UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southwest Region
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404

July 6, 2009

In response refer to:
150304SWR03SR8649

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: Comments, Recommended Terms and Conditions, and Motion to Intervene for the Kilarc-Cow Creek Hydroelectric Project, FERC Project No. P-606

Dear Secretary Bose:

Enclosed are the National Marine Fisheries Service's (NMFS) comments, recommended terms and conditions, and motion of intervention for the Kilarc-Cow Creek Hydroelectric Project (FERC No. P-606). NMFS is providing these comments in response to the Federal Energy Regulatory Commission's May 12, 2009 Notice of Application Ready for Environmental Analysis. Also enclosed is a certificate of service.

NMFS remains committed to working cooperatively with Pacific Gas and Electric (PG&E) and other stakeholders in the decommissioning process. Decommissioning, as described in the Final License Surrender Application, remains the most viable alternative for maximizing benefits for anadromous fish. NMFS was one of the signatories of the Early Decommissioning Agreement along with PG&E, the California State Water Resources Control Board, the U.S. Fish and Wildlife Service, the California Department of Fish and Game, the National Park Service, Trout Unlimited and Friends of the River - establishing a framework for a decommissioning and restoration scenario for this Project. NMFS remains committed to the principles outlined in the Early Decommissioning Agreement.

These terms and conditions were developed jointly with and are therefore consistent with the measures proposed by PG&E in their Final License Surrender Application, as well as those concurrently being filed by the U.S. Fish and Wildlife Service, California Department of Fish and Game, and the California State Water Board. The recommendations and terms and conditions herein are provided in accordance with the provisions of the Federal Power Act, 16 U.S.C. § 791 *et seq.*, the Fish and Wildlife Coordination Act, 16 U.S.C. § 661 *et seq.*, the Endangered Species Act, 16 U.S.C. §1531 *et seq.*, NMFS' Tribal Trust responsibilities, the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.*, and the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801 *et seq.*

If you have any questions regarding this document, please contact Mr. David White at (707) 575-6810.

Sincerely,

(for Edmondson)

Steve Edmondson
Northern California Habitat Supervisor

Enclosures

cc: Kilarc-Cow Creek Service List

Comments

I. Background

The Kilarc-Cow Creek Project (Project) is licensed by the Federal Energy Regulatory Commission (FERC or the Commission) as FERC Project No. P-606. The Project, owned and operated by the Pacific Gas and Electric Company (PG&E), is located in Shasta County, California along Old Cow Creek and South Cow Creek. The Project consists of Kilarc Powerhouse and Cow Creek Powerhouse along with related canals, penstocks, forebays and other structures.

Due to the complex and competing resource issues associated with the Project, in early 2004 PG&E decided to explore decommissioning as an alternative to relicensing the Project. PG&E's evaluation showed that the Project would be a high-cost source of energy and would not be competitive with other generation sources. Staff representatives of PG&E, the City of Redding, and the California Energy Commission all recommended against relicensing the Project for economic and environmental reasons. Each of these recommendations has been made part of the FERC record.

In March 2005, after 1½ years of cooperative effort, PG&E, the National Marine Fisheries Service (NMFS), the California Department of Fish and Game (CDFG), the State Water Resources Control Board (SWRCB), the U.S. Fish and Wildlife Service (USFWS), the National Park Service (NPS), and Trout Unlimited and Friends of the River signed an agreement (Agreement) that stated PG&E would not seek a new license. By not filing an application for new license by the statutory deadline of March 27, 2005, the Company lost its incumbent licensee status and its opportunity to relicense the Project. The current FERC license for the Project expired March 27, 2007. Since then, the Project has been operating on annual licenses.

On April 7, 2005, FERC published a notice soliciting applications for the license from potential applicants other than PG&E, providing a 90-day period for filing a notice of intent. Synergies Energy Services, LLC filed a notice of intent to file a license on June 27, 2005, but failed to file an application for license within the time provided by the Commission. Therefore, FERC ordered PG&E to prepare and file a license surrender application in compliance with FERC's rules that provides for the disposition and decommissioning of Project facilities.

On March 12, 2009, PG&E filed the Kilarc-Cow Creek Hydroelectric Project Final License Surrender Application (FLSA).

PG&E has detailed the proposed treatment of facilities in the Decommissioning Plan in the FLSA. In general, treatment of the facilities related to decommissioning is described in the FLSA as follows:

1. Removing diversion dams to allow free passage
2. Dam abutments may be left in place to protect stream banks
3. Powerhouse structures secured and left in place
4. Electrical equipment removed

5. Forebays graded and filled
6. In consultation with affected landowners, canals segments will be left in place, breached or filled. Flumes will be removed.

On May 12, 2009, FERC published a Notice of Application Ready for Environmental Analysis. The notice specified a deadline for filing motions to intervene and protests, recommendations, and preliminary terms and conditions as July 11, 2009. This document is filed in response.

II. Project Description

The existing Kilarc-Cow Creek Hydroelectric Project, owned and operated by PG&E (Licensee), is composed of two developments, including Kilarc and Cow Creek, and has a combined installed capacity of 5 megawatts (MW).

Kilarc Development: The Kilarc development, which diverts water from Old Cow Creek, consists of the following constructed facilities: (1) North Canyon Creek Diversion Dam and Canal; (2) South Canyon Creek Diversion Dam and Canal; (3) Canyon Creek Siphon; (4) Kilarc Main Canal Diversion Dam and Main Canal (including tunnel and elevated flumes; (5) Kilarc Forebay Dam, an earth fill dam, 13-feet high and 43-feet long; (6) a 10-foot wide overflow spillway, 3.0 feet deep and with a rated capacity of 50 cfs; (7) a 48-inch slide gate intake structure with a manual lift, protected by a trash rack over the opening to the penstock; and (8) Kilarc Penstock, a 4,801-feet long buried pipe with a maximum flow capacity of 43 cfs.

Cow Creek Development: The Cow Creek development, which diverts water from South Cow Creek, consists of the following constructed facilities: (1) Mill Creek Diversion Dam and Canal; (2) Mill Creek-South Cow Creek Canal; (3) South Cow Creek Diversion Dam and Main Canal (4) Cow Creek Forebay Dam, an earth fill berm, 16-feet high and 54-feet long; (5) Cow Creek Forebay; (6) a 49.7-foot wide overflow spillway, 1.7 feet deep with a rated capacity of 50 cfs; (7) a 42-inch slide gate intake hydraulically operated and protected by a trash rack over the opening to the penstock; and (8) Cow Creek Penstock, a 4,487-feet long buried pipe.

