STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification for
U. S. Army Corps of Engineers 404 Permits for
THE BUCKS CREEK HYDROELECTRIC PROJECT (FERC NO. 619)

GRIZZLY CREEK WEIR MODIFICATION PROJECT
ON GRIZZLY CREEK, TRIBUTARY TO THE NORTH FORK FEATHER RIVER

FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 619

SOURCES: Grizzly Creek

COUNTY: Plumas County

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

BY THE EXECUTIVE DIRECTOR:

Background

The **PACIFIC GAS AND ELECTRIC COMPANY** (PG&E) owns and operates the Bucks Creek Hydroelectric Project (Bucks Project) located on Bucks, Milk Ranch, and Grizzly Creeks and their tributaries in Plumas County. The Bucks Project features include four reservoirs, a conduit, two tunnels, and two powerhouses, all located in the North Fork Feather River watershed within the Plumas National Forest (PNF). Bucks Powerhouse, on the North Fork Feather River, began operation in the 1920s with flow delivered from impoundments at Upper Bucks Lake and Lower Bucks Lake. In 1988 the Federal Energy Regulatory Commission (FERC) approved an amendment to the Bucks Project License, and construction of the Grizzly Powerhouse and Forebay on Grizzly Creek was completed in 1993. Articles of the amended license required PG&E to conduct environmental studies of the Bucks Project area and, in consultation with PNF, develop environmental mitigation plans and recommendations for submittal to FERC by December 31, 2004. Based on instream flow and fisheries enhancement recommendations received, FERC issued a January 11, 2006 Order amending minimum streamflow requirements below Lower Bucks Lake Dam and Grizzly Forebay Dam. As an interim measure, PG&E has removed the orifice plates in the existing outlet valves allowing flow of approximately seven cubic feet per second (cfs) to pass below each dam, to achieve releases as close as possible to the specified minimum flows. To fully implement and monitor compliance with the required minimum flow

releases to Grizzly Creek, retrofit work on the Grizzly Forebay Dam outlet valve and modifications to the Grizzly Creek measuring device (Grizzly Weir) downstream will be necessary.

Proposed Project

PG&E proposes modifications to the existing Grizzly Weir measuring structure (PG&E gage NF22), located on Grizzly Creek approximately 300 feet downstream of Grizzly Forebay Dam. The weir will be reconstructed to provide accuracy in measuring increased minimum flows equal to or greater than eight cfs, and upgrades will be made to the structural integrity of this Bucks Project feature. Work involves the diversion of streamflow around the center of the existing weir using a temporary cofferdam made from clean sandbags along with a corrugated plastic conduit bypass system. Creation of a dry construction zone will result in the temporary dewatering of approximately 50 feet of streambed immediately upstream of the weir location. Construction activities will include concrete cutting to enlarge the rectangular measurement notch in the weir, installation of a weir plate, and concrete patching of pervious areas of the existing weir expanse and wingwall structure. Approximately five cubic yards of rock will be removed from the wingwall and 10 cubic yards of concrete used for reconstruction. Materials will be removed by hand and relocated outside of the creek drainage; affected areas will be restored after completion of the construction activities.

PG&E has agreed to maintain minimum flow releases from Grizzly Forebay Dam to Grizzly Creek during reconstruction and rehabilitation of the measurement weir for protection of the aquatic ecosystem in all but the limited area scheduled for temporary dewatering. Flow will be conveyed downstream of Grizzly Weir through appropriately-sized conduit to maintain continuous wetted perimeter beyond the work zone. In preparing the construction site PG&E will conduct appropriate fish rescue efforts, as needed. The work site is not accessible by vehicle; PG&E will deliver construction materials to the immediate area using helicopter or concrete pump equipment staged at the nearby roadway. The laydown area at Grizzly Weir will be on a 12' x 16' plywood platform constructed below the highwater mark on a granite outcropping in the dry. The platform will be constructed with a safety containment barrier and will be used to store hand tools. No fuels or liquids will be stored at the site. Erosion control measures will be taken in the limited areas of work and concrete placement will be done in the dry. All construction debris will be removed from the site and stream channel and upon completion of the project the laydown platform will be removed.

