Attachment S
PG&E guidance documents

PACIFIC GAS AND ELECTRIC COMPANY

Kilarc-Cow Creek Hydroelectric Project
FERC Project No. 606

REQUIREMENTS FOR ACQUIRING, OWNING AND MANAGING KILARC POWERHOUSE AND ADJACENT LAND

March 10, 2008

REQUIREMENTS FOR ACQUIRING, OWNING AND MANAGING KILARC POWERHOUSE AND ADJACENT LAND

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Section 1.0 Introduction

Pacific Gas and Electric Company (PG&E) is the owner and operator of the federally-licensed Kilarc-Cow Creek Hydroelectric Project, FERC No. 606 (Project). PG&E began to relicense the Project in 2002. During the process of relicensing, PG&E identified issues associated with resource protection and upgrades that would be required for continued operation of the facilities. Evaluation of the costs of operating the Project under a new license with anticipated conditions showed that the likely cost of providing the necessary level of protection, mitigation, and enhancement of the resources affected by the Project would outweigh the economic benefit of generation at the Project over the life of the new license. After discussions with resource agencies, PG&E made the decision not to file for a new license to operate the Project. After the decision was made the Federal Energy Regulatory Commission (FERC) allowed for interested parties to file for a new license for the Project, however no entity filed for the license in the timeframe allowed. Consequently, FERC ordered PG&E to develop a Surrender Application, which includes a decommissioning plan. In development of PG&E's decommissioning plan, several local community members expressed concerns that the Kilarc Powerhouse would be decommissioned. It was suggested that another entity could perhaps take over the facility for future public use. In support of PG&E's Land Conservation Commitment to permanently protect watershed lands through donation of conservation easements and/or fee interests in the lands, PG&E would support a donation of the land facility to a State or Federal agency, local government, or nonprofit group that has demonstrated capacity and capability to maintain the facility for a recreational/historical public use.

PG&E has prepared this document to assist entities potentially interested in acquiring, owning and managing the Kilarc Powerhouse and adjacent land for future public use, which would be recreational or historical in nature, to evaluate the opportunities, requirements and obligations associated with such an undertaking. Information is provided on maintenance of essential facilities, required land transfers, institutional obligations, and potential permits and upgrades that may be needed.

This document reflects PG&E's current understanding of the issues that would need to be addressed to modify Kilarc Powerhouse and adjacent land for public use. Additional issues to those identified herein may arise in the course of transferring the Kilarc Powerhouse and adjacent land to another entity for recreational or historical purposes and additional requirements could be applicable. Those entities interested in owning Kilarc Powerhouse and adjacent land are advised to conduct their own due diligence, including consulting with the various agencies of jurisdiction as to the applicable regulations and requirements.

1.1 Project Description

The Project, which includes Kilarc Powerhouse, is located in Shasta County approximately 30 miles east of Redding near the community of Whitmore. The Project consists of two separate developments; one on South Cow Creek (Cow Creek Development), and one on Old Cow Creek

(Kilarc Development). Each development has a series of diversions from streams, a canal system, access roads, forebay, powerhouse with electric generators, tail race, switchyard, and a short transmission line connecting the powerhouses to the power grid.

Kilarc Powerhouse and Adjacent Land – The Kilarc Powerhouse was constructed in 1904, and is a two story, rubble masonry wall buildings with a corrugated metal roof. Inside the powerhouse are two turbines and generators as well as other electrical equipment.

On the same parcel as the Kilarc Powerhouse, adjacent to the northeast portion of the building, is the Kilarc switchyard, a small paved parking area, and an unpaved parking area. To the southwest of the Kilarc Powerhouse is a level grassy lawn that affords direct access to Old Cow Creek that the public currently informally uses for picnicking and fishing access. PG&E would retain and continue to operate the switchyard, which would require the property parcel to be split. The Kilarc Powerhouse and adjacent land to the southeast could be operated and maintained for public use. These facilities could have several future public uses, such as: utilizing Kilarc Powerhouse as a museum, formalize the use of the level grassy area as a picnic site, and access to Old Cow Creek for recreational fishing.

Photograph 1.1-1a Kilarc Powerhouse and Adjacent Land

Section 2.0 Considerations and Operation Issues

After Project decommissioning, Kilarc Powerhouse will not be operated by PG&E or any other entity for power generation. If another entity were interested in the future ownership of Kilarc Powerhouse and adjacent land for public use, PG&E would be supportive, so long as all regulatory and legal requirements were met, the facilities were adequately maintained, and PG&E retained no future legal, financial, or other obligations. PG&E would be willing to meet with interested entities to discuss their interest in future ownership of this site for public recreational and/or historical use.