III. NMFS' Interest in these Proceedings

As pointed out in the FLSA, several special status anadromous species are present in the Project area. Fall and late-fall Chinook salmon in the Project area are candidates for threatened status under the Endangered Species Act (ESA). The Central Valley steelhead Distinct Population Segment (DPS) which is listed as threatened under the ESA, includes all naturally spawned populations of steelhead within the Sacramento and San Joaquin River Basins (71 FR 834). Critical habitat for Central Valley steelhead was designated September 2, 2005, and includes portions of Cow Creek and its tributaries (70 FR 54288). The Central Valley spring-run Chinook salmon Evolutionarily Significant Unit (ESU), which is listed as threatened under the ESA, includes all naturally spawned populations of spring-run Chinook salmon in the Sacramento River and its tributaries (70 FR 37160). Critical habitat for Central Valley spring-run Chinook salmon was designated on September 2, 2005 (70 FR 52488), but does not include Cow Creek or its tributaries. NMFS has authority to protect and manage these species under the ESA (16 U.S.C. §§ 1531 *et seq.*), Federal Power Act (16 U.S.C. §§ 803 *et seq.*), the Magnuson-Stevens

Fishery Conservation and Management Act (16 U.S.C. §§ 1801 *et seq.*), and other laws. NMFS provides in detail our resources, goals, and objectives for this Project in the following section. For additional details concerning NMFS' interest in these proceedings, please see enclosed Motion to Intervene.

IV. NMFS' Resource Goals and Objectives

A licensee may be surrendered only upon the fulfillment by the licensee of such obligations under the license as the Commission may prescribe and upon the proper disposition of the works as determined by the Commission (18 CRF §6.2). NMFS provides below its resource goals and objectives for the Commission's use in preparation of its environmental assessment of the need for measures required for environmental integrity.

Resource Goals

1. Protect, conserve, enhance, and recover native anadromous salmonids and their habitats by providing access to historic habitats and by restoring fully functioning habitat conditions.

2. Identify and implement measures to protect, mitigate or minimize direct, indirect, and cumulative impacts to, and enhance native anadromous salmonid resources, including related spawning, rearing, and migration habitats and adjoining riparian habitats.

Resource Objectives

1. ***Flows*** - Implement scheduled flows to the benefit of native anadromous salmonids and their habitats. This includes providing a range or schedule of flows necessary to: a) optimize suitable habitat; b) stabilize flows during spawning and incubation of ingravel forms; c) facilitate the efficient migration of spawning adults, safe, and timely emigration of smolts, and movement of rearing juveniles between feeding and sheltering areas; d) ensure redd placement in viable areas; and e) develop channel forming processes, riparian habitat protection, and maintenance movement of forage communities. This also includes impacts of flood control, irrigation, or other project structures or operations that act to displace individuals or their forage or destabilizes, scours, or degrades physical, chemical, or biological quality of habitat.

2. ***Water Quality*** - Modify project structures or operations necessary to mitigate direct, indirect, or cumulative water temperature and water quality impacts associated with project structures and operations, or enhance water temperature and water quality conditions in salmonid habitat.

3. ***Water Availability*** - Coordinate operations with other projects, programs or initiatives, and/or use water transfers, water exchanges, water purchases, or other forms of agreements to maximize potential benefits to anadromous salmonids from limited water supplies.

4. ***Fish Passage*** - Provide access to historic spawning, rearing, migration, and seasonal habitats necessary for salmonids. This includes modifications to project facilities and operations

necessary to ensure: the safe, timely, and efficient passage of upstream migrating adults; the downstream passage of emigrating juveniles; and passage necessary for rearing juveniles to disperse and access habitat necessary for feeding and sheltering.

5. ***Channel Maintenance*** - Implement flow regimes and non-flow related measures necessary to mitigate and minimize direct, indirect and cumulative impacts of project operations on sediment movement and deposition, river geometry, and channel characteristics. This includes impacts on stream geomorphology, capacity, flood plain conductivity, and bank stability. It also includes impacts to the extent, duration, and repetition of high flow events, as well as habitat diversity and complexity.

6. ***Predation*** - Minimize and mitigate the impact of project structures or operations that introduce predators, create suitable habitat for predators, harbor predators, or are conducive to the predation of native anadromous salmonids.

7. ***Riparian Habitat*** - Mitigate or minimize direct, indirect, and cumulative impacts to riparian habitat. Enhance riparian habitat and habitat functions necessary to mitigate and minimize impacts of project facilities and operations.

8. ***Coordination*** - In developing alternatives for relicensing, include a full range of alternatives for modifying project and non-project structures and operations to the benefit of anadromous salmonids and their habitats, while minimizing conflicts with operational requirements and other beneficial uses. This includes developing alternatives for greater coordination with other stakeholders, and water development projects to ensure project structures and operations are consistent with on-going and future restoration efforts, and to potentially enhance these efforts.

V. Projects Impacts on Salmonids

Salmonids require cool, clear, running water to support their freshwater life history stages (Bjornn and Reiser 1991). Incubating salmon eggs require clean gravel substrates. Juvenile habitats typically consist of free-flowing streams providing a complex of alternating shallow, swift riffles, and low-velocity pools with abundant cover in the form of woody debris, boulders, and undercut banks. Dams convert natural stream habitats to artificial pond environments. Habitats for salmonids are adversely affected by project facilities because dams change stream flow patterns, reduce habitat diversity, diminish water quality, and create barriers to the natural instream movements of salmonids. Dams can also enhance habitats for species that prey upon juvenile salmon and steelhead.

Recommended Conditions for Surrender of License

Pursuant to the Commission's regulatory authority under the Federal Power Act (16 U.S.C. 791 *et seq.*) and to carry out the purposes of the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*), NMFS recommends that the following terms and conditions to protect, mitigate damages to, and enhance fish resources be included in the agreement for the Licensee's surrender of the License and in subsequent orders regarding the surrender. These conditions are consistent with the PM&E Measures put forth by PG&E in their Final License Application, and are meant to reinforce our support of the current Decommissioning Plan as the best alternative to restore habitat and instream flows for the benefit of anadromous fish.