Activities proposed at the Grizzly Weir site offer potential for introduction of discharge to the Grizzly Creek channel downstream. Consistent with requirements of the Clean Water Act (CWA), PG&E has requested a CWA section 404 Permit (33 U.S.C. §1344) from the U.S. Army Corps of Engineers for the proposed retrofit and restoration project. In its application, PG&E seeks to proceed with construction activities under a section 404 Nationwide Permit, characterizing the proposed project as "scientific measurement" and "temporary construction, access and dewatering."

404 Nationwide Permits

On May 11, 2007, the State Water Resources Control Board (State Water Board) issued statewide water quality certification covering several classes of activities covered under U.S. Army Corps of Engineers 404 Nationwide Permits (NWP) Program and at the same time denied certification without prejudice to several classes of NWPs that were found to individually or cumulatively have a significant effect on the environment. The NWP classes that were not certified by the State Water Board were found to result in more than minimal individual impacts or contribute to cumulative impacts as a result of the range of activities contemplated under those NWPs and therefore require water quality certification on an individual project-by-project basis. PG&E has applied to the U.S. Army Corps of Engineers for NWP Number 5 (Scientific Measurement Devices) and NWP Number 33 (Temporary Construction, Access and Dewatering). The State Water Board characterizes the purpose of streamflow gauging on Grizzly Creek to be regulatory compliance rather than scientific measurement, and therefore will dismiss the proposal for NWP Number 5 as inappropriate in this instance. NWP Number 33 is among those NWP classes denied certification. Therefore, PG&E must obtain individual water quality certification from the State Water Board.

Regulatory Authority

The Federal CWA (33 U.S.C. §§ 1251-1387) was enacted "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. § 1251(a)). Section 101(g) of the Clean Water Act (33 U.S.C. § 1251(g)) requires federal agencies to "cooperate with state and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources."

Section 401 of the CWA (33 U.S.C. § 1341) requires every applicant for a federal license or permit that may result in a discharge to navigable waters to provide the responsible federal agency with certification that the project will be in compliance with specified provisions of the Clean Water Act, including Water Quality Standards and Implementation Plans (CWA, § 303, 33 U.S.C. § 1313). CWA section 401 directs the State agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the CWA and with any other appropriate requirement of State law. Section 401 further provides that State certification conditions shall become conditions of any federal license or permit for the project.

The State Water Board is the lead agency responsible for water quality certification in California (Wat. Code, § 13160) and has delegated this function to the Executive Director by regulation (Cal. Code Regs., tit., 23, § 3838, subd. (a)).

The California Regional Water Quality Control Boards (RWQCB) have adopted, and the State Water Board has approved, Water Quality Control Plans (Basin Plans) for each

watershed basin, in accordance with provisions of section 303 of the CWA, related to the establishment of water quality standards and planning (33 U.S.C. § 1313). Basin Plans identify beneficial uses of the waters within each defined Region.

The RWQCB, Central Valley Region, adopted its Water Quality Control Plan for the Sacramento and San Joaquin River Basins (4th Edition) on September 15, 1998; the Basin Plan has now been revised with approved amendments through February 2007. The Basin Plan identifies the beneficial uses of the North Fork Feather River and its undesignated tributaries including Grizzly Creek, as: Municipal and Domestic Supply (MUN), Hydropower Generation (POW), Water Contact Recreation (REC 1), Non-contact Recreation (REC 2), Cold Freshwater Habitat (COLD), Coldwater Spawning (SPWN), and Wildlife Habitat (WILD).

Protection of the chemical, physical, and biological integrity of waters of the state for instream beneficial uses identified in the Basin Plans requires maintenance of adequate stream flows as well as effluent limitations and other limitation on discharges of pollutants from point and nonpoint sources to navigable waters and their tributaries.