PG&E has identified the following issues that may need to be addressed by a prospective owner. However, as mentioned previously, PG&E cannot anticipate all of the potential issues involved in seeking to operate Kilarc Powerhouse as a recreational facility. Consequently, this list is not intended to be exclusive, exhaustive, or definitive.

- Identify a future use of the Powerhouse that would be compatible with PG&E's continued use of the adjacent switchyard;
- Parcel Split will be required;
- Upgrade to meet seismic retrofit requirements;
- Upgrade to meet ADA requirements for public recreational use;
- Assume liability for future operation and maintenance as a recreational facility and for public use;
- Obtain FERC, CPUC, and other regulatory approvals that may be necessary.

2.1 Land Transfers and Access

PG&E owns the land around the Kilarc Powerhouse. For future ownership of the Kilarc Powerhouse and adjacent land (excluding the portion of the parcel on which the switchyard is located), a portion of the PG&E-owned lands would need to be acquired by the interested entity for public use. The transfer of utility facilities is subject to certain regulatory and legal requirements, as discussed in Section 2.2 below.

2.2 Involvement/Approval of Other Entities

Project Agreement for Kilarc Cow Creek Hydroelectric Project – Future public use of the Kilarc Powerhouse and surrounding area would support the Project Agreement, by preserving the historical, architectural and cultural value of the Kilarc Powerhouse, and/or support public recreation opportunities. When PG&E was considering decommissioning as an alternative to relicensing the Project, it consulted with State and Federal resource agencies and environmental groups to determine the expectations of those parties regarding decommissioning. The

consultation resulted in the Project Agreement[1], which identifies the parameters of decommissioning the parameters of decommissioning.

Federal Energy Regulatory Commission – Since the Kilarc Powerhouse is part of a project licensed by FERC under the Federal Power Act, the disposition of Project facilities, including Kilarc Powerhouse and the adjacent land, would require FERC's approval and would be subject to evaluation under the National Environmental Policy Act. If the facilities are to be transferred to another entity, during the decommissioning process, PG&E would need to include this proposal in the Surrender Application for FERC's consideration.

California Public Utilities Commission (CPUC) – In some cases, the CPUC has authority over the disposition or encumbrance of utility lands and facilities. Proposed transactions may need to be submitted to the CPUC for approval under Section 851 of the Public Utilities Code. Under that statute, the CPUC has an approval process for certain asset transfers. The method for seeking CPUC approval depends in part on the value of the land or asset to be transferred. Depending on the intended use of the property, CEQA review and approval by the CPUC may be required.

State Historic Preservation Office – Mitigation conditions established in the License Surrender Application, such as consultation with the State Historic Preservation Office and FERC under Section 106 of the National Historic Preservation Act, will also guide future use for the site. This consultation with the SHPO could include ensuring that any rehabilitation or modification of the Kilarc Powerhouse in preparation for its use as a historic site or as a recreational facility is conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. An agreement (PA or MOA) between FERC, PGE, the future property owner, and SHPO could be established as part of the License Surrender Application, where the responsibilities and schedule are provided as to the future of the powerhouse.

2.3 Required Facilities

Kilarc Powerhouse and Adjacent Land – In order to make the facility suitable for public use, the following activities and modifications may need to be made depending on the specific proposed uses of the Powerhouse and the adjacent land: site planning to create a more suitable parking area; construction of public restrooms; improvements to the site and building in compliance with the Americans with Disabilities Act; and seismic retrofitting of the Powerhouse to a level necessary for public use.

Recreation Facility Maintenance – Maintenance of Kilarc Powerhouse and adjacent land should be comparable to other facilities of this size. Generally, maintenance and operations would include landscaping, janitorial work, and snow removal, as well as other basic maintenance needs including repairing sprinkler system, fencing repairs, painting, pest control, roof repairs, window and door servicing, and plumbing repairs.

[1] Parties to the Project Agreement are PG&E, U.S. Fish and Wildlife Service, California Department of Fish and Game, National Park Service, California State Water Resources Control Board, National Marine Fisheries Service, Friends of the River, and Trout Unlimited.

