



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
777 Sonoma Ave., Room 325
Santa Rosa, CA 95404-4731

November 6, 2008

In response refer to:
150304SWR2003SR8649

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Pacific Gas and Electric Company
c/o Darcy Kremin, ENTRIX
2300 Clayton Road, Suite 200
Concord, CA 94520

Subject: Comments regarding PG&E's Kilarc-Cow Creek Hydroelectric Project Draft License Surrender Application dated September 4, 2008, FERC P-606

To the Parties Addressed Above:

NOAA's National Marine Fisheries Service (NMFS) has received a copy of the Pacific Gas & Electric Company's (PG&E) Kilarc-Cow Creek Hydroelectric Project (Project) Draft License Surrender Application (DLSA) dated September 4, 2008. NMFS offers the enclosed specific suggestions for consideration in preparing the Final License Surrender Application (Enclosure 1).

PG&E has put together a thorough DLSA and Decommissioning Plan. Dr. Brian Cluer, NMFS fluvial geomorphologist, provided review of the geology and geomorphology sections of the DLSA. According to Dr. Cluer, PG&E has correctly identified the important issues regarding the proposed dam removals, and has performed the appropriate analyses. PG&E has accurately described Old Cow and South Cow creeks as sediment-limited systems, and has accurately characterized accumulated sediment as a valuable aquatic resource. The Decommissioning Plan should, and does, capitalize on the value of this sediment, allowing it to naturally redistribute after dam removal. Redistribution of this sediment (mostly gravel, sand, and cobble) will increase habitat complexity, restore natural riparian processes, and benefit anadromous fish.

NMFS remains committed to working cooperatively with PG&E and other stakeholders in the decommissioning process. Decommissioning, as described in the DLSA, 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

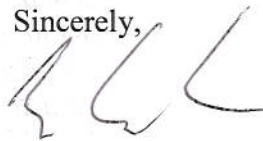


Water Resources Control Board, the U.S. Fish and Wildlife Service, the California Department of Fish and Game, the National Park Service, Trout Unlimited and Friends of the River - establishing a framework for a decommissioning and restoration scenario for this Project. NMFS remains committed to the principles outlined in the Early Decommissioning Agreement.

NMFS notes that PG&E anticipates that the relevant resource management measures proposed in the DLSA will be included by NMFS in our Endangered Species Act (ESA) Biological Opinion (BO) for the Project, and that PG&E plans to file with FERC a Biological Assessment (BA) in mid-2009. PG&E has included several important environmental measures for the protection of anadromous fish in the DLSA. NMFS looks forward to continuing to work cooperatively with PG&E and FERC, including the consultation process. Our BO will include the measures provided in FERC's environmental document. Based on our review of the subject application, we recommend FERC initiate consultation with NMFS pursuant to the ESA.

If you have any questions regarding these comments, please contact David White at (707) 575-6810.

Sincerely,



Steve Edmondson
Northern California Habitat Supervisor

Enclosure

cc: Service List P-606

**UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION**

Pacific Gas and Electric) Project No. 606-000
Kilarc-Cow Creek Hydroelectric Project)
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**NATIONAL MARINE FISHERIES SERVICE'S
COMMENTS**

I. Background

The Kilarc-Cow Creek Project is licensed by the Federal Energy Regulatory Commission (FERC or the Commission) as FERC Project No. 606 (Project). 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, 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.

FERC published a notice soliciting applications from potential applicants, and none were received by the specified deadline. 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 September 4, 2008, PG&E filed the Kilarc-Cow Creek Hydroelectric Project Draft License Surrender Application (DLSA). As noted in their letter, the 60-day public review period for the

DLSA commenced on September 9, 2008, and, therefore, comments should be submitted by November 7, 2008.

In general, treatment of the facilities related to decommissioning is described in the DLSA 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; and
6. In consultation with affected landowners, canals segments will be left in place, breached or filled. Flumes will be removed.

The DLSA provides a timetable for facility removal and a Proposed Decommissioning Plan (PDP), attached to the DLSA as Appendix A.