California Environmental Quality Act Compliance

The State Water Board is lead agency for the Grizzly Creek Weir Modification Project under the California Environmental Quality Act (CEQA). The State Water Board has prepared a Notice of Exemption for the project. The project is exempt based on a CEQA Categorical Class 1 Exemption (CEQA Guidelines §15301(b) and (d)), operation, repair, maintenance of existing facilities of investor-owned utilities used to provide electrical power, and restoration or rehabilitation of deteriorated structures, facilities to meet current standards. Biological studies have recently been conducted within the affected area to assess instream flow needs, water quality parameters, condition of fisheries, benthic macroinvertebrates, amphibian species, presence or absence of sensitive terrestrial species, other ecological and recreation attributes. A compilation and disclosure document for these environmental studies, Summary Report and Environmental Mitigation Plans (PG&E, April 29, 2005), may be viewed as FERC electronic library posting 20050510-0012, at http://www.ferc.gov/docs-filing/elibrary.asp. Environmental studies conducted by PG&E under the oversight of the PNF found no special status aquatic species in the Grizzly Forebay and Grizzly Creek areas. Surveys and general observations identify an active and seasonally occupied Bald Eagle (*Haliaetus leucocephalus*) nest approximately 0.75 mile from the proposed project. Records indicate that breeding activity at this nest site typically begins in late February through March with young fledging by early July. The project is expected to have no effect on any listed species that may occur within the project area. Further, no historic or cultural resources will be impacted by the project.

In addition to the Bucks Project biological reports and assessment, the State Water Board has considered the information included in the Stream Alteration Agreement issued by the Department of Fish and Game (1600-2006-0486-R2), the Bucks Creek Hydroelectric Project Bald Eagle Management Plan (FERC posting 20060303-0059)

and related watershed information for the North Fork Feather River. Further, the State Water Board has considered the current Basin Plan for the Sacramento and San Joaquin River Basins, the existing water quality conditions of the subject streams, and project-related controllable factors.

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD THE STATE WATER BOARD CERTIFIES THAT THE GRIZZLY CREEK WEIR MODIFICATION PROJECT, AS PART OF THE BUCKS CREEK HYDROELECTRIC PROJECT OPERATED BY PACIFIC GAS AND ELECTRIC COMPANY, will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, if the Licensee complies with the following terms and conditions during the construction project certified herein.

1. This certification is subject to modification or revocation upon administrative or judicial review including review and amendment pursuant to Water Code section 13330 and title 23 of the California Code of Regulations (commencing with § 3867).

2. The State Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

3. Notwithstanding any more specific conditions in this certification, the project shall be operated in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

4. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under any State or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this certification, the State Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

5. Grizzly Forebay Dam shall be operated in a manner that provides a continuous minimum flow release of six cubic feet per second or greater to Grizzly Creek, as

measured at the dam, to maintain the native aquatic species in good condition. The entire flow of Grizzly Creek will be conveyed downstream of Grizzly Weir to sustain continuous wetted perimeter beyond the work zone.

6. This certification does not authorize any act that will result in the taking of a threatened or endangered species, or any act which is now prohibited or becomes prohibited in the future under either the California Endangered Species Act (DFG Code § 2050 to 2097) or the federal Endangered Species Act (16 U.S.C. § 1531 to 1544). If a "take" will result from any act authorized under this certification or water rights held by the Licensee, the Licensee shall obtain authorization for the take prior to any construction or operation of the project. The Licensee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this certification.

7. Equipment staging and project construction shall not commence until Bald Eagle nesting and fledging activity in the Grizzly Forebay area has been completed for the season. Breeding success, nestling occupancy, and fledging date(s) shall be documented and notification made to the Department of Fish and Game and State Water Board, prior to commencement of work.

8. Within one week prior to initiating project activities, visual survey(s) shall be conducted to identify presence or absence of amphibian or aquatic reptilian species in the Grizzly Creek area beginning at Grizzly Forebay Dam and extending downstream beyond the confluence of Foreman Creek. Survey efforts shall focus on State and Federally listed and sensitive species including Foothill Yellow-legged Frog and Western Pond Turtle, but observations and reporting shall account for all aquatic herpetofauna found within the survey area. If sensitive aquatic species are found to be present in the Grizzly Creek survey reach, PG&E shall notify the Department of Fish and Game and the State Water Board for guidance on appropriate protective measures necessary prior to beginning construction.

9. Prior to dewatering the in-channel work area in the immediate vicinity of Grizzly Creek Weir, appropriate measures for fish rescue and safe release of captive species to suitable habitat shall be implemented.