2.4 Potential Liabilities Associated with Kilarc Powerhouse Recreation Operations

The potential liabilities associated with the retention of Kilarc Powerhouse and adjacent land for public use include the potential for personal injury associated with public use. All electrical generation equipment in the power house will be de-energized as a part of the decommissioning plan.

2.5 Transfer and Upgrade Costs

In addition to the maintenance costs, there are other costs associated with the transfer and permitting of Kilarc Powerhouse and adjacent land for future public use including seismic retrofit, ADA requirements. Conditions established in the Surrender Application, such as consultation with the State Historic Preservation Office and FERC under Section 106 of the National Historic Preservation Act, and the California Environmental Quality Act (CEQA) may also apply to the transfer and upgrades, which could potentially require additional costs.

PG&E has not estimated what the transfer and upgrade costs would be at this time.

Section 3.0 Summary

PG&E supports the potential acquisition, ownership and management by an outside entity of the Kilarc Powerhouse and adjacent land for public use. The transfer of facilities would need to be approved by FERC, the CPUC, and other State and Federal agencies as part of standard permitting processes for management of these facilities for a new use.

If the approvals are obtained for transfer of the Project facilities and lands, the prospective owner would need to assume all liability for the Project, including personal injury and accidental death. The future owner would need to work with PG&E to obtain land rights and necessary parcel divisions and assume fiscal responsibility for the facilities.

PG&E is available to discuss with interested parties the transfer of the Kilarc Powerhouse and adjacent lands. .

Interested parties should contact Stacy Evans, PG&E's Project Manager at 415-973-4731.

PACIFIC GAS AND ELECTRIC COMPANY

Kilarc-Cow Creek Hydroelectric Project

FERC Project No. 606

INFORMATION FOR OPERATION OF KILARC FOREBAY AS A RECREATION FACILITY

December 20, 2007

INFORMATION FOR OPERATION OF KILARC FOREBAY AS A RECREATION FACILITY

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Section 1.0 Introduction

Pacific Gas and Electric Company (PG&E) is the owner and operator of the federally-licensed Kilarc-Cow Creek Hydroelectric Project, FERC No. 606 (Project). PG&E began to relicense the Project in 2002. During the process of relicensing, PG&E identified issues associated with resource protection and upgrades that would be required for continued operation of the facilities. Evaluation of the costs of operating the Project under a new license with anticipated conditions showed that the likely cost of providing the necessary level of protection, mitigation, and enhancement for the resources affected by the Project would outweigh the economic benefit of generation at the Project over the life of a new license. After discussions with resource agencies, PG&E made the decision to not file for a new license to operate the Kilarc-Cow Creek Hydroelectric Project. After the decision was made, the Federal Energy Regulatory Commission (FERC) allowed for interested parties to file for a new license for FERC Project 606, however no entity filed for the license in the timeframe allowed. FERC ordered PG&E to develop a Surrender Application which includes a decommissioning plan. In development of PG&E's decommissioning plan, concerns were expressed that decommissioning the Project included the decommissioning of Kilarc Forebay. It was suggested that another entity could take over the operations and maintenance required to continue use of the recreational facilities at Kilarc Forebay. PG&E would not oppose the transfer of these facilities to a State or Federal agency, local government or nonprofit group that has the capability to continue operations of Kilarc Forebay for recreational purposes if approved by FERC, California Public Utilities Commission (CPUC) and other relevant State and Federal agencies.

PG&E has prepared this report to assist entities potentially interested in managing and operating the recreational facilities at Kilarc Forebay to evaluate the requirements and obligations associated with such an undertaking. Information is provided on operations and maintenance of essential facilities, required land transfers and easements, institutional obligations, necessary permits and potential upgrades needed for continued operations at Kilarc Forebay.

This document reflects PG&E's current understanding of the issues that would need to be addressed to retain Kilarc Forebay as a recreational facility. It is intended to provide a general overview of the issues, but is not an exhaustive study. Additional issues to those identified herein may arise in the course of transferring the Kilarc Forebay and associated facilities to another entity for recreation purposes and additional requirements could be applicable. Those entities interested in operating Kilarc Forebay as a recreational facility are advised to conduct their own due diligence, including consulting with the various agencies of jurisdiction as to the applicable regulations and requirements.