II. NMFS' Interest in these Proceedings

As pointed out in the DLSA, several special status anadromous species are present in the Project area. Fall and late-fall Chinook salmon in the Project are candidates for threatened status under the Endangered Species Act (ESA). Central Valley ESU steelhead in the Project are threatened under the ESA. Project area has been designated critical habitat for the steelhead. Central Valley ESU Spring run Chinook salmon are threatened under the ESA and California Endangered Species Act (CESA). NMFS is responsible for protecting and managing 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 has previously provided in detail our resources, goals, and objectives for this Project (NMFS 2005).

III. Specific Comments

Sediment Release

Dr. Brian Cluer, NMFS fluvial geomorphologist, provided specialized review of the geology and geomorphology sections of the DLSA. According to Dr. Cluer, PG&E has correctly identified the important issues regarding the proposed dam removals and has performed the appropriate analyses. PG&E accurately described Old Cow and South Cow creeks as sediment-limited systems, and accurately characterized the sediment accumulated behind the dams, composed mostly of sand, cobble and gravel, as a valuable resource. Under the proposed plan, the sediment should naturally redistribute after dam removal, increasing habitat complexity, benefitting anadromous fish, and restoring natural riparian processes.

We note that during the redistribution of sediment, sediment will accumulate in the scour pools below the dams. This is necessary to restore the natural stream gradient in these reaches. It is

also necessary that as sediment moves through the system, it will temporarily accumulate in other pools downstream, eventually being moved out during high flow events.

PG&E proposes decommissioning work at the South Cow Creek Diversion dam from July to September when adult anadromous salmonids are not present in South Cow Creek (DLSA at E.4-7). This would facilitate movement of accumulated sediment commencing with restoration of flows to the bypassed reaches, and stimulated by precipitation and runoff in the wet season (October to April). This timing makes sense from NMFS' perspective. NMFS concludes that these reaches are sediment-limited, making the accumulated sediment a valuable resource, and that the total amount of sediment that will be released likely represents a very small proportion of the annual sediment load carried by a supply-limited stream. Accordingly, we believe that getting the sediment back into the system quickly should be a priority, as it may improve spawning habitat even for the next spawning season.

Water Rights

In the DLSA (DLSA at E2.-17), PG&E proposes:

...to dispose of the six water rights described above by abandoning them upon receiving a final Order from FERC approving the decommissioning and removing the Project from FERC's jurisdiction. PG&E proposes to abandon its Project-related-water rights rather than transfer them as originally envisioned by the Project Agreement because abandonment would accomplish the Project Agreement's goals more easily and with greater certainty.

NMFS would like to pursue this issue cooperatively with PG&E and other stakeholders in the future to assure that PG&E's water rights are dedicated to instream beneficial uses. Restoring flows to the bypassed reaches will improve access to quality habitat by reducing or eliminating certain fish passage impediments (DLSA at E.2-42 and E.2-44), restoring geomorphic and riparian processes, and providing appropriate attraction flows. Providing adequate flows in these anadromous reaches that have been dewatered for approximately a century is critical to re-establishing healthy fish runs. At this point, NMFS encourages PG&E to resolve the water rights issues as described in the 2005 Kilarc-Cow Creek Project Agreement (Agreement, page 3):

If FERC authorizes or orders the Company to decommission the Project, upon a final order from FERC ending Project power operations, the Company intends to transfer its appropriate water rights held for operation of the Project ("water rights") to a resource agency or other entity that: 1) agrees to use the water rights to protect, preserve, and/or enhance aquatic resources, as authorized by applicable laws and regulations, such as Water Code section 1707; and 2) is acceptable to the Parties. Additionally, prior to transferring of its water rights, the Company will work in good faith with other non-Parties to resolve potential water rights issues with the goal of having the water rights used to preserve, protect and/or enhance aquatic resources.