10. In order to protect the beneficial uses for the North Fork Feather River and its undesignated tributaries, as defined in the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, the construction and operation of the project shall not add the following substances to surface waters:

    - Biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses;

    - Taste or odor-producing substances that impart undesirable tastes to domestic and municipal water supplies or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses;

- Materials that have potential to alter pH of the surface waters such that it may be depressed below 6.5 or raised above 8.5;

- Perceptible floating material including, but not limited to, solids, liquids, foams or scums which could result in degradation of water quality;

- Suspended or settleable material in concentrations that cause a nuisance or adversely affect beneficial uses;

- Oil, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water;

- Toxic pollutants in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health; and,

- Coliform organisms attributable to human wastes.

11. Fresh concrete or grout that has not set shall not be allowed to contact or enter surface water. All concrete supplies shall be removed from the stream channel at the end of each workday, and shall be stored at elevation above the normal active channel.

12. Any imported rock placed in the river or along the interface between river and riparian zone shall be washed rock.

13. All equipment using gas, oil, hydraulic fluid or other petroleum products shall be steam cleaned prior to its use in the river channel. All equipment shall be inspected for leaks prior to use in the river and shall be monitored for leakage. Equipment refueling shall only take place in a designated, contained area. Equipment and ancillary fueling materials shall be returned to containment areas above high water line at the close of each workday.

14. Appropriate spill and containment equipment (oil spill booms, sorbent pads, etc.) shall be maintained on-site and all construction and operator staff shall be adequately trained and skilled in proper use practices.

15. PG&E shall conduct a short-term water quality monitoring program in Grizzly Creek to evaluate conditions, at a minimum, once within 48 hours prior to the initiation of activity, once daily throughout the period of construction, and once within 72 hours following completion of construction activity. Monitoring shall, at a minimum, provide data on pH, dissolved oxygen concentrations, turbidity, and total suspended solids levels. Water quality parameters shall be evaluated using grab samples collected within the flowing water column, or using a correctly calibrated probe(s), at a point

30 to 50 yards downstream of the construction site. During construction, samples shall be collected at least once daily, at mid-afternoon while work activities are underway. In the event of spill or suspected incident, water quality samples shall be collected within six hours of knowledge of the incident, and every 12 hours thereafter until pre-project parameters have been restored.

16. Activities associated with the project shall not cause increases to water temperature of Grizzly Creek. PG&E shall, using continuous temperature recording devices installed prior to any re-diversion of flow, collect hourly water temperature data at two locations including: a) a station 30 to 50 yards downstream of the construction site, and b) a station approximately one mile downstream of Grizzly Forebay Dam, sited to avoid direct influence from tributary contributions.

17. The Streambed Alteration Agreement permit issued March 28, 2007, by the Department of Fish and Game, Region 2 (DFG) shall be incorporated by reference into this water quality certification. PG&E shall comply with terms of the DFG permit. In the event of conflict between terms of that permit and this water quality certification, the conditions of this certification shall control.

18. In order to show compliance with permit conditions set forth by the Department of Fish and Game and the State Water Board, PG&E will submit a Project Completion Report to the Chief of the Division of Water Rights within three months of completing the project. The report shall contain but not be limited to the following:

    - A summary of all construction activities performed;
    - Any issues related to protective measures set forth in the project permits;
    - Photographs of the constructed physical features at Grizzly Creek Weir; and
    - Results of streamflow release records for Grizzly Forebay Dam and short-term water quality monitoring of the reach below construction activities at Grizzly Weir. Water quality monitoring and reporting shall include but not be limited to turbidity, total suspended solids, pH, dissolved oxygen, and water temperature;
    - A copy of the Project Completion Report shall be provided to the U.S. Army Corps of Engineers, the Federal Energy Regulatory Commission, the RWQCB Central Valley Region and the Department of Fish and Game.

19. No construction material, spoils, debris, or any other substances associated with this project that may adversely impact water quality standards, shall be located in a manner that may result in a discharge or a threatened discharge to waters of the United States.

20. This certification action is not intended and shall not be construed to apply to an application for a FERC license or an amendment to a FERC license unless the

pertinent certification application was filed pursuant to 23 CCR Subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

21. Any modifications of the proposed project may require submittal of a new Clean Water Act Section 401 Water Quality Certification application.

Dorothy Rice
Executive Director

7.5.07
Date