1.1 Project Description

The Kilarc-Cow Creek Project, which includes Kilarc Forebay, is located in Shasta County approximately 30 miles east of Redding near the community of Whitmore. The Project consists of two separate developments; one on South Cow Creek (Cow Creek Development), and one on Old Cow Creek (Kilarc Development). Each development has a series of diversions from

streams, a canal system, access roads, forebay, powerhouse with electrical generators, tail race, switchyard, and a short transmission line connecting the powerhouses to the power grid. The combined generation capacity of the two developments is less than 5 megawatts. To operate Kilarc Forebay as a recreational facility, the new recreational operator would need to operate and maintain the following facilities: Kilarc Diversion on Old Cow Creek, Kilarc Main Canal, Kilarc Forebay, and the Forebay dam, spillway and spill channel.

Recreational Facilities at Kilarc Forebay - As part of the FERC Project license, PG&E constructed and maintains day use recreation facilities at Kilarc Forebay. These facilities include two picnic areas on the northeastern side which can be used year-round. The eastern-most facility includes eight picnic tables, four barbecue pedestals, two vault toilets and a parking area. The second picnic facility is a first-come, first-serve group area. It also includes a parking area, eight picnic tables and four barbecue pedestals. A short trail provides direct access to the toilets at the eastern picnic area from the group area. A footbridge was constructed across the entrance of the Kilarc Main Canal to provide access to the Forebay. A trail around the Forebay provides access for fishing. Camping, boating and swimming are currently prohibited at the Forebay. Additional information on recreational use of Kilarc Forebay can be found in the Recreational Resources report published on the Project website (www.kilarccowcreek.com).

Kilarc Forebay Operations - Kilarc Forebay was constructed in 1902 and is situated on a flat plateau at the west end of a spur from Miller Mountain. It has a surface area of 4.5 acres and a volume capacity of 30 acre feet. The Kilarc Diversion Dam diverts water in the upstream reaches of Old Cow Creek into the Kilarc Main Canal. The Kilarc Main Canal conveys the water to the Forebay where it passes through an intake structure into the penstock. In the penstock, water drops approximately 1,200 feet to the powerhouse, and then is released through the tail race to Old Cow Creek. The Kilarc Forebay has an overflow spillway that during periods of high flows drops water over the Forebay dam, down the spill channel and into Old Cow Creek. Photos of the Project facilities are included in Appendix A.

Kilarc Main Canal Diversion Dam - The water in the main canal is diverted from the Old Cow Creek drainage and no other water source is available to the Forebay. The Kilarc Main Canal Diversion Dam is a concrete structure, 83-ft long**,** 8-ft high and has a crest elevation of 3,814 ft.

Kilarc Main Canal - The Kilarc Main Canal delivers the water from the Kilarc diversion on Old Cow Creek to the Forebay. The Kilarc Main Canal was constructed in 1903-1904. It has a total length of 3.65 miles with a capacity of 52 cfs and an average grade of .00021. The conduit consists of 2.03 miles of canal, 1.44 miles of a 5.5-ft by 3-ft flume, and 0.18 miles of a 6-ft by 7-ft wood-lined tunnel. The canal route travels around hills and along slopes and at times it is perched on the side of steep slopes.

Kilarc Forebay Dam - Kilarc Forebay is created by Kilarc Forebay Dam. The dam is earth filled and has a maximum height of 13 ft. The maximum base width is 43 ft and the dam's crest length is 1,419 ft at 3,782 ft elevation.

Kilarc Forebay Spillway and Spill Channel - Under high flow conditions, the water delivered to the Forebay is designed to pass over the spillway and return to Old Cow Creek via the

spillway channel rather than through the penstock. The spillway is 10 ft wide and 3 ft deep and has a rated capacity of 50 cfs. The spillway empties into the spill channel.

Access Roads - Access roads to the Kilarc Development Facilities are gravel roads that cross private lands as well as PG&E lands. Kilarc Forebay is reached by a two lane gravel road. The Kilarc Main Canal Diversion Dam and portions of the waterways are reached by single lane roads. The canal has an unimproved road along the edge of the canal. The roads include culverts and bridges at water crossings.

Section 2.0 Considerations and Operation Issues

After Project decommissioning, Kilarc Forebay will not be operated by PG&E as a recreation resource. If another entity is interested in taking responsibility for the operations of Kilarc Forebay for public recreation purposes, PG&E would not be opposed, so long as all regulatory and legal commitments are met to operate and maintain the required facilities, and PG&E retained no future obligation. If these requirements are met, PG&E anticipates the signatories of the Project Agreement (discussed below in Section 2.3) would concur with operation of Kilarc Forebay as a recreation facility. PG&E would be willing to meet with interested entities to discuss their interest and assist them in understanding the operation and maintenance activities that would be necessary based on our knowledge to continue to support recreational use of Kilarc Forebay.