NMFS encourages PG&E to petition the California State Water Resources Control Board to dedicate these water rights for the purpose of preserving or enhancing fish and wildlife resources. California Water Code Section 1707 is relevant to dedicating the water rights to enhancing fish and wildlife resources, and authorizes:

(a) Any person entitled to the use of water, whether based upon an appropriative, riparian, or other right, may petition the board pursuant to this chapter, Chapter 6.6 (commencing with Section 1435) or Chapter 10.5 (commencing with Section 1725) for a change for purposes of preserving or enhancing wetlands habitat, fish and wildlife resources, or recreation in, or on, the water. (b) The board may approve the petition filed pursuant to subdivision (a), subject to any terms and conditions which, in the board's judgment, will best develop, conserve, and utilize, in the public interest, the water proposed to be used as part of the change, whether or not the proposed use involves a diversion of water, if the board determines that the proposed change meets all of the following requirements: (1) Will not increase the amount of water the person is entitled to use. (2) Will not unreasonably affect any legal user of water. (3) Otherwise meets the requirements of this division.

NMFS would be glad to assist with this process as is permissible.

Water Quality

NMFS notes that sediment analysis results showed that copper concentrations in Kilarc sediments are at or slightly greater than Threshold Effects Level (TEL) of 35.7 mg/kg but well below the Probable Effects Level (PEL) of 197 mg/kg. NMFS expects the state and regional water boards to comment on this issue.

Protection, Mitigation, and Enhancement Measures

PG&E has proposed the following measures to safeguard anadromous fish during decommissioning:

1. (GEOL-1) Using Best Management Practices to control erosion and sedimentation
2. (GEOL-3) Developing a Design Plan to limit landslides
3. (GEOM-1) Creating a thalweg through accumulated sediment for fish passage
4. (GEOM-2) Regularly monitoring for bank erosion and undercutting
5. (AQUA-1) Isolating aquatic resources from construction
6. (AQUA-2) Conduct fish rescues
7. (AQUA-3) Avoiding sensitive periods for steelhead and Chinook salmon

8. (AQUA-4) Applying NMFS' Fish Passage Criteria and Guidelines to structures left in place at the South Cow Diversion Dam

These are all important measures that we feel should be included in PG&E's Final License Application. In order to strengthen the level of protection of these measures, we suggest the following modifications:

Measure AQUA-4: Modify the measure to apply to any Project structure left in place, rather than just the South Cow Diversion Dam.

Measure GEOM-2: Modify the measure to include monitoring of the pilot thalweg for development of long-term fish passage barriers, and potential additional excavation, as necessary. The monitoring could be performed on the same basis as proposed in GEOM-2 (*i.e.*, after spring runoff for two years, and then PG&E will consult for with the resource agencies on a need for any additional monitoring). NMFS expects that fish barriers may frequently and temporarily occur in the pilot thalweg as sediment redistributes. Our suggestion is intended to prevent the development of a long term fish passage barrier.

Finally, NMFS suggests that a measure be included (or an existing measure be modified to include) to limit and mitigate instances in which, as a result of decommissioning Project facilities, road access is provided across fish-bearing streams.

IV. Conclusion

PG&E has put together a thorough DLSA and Decommissioning Plan. Decommissioning, as described in the DLSA, remains the most viable alternative for maximizing benefits for anadromous fish. PG&E has included several important environmental measures for the protection of anadromous fish in the DLSA.

NMFS notes that PG&E anticipates that the relevant resource management measures proposed in the DLSA will be included by NMFS in our Endangered Species Act (ESA) Biological Opinion (BO) for the Project, and that PG&E plans to file with FERC a Biological Assessment (BA) in mid-2009. NMFS looks forward to continuing to work cooperatively with PG&E and FERC, including the consultation process. Our BO will include the measures provided in FERC's environmental document. Based on our review of the subject application, we recommend FERC initiate consultation with NMFS pursuant to the ESA and the Fish and Wildlife Coordination Act (FWCA).

If you have any questions regarding these comments, please contact David White at (707) 575-6810.

References

NMFS (National Marine Fisheries Service) (2005). Comments on Synergics Energy Services' Initial Information Package, Kilarc-Cow Creek Project, FERC No. 606, Old and South Cow Creeks, Shasta County.

**UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION**

Pacific Gas and Electric)	Project No.606
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Draft License Surrender Application)	
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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 this 6th day of November, 2008

David White

David White
National Marine Fisheries Service