The primary goal of these recommendations is to establish safe and effective fish passage, restoration, and habitat conservation for anadromous fish at the Project's facilities consistent with NMFS' resource goals and objectives, described previously in this document. The purpose of NMFS' proposed mitigation measures is to restore and maintain productivity of anadromous fish populations and their habitats affected by Project developments.

NMFS has prepared these preliminary terms and conditions based on current information regarding the proposed decommissioning of the Project. As more detailed plans are developed or new information becomes available, deficiencies may be observed and modifications to protection, mitigation, and enhancement measures may be necessary. NMFS will amend these recommendations as needed to be consistent with finalized design plans and with new information developed as a result of the Commission's environmental review process or to correct deficiencies or problems found during post-licensing monitoring or evaluations. NMFS will work cooperatively with PG&E in developing these modifications.

1. **PM&E Measure GEOL-1: Implement Soil Erosion and Sedimentation Control Best Management Practices**

Recommendation:

The Licensee shall identify and implement Soil Erosion and Sedimentation Control Best Management Practices (BMPs) that address soil erosion impacts that may occur both during and after decommissioning construction work. The Licensee shall adhere to standard erosion control procedures, including applicable measures developed by the U.S. Forest Service (USDA-FS) and published in the Water Quality Management for Forest System Lands in California Best Management Practices (USDA-FS, 2000).

Prior to construction, the Licensee shall identify all natural drainage paths along the canals and tunnel during pre-construction surveys. Slopes prone to instability shall be identified, and site specific BMPs shall be implemented to avoid potential slope erosion and increased sedimentation in streams during and after construction activities. During the construction period, the Licensee shall install BMPs in all areas where soil is disturbed and could result in an increase in sedimentation and/or erosion. The Licensee shall perform inspections after storm events and perform any necessary repairs, replacements and/or addition of BMPs.

At the end of construction, the Licensee shall identify potential future erosion sites and install long-term BMPs. Specific areas to be addressed are listed below:

- After removal of the canals, diversions, and impoundment structures, the Licensee shall implement BMPs such as restoration of natural drainage paths, and recontouring of slopes to match pre-existing slope morphology, as feasible. Revegetation shall be implemented to increase bank stability.

- The Licensee shall implement BMPs to address potential erosion of access roads and staging areas throughout the Kilarc and Cow Creek developments. Artificial swales, culverts, and/or other structures shall be designed to direct runoff away from disturbed areas based on the natural drainage features of the area. For any temporary access roads that are removed, the Licensee shall implement measures in accordance with BMP 2-26 Obliteration or Decommissioning of Roads, as defined in the USDA-FS Water Quality Management for Forest System Lands in California Best Management Practices (USDA-FS, 2000).

Project Impacts:

The removal of structures in the stream banks and creek restoration activities have the potential to result in streambank erosion. In addition, erosion and sedimentation may result from increased use and/or expansion of access roads and construction and/or use of staging areas, which could erode during precipitation events. Erosion and sedimentation may affect anadromous fish by decreasing water quality, burying eggs, or burying available spawning gravel.

2. **PM&E Measure GEOL-2: Implement Stormwater Pollution Prevention Best Management Practices**

Recommendation:

The Licensee shall identify all potential pollutant sources, including sources of sediment (e.g., areas of soil exposed by grading activities, soil/sediment stockpiles) and hazardous pollutants (e.g., from petroleum products leaked by heavy equipment or stored in maintenance areas). Also, the Licensee shall identify any non-storm water discharges and implement BMPs to protect streams from potential pollutants and minimize erosion of topsoil. The Licensee shall include a monitoring and maintenance schedule to ensure BMP effectiveness for sediment control, spill containment, and post-construction measures.

The Licensee shall include a monitoring and reporting program, including pre and post storm inspections, to determine if BMPs are sufficient to protect streams and to identify any areas where stormwater can be exposed to pollutants. The monitoring program will include provisions for sampling and analysis to evaluate whether pollutants that cannot be visually observed are contributing to degradation of water quality.

Project Impacts:

The removal of structures in the stream banks and creek restoration activities have the potential to result in streambank erosion or release of hazardous substances. In addition, erosion and sedimentation may result from increased use and/or expansion of access roads and construction and/or use of staging areas, which could erode during precipitation events. Erosion and sedimentation may affect anadromous fish by decreasing water quality, burying eggs, or burying available spawning gravel. Hazardous substances may harm anadromous fish by decreasing water quality or poisoning them.

Justification:

Implementation of PM&E measures GEOL-1 and GEOL-2 would reduce the potential impacts related to soil erosion and sedimentation and potential release of hazardous chemicals into stormwater runoff.

3. **PM&E Measure GEOL-3: Professional Engineering Design Plans and Specifications Mitigation, and Enhancement Plan**

Recommendation:

The Licensee shall develop detailed design plans and specifications after FERC orders the Project to be decommissioned. These plans shall consider the potential for landslides and shall include provisions to minimize this potential. The Licensee shall prepare engineering plans for new access roads or staging areas to minimize grades and cut and fill volumes, as well as to minimize any potential for landslides as a result of the grading work.

Project Impacts:

Construction activities could cause soil to become unstable resulting in on- or off-site landslides. Landslides could reach streams and cause water quality problems, siltation off gravel beds, and harm to anadromous fish.

Justification:

Implementation of PM&E measure GEOL-3 would reduce the potential for landslides to occur and benefit anadromous fish.

4. **PM&E Measure GEOM-1: Sediment Release Measures**

Recommendation:

Following removal of the South Cow Creek and Kilarc Main Diversion dams, the Licensee shall reshape the downstream face of the sediment wedge left in place at each diversion structure to an appropriate angle of repose. The Licensee shall also form a pilot thalweg to ensure temporary fish passage until the stored sediments have been transported by flow from the

former impoundment sites and to help advance the processes of natural channel formation at the nickpoint created by the dam removal, by performing the following measures:

- Excavate a pilot thalweg through the sediment wedge that connects with the existing thalweg at a nearby upstream point to the thalweg immediately downstream of the dam.

- Shape the pilot thalweg on-site during the dam removal process.

- Dimension the pilot thalweg so that it has at minimum a 6-foot bottom width, which is approximately 20 percent of the 30 foot bankfull channel width downstream from the dam.

- Lay back the side slopes of the pilot thalweg to a natural, stable angle of repose.

- Construct the thalweg channel so that the starting depth at the downstream end of the channel is approximately equivalent to the water surface elevation of the plunge pools immediately downstream from each of the respective dams.

