit amendment)	State Historic Preservation Office	Cultural resources protection and management
<i>Local</i>		
Road Encroachment Permits	Butte County Public Works	Temporary construction access from West Liberty Road to RFS expansion area
Building Permits	Butte and Colusa County Development Services	Building permits for structures and buildings
Authority to Construct	Colusa County Air Pollution Control District	Construction equipment emissions
Authority to Construct/Operate	Butte County Air Quality Management District	Combustion emission reduction and monitoring for compressor engines