PG&E has identified the following issues that may need to be addressed by a prospective recreation operator. However, as mentioned previously, PG&E cannot anticipate all of the potential issues involved in seeking to retain Kilarc Forebay as a recreational facility. Consequently, this list is not intended to be exclusive, exhaustive, or definitive. Those entities interested in operating Kilarc Forebay as a recreational facility are advised to conduct their own due diligence, including consulting with the various State, Federal and local governmental agencies of jurisdiction as to the applicable regulations and requirements.

- Upgrade the Kilarc Main Canal Diversion Dam to address regulatory and environmental requirements,
- Obtain land rights or easements for public access across private lands,
- Obtain easements from private landowners for operations and maintenance for Kilarc Diversion and canals,
- Obtain necessary permits for operating and upgrading the Kilarc Main Canal Diversion,
- Complete studies and obtain approval from necessary parties on flows to be diverted to Kilarc Forebay to maintain as recreation facility,
- Obtain water rights for the operations of Kilarc Forebay as a recreation facility,
- Assume liability for future operation and maintenance as a recreational facility and liability for public use, and
- Obtain FERC, CPUC, and other regulatory approvals that may be necessary.

2.1 Land Transfers and Access

PG&E owns the lands around the Project facilities and along the Project canals. PG&E has acquired rights and easements from private landowners to access the Project facilities and

spillways. For continued operation and maintenance of Kilarc Forebay as a recreational facility, the PG&E-owned lands would need to be acquired and the acquiring entity would need to secure from private landowners the right to cross private land to access the facilities for operation, maintenance, and public use of the Kilarc Forebay recreational facilities. The public is currently permitted to access the Kilarc Forebay for recreational use in conjunction with PG&E's FERC license. This right of public access will otherwise cease with PG&E's decommissioning of the Project. The transfer of utility facilities for recreation purposes would need to be approved by FERC in the decommissioning process since the facilities are part of the federally-approved project. The potential applicability of Section 851 of the California Public Utilities Code would need to be considered in advance of any transfer of lands or facilities. If applicable, Section 851 would require CPUC approval in advance of the transfer.

2.2 Water Rights

PG&E has an adjudicated non-consumptive water right to divert 52 cfs at the Kilarc Main Canal Diversion Dam for power production. Any prospective recreational operator would need to secure water rights to preserve the Forebay, either by arranging for the transfer of a portion of PG&E's existing water rights or by obtaining a new non-consumptive water right. A permit from the State Water Resources Control Board (SWRCB) would be required to obtain a new non-consumptive water right. In Old Cow Creek, the process here would include a few extra steps. The Cow Creek basin, including Old Cow Creek, has been declared fully appropriated and also was subject to formal court adjudication in 1969. For a new water right, the prospective recreational operator would need to petition the SWRCB for an exemption to the fully appropriated stream designation. If successful, then the applicant's application would be accepted by the SWRCB. The SWRCB would then review the application and determine whether or not to issue a permit to allow water to be diverted. If a new water right is granted, it would be junior to all other adjudicated users and could not harm existing senior water users. If the prospective recreation operator arranges for a transfer of PG&E's existing water rights to support the Forebay, the adjudicating court, in this case the Shasta County Superior Court, would need to approve the transfer. Reopening the adjudication would likely be time consuming and resource-intensive.

The issuance of new water rights permits or a change in an existing permit by the SWRCB is a discretionary action, subject to California Environmental Quality Act (CEQA) review.

2.3 Involvement/Approval of Other Entities

Project Agreement for Kilarc Cow Creek Hydroelectric Project - When PG&E was considering decommissioning as an alternative to relicensing the Project, it consulted with State and Federal resource agencies and environmental groups to determine the expectations of those parties regarding decommissioning. The consultation resulted in the Project Agreement[1]. The

[1] Parties to the Project Agreement are PG&E, U.S. Fish and Wildlife Service, California Department of Fish and Game, National Parks Service, California State Water Resources Control Board, National Marine Fisheries Service, Friends of the River, and Trout Unlimited.

Project Agreement identifies the parameters of decommissioning. Continued operation of Kilarc Forebay as a recreational facility was not contemplated by the parties to the Project Agreement. If all of the regulatory and legal requirements were met, PG&E anticipates the signatories of the Project Agreement would concur with operation of Kilarc Forebay as a recreation facility.