The final design will be based on the best available information at the time prior to implementation, in consultation with NMFS and CDFG. The Licensee shall make adjustments to the thalweg dimensions and elevation if site-specific conditions make it infeasible to construct the pilot channel to the recommended dimensions at either of the dam sites.

The Licensee shall allow the sediments remaining behind the diversions after excavation of the pilot channel to redistribute downstream during natural high flow events.

The Licensee shall place sediments excavated from the South Cow Creek and Kilarc Main Canal diversion impoundments along channel margins for future recruitment during high flow events. The Licensee shall place these native sediments so they do not interfere with riparian vegetation. The Licensee shall not place nonnative angular rock material (which may be found between the bin walls of South Cow Creek Dam) in the stream, but shall dispose of it locally at a suitable site (e.g. as canal fill).

The Licensee shall monitor fish passage conditions along the pilot thalweg channels and for 10 channel widths downstream of the dams for two years following removal. The monitoring program is discussed under PM&E Measure AQUA-5.

Project Impacts:

The release of sediment behind the Kilarc Main Canal and South Cow Creek diversion dams may result in the short-term filling of pools downstream of the dams and the creation of fish passage impediments. The plunge pools located immediately downstream of each of the dams would partially or mostly fill with sediment, and would probably not reform after the dams are removed. Other than these two plunge pools, pools further downstream would also temporarily store sediment, but seasonal high flows are sufficient to maintain these pools over the long-term, so that any sediment deposition would not persist. The downstream face of the sediment wedge

(along the upstream face of the former dam site) could be a temporary impediment to fish passage until there are sufficient high flows to incise into the sediment wedge at the nickpoint created by the dam removal, producing a low-flow channel suitable for passage. Additionally, a highly mobile bed associated with transport of stored sediments could impede fish passage.

Justification:

Implementation of PM&E measure GEOM-1 would reduce the potential for creating fish passage barriers from the face of the sediment wedge and from release of sediments stored behind the dam. Fish passage monitoring (implemented under PM&E Measure AQUA-5) would ensure that dam removal does not result in long term fish passage barriers.

5. **PM&E Measure GEOM-2: Bank Erosion Measures**

Recommendation:

To minimize potential impacts associated with bank erosion, the Licensee shall conduct the following monitoring and mitigation:

- The Licensee shall conduct a monitoring assessment after removal of the Kilarc Main Canal and South Cow Creek diversion dams. The monitoring shall consist of a visual assessment with photographic documentation of the impounded sediment wedge and streambanks adjoining the perimeter of the former sediment impoundment area. The monitoring shall be conducted after spring runoff, as soon as weather permits access to the sites and flows are low enough that the streambanks can be easily observed. The Licensee shall utilize the visual assessment to identify any areas of active erosion or undercutting, or areas that appear to be susceptible to erosion. The Licensee shall conduct the monitoring assessment for two years post decommissioning.

- If during the monitoring assessment, the Licensee observes significant erosion or bank undercutting, then the Licensee shall implement and install erosion control measures, as feasible, in the channel. The Licensee shall adhere to standard erosion control procedures, including applicable measures developed by the USDA-FS and published in the Water Quality Management for Forest System Lands in California Best Management Practices (USDA-FS, 2000).

During the permitting process, the Licensee will design bank erosion control measures in consultation with CDFG and the Regional Water Quality Control Board (RWQCB). These erosion control measures may include planting vegetation on the exposed banks to help in stabilization, use of geotextile fabric, dormant pole plantings, or other techniques that may be suitable, potentially in combination with rip-rap for stabilization.

PM&E Measure GEOL-1 will also be implemented to address slope stabilization and erosion control protection at the site of infrastructure removal including the dam abutments and diversion canal intakes.

Project Impacts:

There is potential for localized bank erosion to occur following the removal of South Cow Creek and Kilarc Main Canal diversion dams. Erosion may occur at the site where dam abutments or diversion canal intakes were located, or along the stream banks upstream from the respective dam sites in the backwater impoundment area once the sediments have been naturally transported downstream. Following two years of monitoring, PG&E will consult with the resource agencies on the need for any additional monitoring that may be conducted as part of the United States Army Corps of Engineering (USACE) 404 permit.

Justification:

Implementation of PM&E Measures GEOM-2 and GEOL-1 would reduce the potential impact of bank erosion occurring from the removal of the Kilarc Main Canal and South Cow Creek diversion dams. There is no feasible way to determine in advance of dam removal if bank erosion would occur within the former zone of sediment deposition. If monitoring determines bank erosion is occurring, PG&E would implement measures as described above to address erosion. It is expected that any erosion would be minimized as a result of dam removal with implementation of PM&E Measure GEOM-2.

6. PM&E Measure AQUA-1: Isolate Construction Area

Recommendation

To minimize the deconstruction impacts at the five diversion dams and the Kilarc Tailrace (where instream construction would be required), the Licensee shall isolate the construction area from the active stream using coffer dams or other such barriers. The Licensee shall route water around the construction area in pipes or by removing the dam in two or more phases, allowing the flow to move down the other portion of the stream, while the isolated portion of the dam is removed.

7. PM&E Measure AQUA-2: Conduct Fish Rescue in Instream Work Area

Recommendation:

After a work area is isolated, the Licensee shall conduct a fish rescue to remove any fish trapped in the work area. The Licensee shall relocate these fish to an area of suitable habitat within Old Cow Creek or South Cow Creek downstream of the work area.

8. **PM&E Measure AQUA-3: Avoid Sensitive Periods for Steelhead and Chinook Salmon for the Removal of South Cow Creek Diversion Dam**

Recommendation:

The Licensee shall conduct decommissioning work at South Cow Creek Diversion Dam from July through September when adult anadromous salmonids are not present in South Cow Creek.

Project Impacts:

Deconstruction of the Kilarc Main Canal, South Cow Creek, and Mill Creek diversion dams may result in potential lethal effects from shockwaves associated with breaking down the dam structure; potential crushing of aquatic species from operation of heavy equipment in the stream; sedimentation effects associated with dam removal and removal of gates and other headwork structures; and potential fish passage impediments. Deconstruction of North and South Canyon Creek diversion dams may result in all of these impacts, except the potential crushing from heavy equipment in the stream. Finally, the decommissioning of the Kilarc Tailrace could potentially impact aquatic resources. The potential effects of filling the Kilarc Tailrace include the burial of fish by fill materials and sedimentation effects associated with placement of fill material.

Justification:

Implementation of PM&E Measures AQUA-1 through AQUA-3, and GEOL-2 would minimize impacts to fish during deconstruction activities in the Kilarc and Cow Creek developments through a combination of avoidance and monitoring measures.

9. **PM&E Measure AQUA-4: Meet NMFS Passage Guidelines for Anadromous Salmonids**

Recommendation:

If the South Cow Creek Diversion Dam cutoff walls become fish passage barriers, the Licensee shall modify these cutoff walls or implement other appropriate measures to meet NMFS passage guidelines (drop, velocity, depth, roughened channel and other site specific factors) for anadromous salmonids. The Licensee shall consult with NMFS on designs to provide adequate fish passage.

Project Impacts:

After removal of the South Cow Creek Diversion Dam, the remaining cutoff walls may become fish passage barriers due to excessive water velocities, vertical jump heights, or insufficient water depths.

Justification:

Implementation of PM&E Measure AQUA-4 would eliminate any potential passage barrier associated with retention of the cutoff walls below South Cow Creek Diversion Dam.

10. PM&E Measure AQUA-5: Monitor Passage Conditions Following Removal of Kilarc Main Canal and South Cow Creek Diversion Dams

Recommendation:

To assess the efficacy of PM&E Measure GEOM-1 and monitor for any potential development of long-term barriers, the Licensee shall monitor fish passage conditions from upstream of the current sediment accumulations above the dam to a point approximately 10 channel widths downstream of the dam after the diversions are removed.

The Licensee shall conduct monitoring for two years after decommissioning of each diversion dam. In each year of monitoring, the Licensee shall conduct monitoring once after the first major runoff event (as access conditions and staff safety allows) and once again later in the year, during the low-flow season, when the condition of the streambed can be more easily assessed. A biologist with experience in assessing fish passage shall conduct the monitoring. The biologist shall walk the stream segment described above and visually assess for any passage challenges arising from sediment movement (i.e., shallow riffles or bars) and obtain depth and velocity measurements at critical high elevation points. The Licensee shall provide notification to resource agencies prior to monitoring so that agency staff may participate in this survey. The Licensee shall provide a summary of monitoring results at the conclusion of each year of monitoring to FERC, NMFS, CDFG, USFWS, and SWRCB.

If, during the monitoring, a long-term passage impediment is identified as a result of the diversions being removed, the Licensee will consult with CDFG and NMFS and the USACE under the Section 404 permit to determine appropriate measures to remedy the situation.

Project Impacts:

After removal of the Kilarc Main Canal Diversion Dam and South Cow Creek Diversion Dam, the stored sediment behind the dams could continue to act as a barrier to upstream migration, until natural flows removed some portion of the sediment. While this subsequent barrier would be temporary, the duration of time it persisted would depend on the magnitude and duration of high flows during the subsequent winter(s), the size of the stored substrates, and channel geomorphology. This barrier could persist for one or more years. PM&E Measure GEOM-1, which calls for creation of a pilot thalweg channel through the stored sediments, is designed to address this impact. The redistribution of the remaining stored sediment could result in new passage impediments being formed in the vicinity of the former dams. While some short-term impediments (days or weeks) may develop as a result of this sediment movement, long-term barriers (years) are not likely to develop as a result of dam removal.

Justification:

Implementation of the PM&E Measure GEOM-1 would minimize fish passage impacts below the Kilarc Main Canal and South Cow Creek diversion dams by reshaping the downstream face of the sediment wedge left in place to a reasonable angle of repose and excavating a pilot thalweg channel. The monitoring outlined in PM&E Measure AQUA-5 would determine whether any new long-term passage impediments relating to dam removal formed, and, if so, ensure that they are addressed in consultation with CDFG and NMFS.

11. **PM&E Measure AQUA-6: Consult with CDFG**

Recommendation:

The Licensee shall consult with CDFG on fish management options (including reduced stocking, increased catch limits and other measures) to reduce the number of fish in Kilarc Forebay prior to decommissioning, with the intent of minimizing the number of fish needing to be rescued.

12. **PM&E Measure AQUA-7: Conduct Fish Rescue in Canals and Forebays, as Needed**

Recommendation:

The Licensee shall conduct fish rescues in the Kilarc Main Canal and Forebay to rescue any fish that remain in these waters during the decommissioning process. These fish shall be relocated to suitable areas to be determined in consultation with CDFG and NMFS. The Licensee shall consult with CDFG and NMFS with regard to the need to conduct fish rescues in South Cow Creek Main Canal and Cow Creek Forebay. If consultation determines that a fish rescue is required for Cow Creek Canal or Forebay, the Licensee shall target salmonids and lamprey for rescue. Non-native fish, such as golden shiner, will not be rescued. The North Canyon Creek and South Canyon Creek diversions shall be decommissioned after diversions cease (these diversions have been out of service for several years), so that the channels are dry and cannot support fish. If the area is not dry, the Licensee shall conduct fish rescues as described for Kilarc Main Canal and relocate the rescued fish to an area to be determined in consultation with CDFG and NMFS.

13. **PM&E Measure AQUA-8: Retain Fish Screen in South Cow Creek Main Canal**

Recommendation:

The Licensee shall retain the fish screen in South Cow Creek Main Canal until after any fish rescue, if needed (see PM&E Measure AQUA-7), is complete and the canal is closed off so fish can no longer enter the canal. Once the fish rescue has been accomplished, the Licensee shall close off the head of the canal before the screens are removed.

Project Impacts:

Anadromous fish could be stranded in the North and South Canyon Creek canals to the extent that flows in the canals, if any, are cut off. Dewatering Kilarc Main Canal, South Cow Creek Main Canal, and the Mill Creek-South Cow Creek Canal could strand fish in the canals. Decommissioning the Kilarc and Cow Creek forebays could result in fish mortality during dewatering or the filling of the forebay.

Justification:

Implementation of PM&E Measures AQUA-6, AQUA-7, and AQUA-8 would minimize impacts to fish from decommissioning Project canals and forebays through fish rescues. Project impacts in regard to fish disease, predation, and reintroduction need to be better monitored. Corresponding remedial measures need to be undertaken to mitigate for any potential impacts.

14. PM&E Measure AQUA-9: Discontinue Cow Creek Powerhouse Operations in Spring

Recommendation:

The Licensee shall discontinue Cow Creek Powerhouse operations in the spring when natural flow is present upstream of the powerhouse.