Federal Energy Regulatory Commission - Since the Kilarc Forebay is part of a project licensed under the Federal Power Act by FERC, the disposition of project facilities, including the Project's current recreation facilities, requires FERC's approval. As part of the Surrender Application required by the FERC, the proposed disposition of the recreational facilities, including the Forebay would need to be identified. If the facilities are to be transferred to another entity for operation as a recreational facility, PG&E would need to include this proposal in the Surrender Application for FERC's consideration.

California Public Utilities Commission - In some cases, CPUC has authority over the disposition or encumbrance of utility lands and facilities. Proposed transactions may need to be submitted to the CPUC for approval under Section 851 of the Public Utilities Code. Under that statute, the CPUC has an approval process for certain asset transfers. The method for seeking CPUC approval depends in part on the value of the land or asset to be transferred. Depending on the intended use of the property, CEQA review and approval by the CPUC may be required.

2.4 Required Facilities

Kilarc Main Canal Diversion - The quality of the recreational fishing at Kilarc Forebay depends on the water diverted from Old Cow Creek drainage. No other water source is available to the Forebay. A diversion of 5 cfs may provide sufficient water to support a recreational fishery in the Forebay[2]. At this flow rate, much of the water previously diverted would remain in Old Cow Creek. The recreational operator would need to obtain water rights for the diversion of water at the Kilarc Main Canal diversion. This process is discussed in Section 2.3. The diversion would also be subject to mandatory bypass flows to provide specific instream flows downstream of the diversion. Even though the amount of water diverted would be less than what PG&E was diverting, and more water will be bypassed at the facility, the new instream flows may constrain diversion operations in dry periods. As part of the water rights process, the recreational operator would work with California Department of Fish and Game (DFG), National Marine Fisheries Service (NMFS), SWRCB and potentially others to establish new instream flows.

The Kilarc Main Canal Diversion Dam is currently a barrier to fish passage. It is anticipated that the diversion would need to be upgraded to include a fish ladder to provide passage for resident fish. The diversion may also require screens to prevent fish from being entrained in the flow. The size of the fish screens would be related to the amount of water diverted. The configuration and design of the fish protection facilities would be developed in consultation with DFG.

[2] The estimate of a 5cfs diversion rate to support recreational values and provide habitat for rainbow trout in Kilarc Forebay would need to be verified by water temperature modeling and further study.

PG&E anticipates that to upgrade the Kilarc Diversion to meet current environmental standards, it would be necessary to obtain:

(1) a Streambed Alteration Agreement with the DFG;

(2) water rights for water diversion and storage from the SWRCB and potentially need approval by the adjudication court;

(3) an Army Corps of Engineers permit, pursuant to Section 404 of the Clean Water Act; and

(4) a certification from the Regional Water Quality Control Board (RWQCB) under Section 401 of the Clean Water Act.

These actions require environmental review under the CEQA for DFG, SWRCB, and RWQCB and under the National Environmental Policy Act (NEPA) for the Army Corps of Engineers.

Kilarc Main Canal - The Kilarc Main Canal delivers the water from the Kilarc diversion to the Forebay. The Kilarc Main Canal has a total length of 3.65 miles. The canal route travels around hills and along slopes and at times it is perched on the side slopes. One of the most important issues of canal operations is to ensure that the canal does not overtop or breach and release water down a hillside. Water spilling out of the canal could cause serious erosion and could destabilize the canal resulting in canal failure. Rocks and trees occasionally fall into the canal, blocking the waterway. PG&E monitors the water level in the canal 24 hours a day, 7 days a week. By comparing the levels at the upstream end of the canal with the downstream end, PG&E can determine if the water is travelling through the canal correctly.

The waterways are inspected regularly. The canal, flumes and tunnels are checked weekly to identify if debris has entered the canal, if the structure has developed any cracks or if the flumes and flume supports are intact. Occasionally land slides can block portions of the canal or create unstable conditions. Once a year, the canal system is drained, cleaned and thoroughly inspected. Maintenance and monitoring of the canal is critical to prevent it from breaching and/or sliding downhill.