15. PM&E Measure AQUA-10: Remove Hooten Gulch Gunite and Implement Bank Stability Measures during the Dry Season

Recommendation:

The Licensee shall remove the gunite in Hooten Gulch and install any replacement bank stabilization measures during the summer when the gulch is dry.

Project Impacts:

Following decommissioning, Hooten Gulch would be returned to its natural ephemeral flow conditions. Cessation of perennial flows could result in fish being stranded or trapped in isolated pools and subsequently dying through predation, dehydration, or poor water quality conditions that develop as these pools dry up. Additionally, the removal of the gunite in Hooten Gulch adjacent to the South Cow Creek Powerhouse and replacement with alternative bank stabilization measures could create potential issues with increased turbidity and contamination from gas, oil and other substances associated with heavy equipment.

Justification:

Implementation of PM&E Measures AQUA-9 and AQUA-10 would minimize potential impacts to aquatic resources, as Hooten Gulch would return more gradually to its natural ephemeral state as natural flows subside. Any fish in Hooten Gulch downstream of the powerhouse would then move downstream with the recession of natural flows in Hooten Gulch and would not be stranded as the result of decommissioning. Conducting channel work after the channel has naturally gone dry would avoid direct impacts to aquatic species as they would not be present at this time.

16. Disposition of Water Rights

Recommendation:

Upon decommissioning, NMFS recommends that the Licensee advise the county Superior court that their non-consumptive water rights, as prescribed in the 1969 Cow Creek Adjudication, have been abandoned in favor of instream flow enhancement, and that all project canals that facilitated the diversion of water have been removed and/or rendered inoperable.

NMFS recommends that FERC provide a reopener of the surrender order, to go into effect if the assumptions upon which NMFS relied on in allowing the abandonment rather than transfer of the water rights to a resource agency, turn out to be mistaken. These assumptions are described more fully below.

Justification:

In the March 2005 Agreement (see previous Background section), the water rights associated with the Project were to be transferred to a resource agency or other entity for the protection, preservation and/or enhancement of aquatic resources after the completion of the decommissioning activities. However, the Cow Creek stream system was adjudicated in 1969 (Decree of the Superior Court for Shasta County No. 38577) which requires the court to approve changes to the water rights associated with the Project. CDFG has "declined to accept transfer" due to the potential for a lengthy process needed to facilitate the transfer. PG&E stated in the LSA that they will abandon the water rights by ceasing diversions after decommissioning.

It is our understanding that because the area is adjudicated, and the water rights are non-consumptive, there should not be an opportunity for a third party to come in and claim the abandoned water, which according to the March 2005 Agreement would be utilized for fish and wildlife resources. NMFS continues to support the goal envisioned in the Decommissioning Agreement that PG&E's water rights be used to protect, preserve and/or enhance aquatic resources.

Advising the county Superior court of the abandonment of their non-consumptive water rights will assist in accounting and record keeping of water rights.

Recommended Actions for Decommissioning of Project Works

Kilarc Development

1. North Canyon Creek Diversion and Canal

Recommendation

Diversion Dam

- Remove wooden stream bank supports and bottom boards.

- The small wooden structure will remain in place to minimize site disturbance caused by difficult access.

Canal

- Two options are proposed for decommissioning the earthen canal depending on accessibility to the canal section: abandoning in-place (for limited accessibility) and filling the canal (for full accessibility). If abandoned in-place, the canal will be strategically breached to address storm runoff and avoid potential erosion/sediment issues. Filling the canal will entail excavating one-half of the height of the canal berm and using the excavated materials as fill (the canal is constructed of native material and has no lining). If filled, the surface will be graded to drain rainwater and snowmelt; erosion control measures will be implemented consistent with Best Management Practices (BMPs) and Project-specific PM&E measures should be implemented.

2. South Canyon Creek Diversion and Canal

Recommendation

Diversion Dam

- Remove diversion walls to natural ground or streambed level, gate, operating mechanism, and all segments. Concrete will be removed from site with mechanical components.

Flume

- Remove wooden and corrugated metal pipe structures. Concrete foundations will be left in place.

Canal

- Two options are proposed for decommissioning the earthen canal depending on accessibility to the canal section: abandoning in-place (for limited accessibility) and filling the canal by excavating one-half of the height of the canal berm and using the excavated materials as fill (for full accessibility; the canal is constructed of native material and has no lining). If abandoned in-place, the canal will be strategically breached to address storm runoff and avoid potential erosion/sediment issues. If filled, the surface will be graded to drain rainwater and appropriate erosion controls will be implemented. The concrete spillway and concrete gate slots will be removed and backfilled with excavated berm material.

Siphon

- Remove trash bars and concrete wing walls, collapse a rubble wall and bury it with excavated berm material.

- Remove all above-grade pipe and install concrete block wall at the vertical intake. Buried portions of the siphon will be capped and abandoned in place.

3. Kilarc Diversion Dam

Recommendation

- Remove the structures, guide walls, diversion gate and frame, gate operator, and debris from the site.

- A temporary cofferdam or diversion may be required.

- The diversion dam appears to be constructed on natural bedrock. The concrete portion that was added to construct the diversion will be removed.

4. Kilarc Main Canal

Recommendation

- For the earthen canal sections, two options are proposed for decommissioning depending on accessibility to the canal section: abandoning in-place (for limited accessibility) and filling the canal (for full accessibility). A canal will be filled by excavating one-half of the height of the canal berm and using the excavated materials as fill (the canal is constructed of native material and has no lining). If filled, the surface will be graded to drain rainwater and appropriate erosion controls will be implemented. If abandoned in-place, the canal will be strategically breached to address storm runoff and avoid potential erosion/sediment issues.

- For the concrete and shotcrete-lined canal sections, several options are available for decommissioning depending on accessibility to the canal section. If the canal is easily accessible for heavy equipment, the concrete walls and bottom will be broken up and pushed into the canal bottom. If there is little to no accessibility for heavy equipment to the canal section, the canal will be abandoned in-place. Abandoned-in-place sections will be strategically breached to address storm runoff and avoid potential erosion/sediment issues. Concrete sections with the downhill wall exposed may be hand cut, broken along the bottom edge, and pushed into the canal bottom. If excess native material is readily available, the canal will be filled with excavated berm material and graded, and erosion control measures will be implemented. Final disposition of sections not accessible by construction equipment will be determined on a case-by-case basis and the practicality of hand removal options will be considered.

- The flumes will be removed to their foundations, anchor bolts will be saw cut or ground flush, and foundation piers will be left in place.

- Mechanical equipment, a shed, and concrete sections, including foundations to grade, will be removed, grading will be conducted, and rip-rap will be installed, if required.

- Broken concrete will be used for rip-rap, if required, where removal of a structure damages the slope.

- Gates, frames, gate operators, support structures, the catwalk, guidewalls and any foundations to grade will be removed.

- The overflow spillway will be demolished, filled and graded, and appropriate erosion control measures will be implemented.

- The thermal electric generator and building will be removed along with slab or foundation concrete.

5. Kilarc Forebay

Recommendation

- The intake trash rake, telemetry, and electrical equipment will be removed; fencing and structures will be demolished and removed, along with any concrete foundations to grade; and the culvert will be backfilled when the canal is backfilled.

- The forebay will be filled with excavated bank material, graded for drainage, and seeded with appropriate seed mix; appropriate erosion control measures will be implemented in accordance with proposed PM&E measures.

- The overflow spillway will be demolished, filled, and graded (as part of reservoir fill work), and appropriate erosion control measures will be implemented.

- The bridge and platform will be disassembled and removed, control equipment will be removed, and the shaft will be cut off at the bottom of the reservoir. Concrete supports, if any, will be left in the reservoir bottom and covered by fill during reservoir backfilling operations.

- The picnic tables and site furnishings will be removed. The restroom buildings and slabs will be demolished and removed. The toilet vaults will be pumped, backfilled and abandoned in-place.

6. Kilarc Penstock – Penstock

Recommendation

- The upper and lower ends of the penstock will be plugged with concrete and graded to cover the exposed section at the surge tower. Because removal of the buried pipe will cause significant site disturbance at a significant cost, the buried pipe will be left in place.

- The surge tower will be cut off and removed; the opening will be covered with a welded steel plate.

7. Kilarc Powerhouse and Switchyard

Recommendation

- Turbines, generators and all associated electrical and mechanical equipment associated with the powerhouse will be removed and the structure will be abandoned in place.

- Turbine pits (located inside the Powerhouse structure) will be filled with mass concrete or other suitable fill material and capped with concrete to be flush with the surrounding floor.

- All exterior openings in the Powerhouse structure will be sealed in a manner dependent on their use. Draft tube openings will be sealed with formed concrete plugs; penetrations for electrical connections will be sealed with foam type filler or plywood, depending on size; windows will be left in place but covered with plywood cut to match the opening and doors and windows will be closed and locked but not permanently sealed. The tailrace will be backfilled to the confluence using local earth materials.

- Powerhouse structure will be secured (in accordance with PM&E measures) and left in place during decommissioning; an option for future reuse of the structure will be preserved. The switchyard will be left in place as it is an integral part of the PG&E inter-connected transmission system.

8. Mill Creek Diversion – Dam and Canal Intake

Recommendation

- Abandon the canal and fill with excavated dam material, where reasonably feasible, to minimize environmental disturbance of the berm. This is the preferred alternative of the private landowner on whose property the canal is located. Strategic breaching will also be implemented to prevent retention of runoff water, where necessary.

9. South Cow Creek Diversion Dam and Appurtenant Structures

Recommendation

- Dam removal will include removing the concrete cap, removing fill, and removing the bin walls and interior baffles.

- A temporary cofferdam/diversion will likely be required.

- Some abutments and foundation structures, connecting to the steep side slopes and below the channel bed, will be left in place to minimize potential future erosion and disturbance to the slopes. These structures include the two parallel cutoff walls beneath the bin-wall dam structure and the retaining walls on both slopes. Retention of the cutoff walls will provide bed grade control after the dam is removed. A portion of the north bank retaining wall will be left in place, with fill behind the wall graded to match the existing slope. Retention of the wall will provide erosion protection and address bank stability. A portion of the south bank retaining wall adjacent to the intake will also be left in place to avoid destabilizing the steep bank behind and above it. All other structures and equipment will be removed (e.g., electrical, mechanical devices, gates, screens, exposed rebar, rakes, metal cables, crib dam sheet metal panels, tie bars and drainage pipes). Where feasible, it is acceptable to the private landowner if structures at or below ground level are left in place so long as they are graded over with sediment fill or fill from elsewhere.

- Equipment access will minimize environmental damage to the surrounding vicinity. More detail about road access to these structures is provided in Section 2.4.

- The broken concrete from the dam and ancillary structure removal will be placed in the first reaches of the main canal and graded over with fill from the canal banks or with sediment from behind the dam if the sediment is not needed or not suitable for stream restoration.

- To allow recruitment of native material stored behind the dam to downstream reaches, sediment from behind the dam, composed mostly of gravel and cobble, will be distributed along stream margins, taking care to not affect riparian vegetation.

- Nonnative material, which may be removed from between the bin walls, may be used for backfill in canals. This nonnative material will not be placed in or along the margins of the stream.

10. South Cow Creek Canal and Tunnel

Recommendation

- Abandoning the canals in place, with strategic breaching, is the preferred alternative of the private landowners on whose property the canal is located. For the earthen section of the canal, strategic breaching will address storm runoff and avoid potential erosion/sediment issues. The short, shotcrete-lined canal segment, from the diversion structure to the bridge, will have the shotcrete removed and placed in the bottom of the canal. The canal segment will then be filled with material from the berm, burying the shotcrete.

- The Cross-over flume is a metal structure that can be easily removed. Given the minimal amount of runoff from uphill sources and the difficulty of maintaining the structure after abandonment, the recommendation is to remove the flume. Removal can be done primarily through unbolting or cutting metal connections. Foundations will be left in place to avoid disturbance to the steep slopes.

- The Cat Bridge is a substantial structure tied into the walls of the canal. Given the landowners' preference for abandoning the canal in place, the bridge will also be abandoned to allow access across the dry canal.

- Tunnel work includes plugging the upstream and downstream ends of the tunnel with concrete and abandoning the tunnel in place.

- Spillways (2 or 3) will be modified such that spill height elevation is the same as the canal bottom.

11. Cow Creek Forebay

Recommendation

- The Cow Creek Forebay will be dewatered and all removal work will occur when the forebay is dry.

- Work will involve removing the forebay by backfilling with the adjacent berm material, grading, and reseeding.