Kilarc Forebay - Kilarc Forebay itself requires periodic cleaning and dredging. Dredging would be required less frequently if the diversion rate is reduced to 5 cfs, as the lower flows would transport less sediment. However if the canal were not cleaned regularly, the sediment load to the Forebay could be similar to or greater than that experienced under current operations. Approximately every 30 years, the Forebay requires dredging. DFG currently stocks catchable rainbow trout to support the recreational fishery, and for the Forebay to continue to support recreational fishing, fish would need to be stocked regularly from the DFG or a private hatchery.

Kilarc Forebay Dam - Kilarc Forebay is created by Kilarc Forebay Dam. After decommissioning, the dam would fall under the regulations of the California Division of Safety of Dams (DSOD). Because of its small size, the dam may not be subject to regular inspection by DSOD. However, to remain sound, the prospective recreational operator would need to inspect

the dam regularly and perform regular repair and maintenance, including periodic clearing of vegetation from the face of the dam.

Kilarc Forebay Spillway and Spill Channel - For power generation, the water passes into the penstock which is located at the other end of the Forebay. For recreation purposes, the spillway is the logical pathway for water to exit Kilarc Forebay. This change in outflow location raises an issue regarding the maintenance of suitable water quality in the Forebay for trout. The spillway is located adjacent to the point where the canal empties into the Forebay. To ensure that the water from the canal circulated through the Forebay, an additional structure may need to be installed. A curtain or wall may need to be placed between the entrance from Kilarc Main Canal and the exit through the spillway. After the water passes into the spillway, the spill channel guides it down into Old Cow Creek. The spill channel needs to be inspected for erosion and blockage from rocks and trees.

Access Roads - There are approximately 9 miles of access road that would need to be maintained to operate and maintain the Project facilities. Approximately 6 miles of one lane gravel roads would need to be maintained for accessing the canal, flumes and the Kilarc Diversion. The 3-mile segment used by the public for accessing Kilarc Forebay is a two lane gravel road. All of the roads require annual grading and vegetation control, as well as roadside cleaning, seasonal culvert maintenance and erosion control measures. The 3-mile segment to Kilarc Forebay requires more maintenance than other roads since it serves the public as well as PG&E and local landowners. Oiling and regraveling of this road occur on an as-needed basis.

Recreation Facility Maintenance - Maintenance of the recreation facilities at the Forebay includes cleaning and repair. Parking lots need to be graded and regraveled as needed. The pathway around the Forebay requires cleaning and smoothing. The vault toilets are cleaned and restocked with supplies weekly. The wooden bridge, picnic table and signs need to be regularly checked for repairs and painting.

2.5 Potential Liabilities Associated with Kilarc Forebay Recreation Operations

The potential liabilities associated with operation of Kilarc Forebay for recreation includes the potential for personal injury associated with public use and a variety of liabilities associated with potential environmental damage. Operation of the waterways is a primary concern for environmental liability from the risk of the canal overtopping and causing substantial erosion and other environmental damage. The Kilarc Main Canal carries the water from the Kilarc Main Canal Diversion to the Forebay, frequently traversing steep hillsides. Water spilling out of the canal could cause serious erosion and result in significant damage to Project features, private property, and natural resources, including sensitive fish and wildlife species.

Section 3.0 Anticipated Costs Based on PG&E Expenditures

3.1 Operation and Maintenance

To provide a reference for estimated operating costs, PG&E has compiled labor, equipment and material costs of operations and maintenance for Kilarc Development based on charges incurred for manpower time over the last five years. A recreational operator's cost or manpower may not be the same as PG&E's. Table 1 represents PG&E's estimated annual effort in annual person hours. A prospective recreational operator would need to demonstrate the financial capacity to support the costs associated with the annual operation and maintenance effort.

Table 1. Maintenance and Operation of Facilities Essential for Recreations Operations

Activity	Estimated Annual Person Hours[A]
General Administration	400
Manage/maintain water gages and water rights reporting	200
Access/ Communication equipment	225
Manage Environmental Operations	40
Maintain Reservoir, Dam and Waterways	225
Maintain Roads and Bridges	450
Maintain Forebay, Dam and Spillway	110
Manage Recreation Facilities	150
Total 1800	

[A] PG&E maintains staff to monitor Project operations on a 24 hour basis, 7 days a week. These hours were not included in this table. The proper function of the canals is essential to the Project. The new recreational operator may opt for a different method to satisfy this obligation such as automatic shut off valves or other fail-safe methods.

There are additional maintenance activities that occur on a less frequent basis. These are summarized in the following table (Table 2).

Table 2. Long-Term Maintenance Activities

Activity	Frequency	Estimated Costs[B]
Dredging Forebay	30 years	$200,000
Forebay Dam Maintenance and Berm Repair	10 years	$10,000

[B] Costs are estimated in 2007 dollars.

3.2 Transfer and Upgrade Costs

In addition to the operation and maintenance costs, there are other costs associated with the transfer and permitting of Kilarc Forebay as a recreation facility. To continue operation, as discussed above, the Kilarc Main Canal Diversion would need to be upgraded to meet the current permit requirements for the DFG's Streambed Alteration Agreements (Fish and Game code section 1600). The DFG will likely require that diversion provide safe fish passage upstream and downstream of the facility.

To complete the diversion upgrades, a Section 404 (CWA) permit from the U. S. Army Corps of Engineers (USACE), a Section 401 (CWA) certification and a storm water control permit from the SWRCB would be necessary. The costs for preparing the application for these permits are included in the Table 3.

An additional category of cost associated with the transfer of facilities is the permit acquisition and the compliance with CEQA and National Environmental Protection Act (NEPA). The transfer and upgrades involve both State and Federal agencies. A joint document could serve to address environmental compliance for both NEPA and CEQA. The exact form of the document would be determined by the public agency or nonprofit that takes over the facilities and the lead agencies for the environmental review. State agencies that could serve as lead agency include CPUC, DFG or the SWRCB. For federal permits, the USACE would be the action agency responsible for NEPA compliance.

Costs for the acquisition of water rights and access agreements or easements to cross private lands have not been estimated. These costs would need to be determined by the public agency or nonprofit group undertaking the acquisition and operation of the Kilarc Forebay and associated facilities.

Other costs associated with the conversion of the Project operations from power production to recreation will likely be encountered as the issues emerge with fuller consideration of the modifications needed to support the new project purpose (recreation) and subsequent refinement of facility operations. One example would be the resolution of the Forebay circulation issue mentioned in Section 2.4. The cost of installing a potential solution, such as a wall or curtain in the Forebay, has not been is included in Table 3 since this potential solution would require further investigation.

Table 3. Potential Transfer and Upgrade Costs

Diversion Upgrades	Potential Cost Range[B]
Fish Ladder and Fish Screen Engineering and Construction	$200,000 to $1,000,000
Additional regulatory costs and permits (including CEQA/ NEPA)	$50,000 to $500,000

[B] Costs are estimated in 2007 dollars.

Section 4.0 Summary

PG&E supports the potential for the Kilarc Forebay to be maintained as a recreation facility with a new owner and operator. The transfer of facilities would also need to be approved by FERC, the CPUC, the signatories to the Project Agreement, and other State and Federal agencies as part of standard permitting processes for operation of these facilities.

If the approvals are obtained for transfer of the Project facilities and lands, the prospective operator would need to assume all liability for the Project, including personal injury and accidental death, potential damage to adjacent private property resulting from public use of the Kilarc Forebay, and potential environmental damage associated with operation and maintenance of all the project facilities and operations that are part of the recreation operations. These include diversion facilities, water conveyance facilities, access roads, forebay, forebay dam, and spill channel. The recreational operator would need to obtain water rights, obtain land rights or easements for access to facilities project located on private property, and assume fiscal responsibility for the upkeep and operation of the facilities.

PG&E is available to discuss with interested parties the transfer of the recreation facilities at the Forebay and the facilities associated with essential operations. PG&E is willing to work with prospective operators to help them understand the scope of activities required to operate project facilities, support the Forebay fishery, and maintain the picnic areas

Interested parties should contact Stacy Evans, PG&E's Project Manager at 415-973-4731 for further information.

Appendix A

Project Facilities at Kilarc Forebay

Photograph A-1. Kilarc Main Canal Diversion from Upstream.

Photograph A-2. Kilarc Main Canal Intake.

Photograph A-3. Kilarc Main Canal Diversion.

Photograph A-4. Flow Release at Kilarc Main Canal Diversion for Bypass Flows.

Photograph A-5. Concrete Lined Section of Kilarc Main Canal.

Photograph A-6. Shotcrete Lines Section of Kilarc Main Canal.

Photograph A-7. Wooden Fume Section of Kilarc Main Canal.

Photograph A-8. Steel Fume of Kilarc Main Canal.

Photograph A-9. Kilarc Forebay Spill Channel.

Photograph A-10. Kilarc Forebay Spill Channel.