- Removal of the outlet structure will consist of removing structural steel elements, cutting off corrugated metal pipe flush with the bottom, breaking up concrete, and backfilling.

- Broken concrete will be placed in the forebay and covered with earth.

- The mechanical trash rake will be removed and the concrete walls will be demolished and removed.

- Below-grade structures will be left in place and graded over.

- The spillway will be abandoned in place to minimize disturbance to the slope that will be caused by its removal.

12. Cow Creek Penstock

Recommendation

- Upstream and downstream ends of the penstock will be plugged with an engineered concrete block.

- Because removing the remaining buried penstock will cause a significant environmental disturbance and be extremely costly, the buried penstock will be left in place.

13. Cow Creek – Powerhouse and Switchyard

Recommendation

- Powerhouse work will include removing turbines, generators, and all associated electrical and mechanical equipment, and abandoning the structure in place.

- Existing concrete will be left in place.

- Turbine pits (located inside the Powerhouse structure) will be filled with mass concrete or other suitable fill material and capped with concrete to be flush with the surrounding floor.

- The powerhouse structure will be secured (in accordance with PM&E measures) and left in place during decommissioning; an option for future reuse of the structure will be preserved.

- Switchyard work includes removing equipment and structures.

- Hooten Gulch will have the shotcrete armor removed for burial in the tailrace to allow a more natural stream bed for fish passage. Replacement bank stabilization measures will be installed.

14. Access Roads for Project

Recommendation

- For the disposition of existing Project roads, PG&E will leave them in-place per landowner requests, scarify and seed the surfaces of any roads to be rehabilitated, and erect barriers or obstacles to limit future access.

- If any new access roads are needed for decommissioning for Project facilities, PG&E will follow the protocols discussed in the applicable proposed PM&E measures to reduce or avoid impacts to environmental and cultural resources.

- For the disposition of any new access roads that are created for decommissioning, PG&E will leave them in-place per landowner requests, scarify and seed the surfaces of any roads to be rehabilitated, and erect barriers or obstacles to limit future access.

Bjornn, T.C., and D.W. Reiser (1991). Habitat requirements of salmonids in streams. Chapter 4 in Influences of Forest and Rangeland Management on Salmonid Fishes and Their Habitats, Meehan, W.R. (ed.) American Fisheries Society Special Publication 19, Bethesda, Maryland. Pp 83-138.

USDA-FS. 2000. Water Quality Management for Forest System Lands in California, Best Management Practices. USDA-FS PSW Region. Available at: http://www.fs.fed.us/r5/publications/water_resources/waterquality/water-best-mgmt.pdf

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Pacific Gas and Electric	)	Project No. 606
Kilarc-Cow Creek Hydroelectric Project	)	
	)	

NATIONAL MARINE FISHERIES SERVICE'S MOTION TO INTERVENE

I. Background

On May 12, 2009, the Federal Energy Regulatory Commission issued a "Notice of Application Accepted for Filing, Soliciting Motions to Intervene and Protests, Notice of Application Ready for Environmental Analysis, and Soliciting Comments, Recommendations, and Terms and Conditions" in the above-referenced proceeding. The Commission noted July 11, 2009 as the deadline for filing interventions. The National Marine Fisheries Service, National Oceanic and Atmospheric Administration, United States Department of Commerce, hereby timely moves for intervention in the above-referenced proceeding pursuant to 18 CFR § 385.214.

Service of process and other communications concerning this proceeding should be made to:

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II. The National Marine Fisheries Service's Interest

The National Marine Fisheries Service (NMFS) is a federal agency with jurisdiction over anadromous fish resources affected by the licensing, operation and maintenance of Hydroelectric Projects. See Reorganization Plan No. 4 of 1970, 84 Stat. 2090, as amended; the Federal Power Act (FPA) at 16 U.S.C. §§ 803(j) and 811 et al.; the Fish and Wildlife Coordination Act (FWCA) at 16 U.S.C. §§ 661 and 662; and the Sustainable Fisheries Act, 16 U.S.C. § 1801 et seq. The effects of the projects on passage and flow conditions, habitat, water quality, and other effects on anadromous fish resources directly concern NMFS under the statutory authorities listed above.

NMFS also has jurisdiction over anadromous species affected by the Project under the Endangered Species Act, (ESA), 16 U.S.C. § 1531 et seq. The Central Valley steelhead Distinct Population Segment (DPS) which is listed as threatened under the ESA, includes all naturally spawned populations of steelhead within the Sacramento and San Joaquin River Basins (71 FR 834). Critical habitat for Central Valley steelhead was designated September 2, 2005, and includes portions of Cow Creek and its tributaries (70 FR 54288). The Central Valley spring-run Chinook salmon Evolutionarily Significant Unit (ESU), which is listed as threatened under the ESA, includes all naturally spawned populations of spring-run Chinook salmon in the Sacramento River and its tributaries (70 FR 37160). Critical habitat for Central Valley spring-run Chinook salmon was designated on September 2, 2005 (70 FR 52488), but does not include Cow Creek or its tributaries. In addition, the Project substantially influences seasonal and daily flows, important water quality parameters (e.g., temperature, dissolved oxygen, and total dissolved gas), and riparian areas in historic and current habitat for salmonids.

Pursuant to these authorities, NMFS has a federal statutory responsibility for protection, mitigation and enhancement of anadromous fish resources that may be directly affected by the results of the complaint proceeding. The FPA and FWCA confer upon NMFS a specific right to participate in this proceeding. The interests of NMFS as a regulatory agency with jurisdictional

responsibility for the protection, mitigation and enhancement of affected anadromous fish resources are not adequately represented by any other party in this proceeding. By carrying out its statutory responsibilities under the FPA, FWCA and other authorities cited above, NMFS acts in the public interest. In addition, NMFS is obligated to satisfy its tribal trust responsibilities in the exercise of its statutory authorities affecting tribal interests and tribal treaty obligations.

III. Conclusion

For the above-stated reasons, NMFS respectfully requests that its motion to intervene in this proceeding be granted.

DATED July 6, 2009, on behalf of the National Marine Fisheries Service.

Respectfully submitted,

David White

David White
Santa Rosa Office
National Oceanic and Atmospheric
Administration

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Pacific Gas and Electric	)	Project No. 606
Kilarc-Cow Creek Hydroelectric Project	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the foregoing document to be served upon each person designated on the official service list compiled by the Secretary in the proceeding.

Dated July 6, 2009

David White

David White
National Marine Fisheries Service