#### STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification for

# PACIFIC GAS AND ELECTRIC COMPANY ROCK CREEK POWERHOUSE EFFICIENCY UPGRADE PROJECT

SOURCE:

North Fork Feather River

COUNTY:

Plumas

## WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

#### BY THE EXECUTIVE DIRECTOR:

## I. Project Description

Pacific Gas and Electric Company (PG&E) operates the Rock Creek Powerhouse on the North Fork Feather River located on the eastern slope of the Sierra Nevada Mountains in Plumas County, California. The existing Rock Creek Powerhouse is part of PG&E's Rock Creek-Cresta Project, Federal Energy Regulatory Commission (FERC) Number 1962, for which FERC issued a new operating license on October 24, 2001. PG&E proposes to increase the efficiency of the Rock Creek Powerhouse by upgrading the existing hydropower turbine-generators and associated equipment.

The Rock Creek Powerhouse Efficiency Upgrade Project (Project) activities are exclusively contained within the Rock Creek Powerhouse and are not expected to involve any encroachment into either the North Fork Feather River or the Rock Creek Reservoir. The Project will not increase or change the flows in either timing or magnitude through the powerhouse or the Rock Creek Dam. Attachment 1 provides a complete list of Project activities. PG&E will provide FERC with updated exhibits to the license for the Rock Creek Powerhouse after the Project is completed.

The application for Water Quality Certification was received on October 19, 2011. The State Water Resources Control Board (State Water Board) provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the Division of Water Rights' (Division) website on February 27, 2012. No comments were received.

PG&E entitlements to divert water for the Project are under water right permit nos. 19050 and 20864, and license no. 9871 issued by the State Water Board, Division and under a riparian claim that the Division recorded as no. S011478.

## **Construction Practices**

PG&E will implement the practices for routine operation and maintenance activities outlined in the California Stormwater Best Management Practices Handbooks published by the California Stormwater Quality Association. These practices include the following:

- Construction work areas will not extend beyond PG&E's right-of-way or temporary
  easements and will be confined to the smallest area needed to accomplish the proposed
  activities.
- Staging and storage areas for equipment, materials, fuels, lubricants and solvents will be located in areas where accidental spills will not enter the stream or riparian corridor.
- If equipment washing or cleaning must occur onsite, the cleaning area will be located away from all water bodies. Wash water will be minimized, contained and will not enter surface water.
- Vehicles and/or equipment will be checked and maintained daily to prevent leaks.
   Vehicles will be cleaned of petroleum residue. Leaks will be repaired immediately and equipment will be removed from the Project site if necessary. Storage of stationary equipment such as motors, pumps, generators, compressors, and welders will be positioned over drip-pans.
- Fuels will be stored in a designated containment area. Fueling that occurs onsite will be
  performed at a designated fueling area. Absorbent materials, spill kits, and drip pans or
  absorbent pads will be used during vehicle and equipment fueling. Fueling areas will be
  protected from storm water run-on and runoff, and will be staged a minimum of 50 feet
  from watercourses.
- All litter and rubbish will be deposited in an appropriate container and hauled out daily from the work site.
- PG&E will monitor contractors for compliance with the protective measures outlined in the Project description during routine operations and maintenance activities.

## II. Regulatory Authority

The Federal Clean Water Act (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 of the Clean Water Act (33 U.S.C. § 1251) requires federal agencies to "co-operate with the 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 Clean Water Act (33 U.S.C. § 1341) requires every applicant for a federal license or permit which may result in a discharge into navigable waters to provide the licensing or permitting 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 promulgated pursuant to section 303 of the Clean Water Act (33 U.S.C. § 1313). Section 401 of the Clean Water Act directs the agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the Clean Water Act and with any other appropriate requirement of state law. Section 401 further provides that certification conditions shall become conditions of any federal license or permit for the Project.

The State Water Board is the state agency responsible for such certification in California. (Wat. Code, § 13160.) The State Water Board 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 adopt, and the State Water Board approves, water quality control plans (basin plans) for each watershed basin in the State. The basin plans designate the beneficial uses of waters within each watershed basin and water quality objectives designed to protect those uses. Section 303 of the Clean Water Act requires the states to develop and adopt water quality standards. (33 U.S.C. § 1313.) The beneficial uses together with the water quality objectives that are contained in the basin plans constitute State water quality standards under section 303. The Central Valley Regional Water Quality Control Board (Central Valley Regional Board) adopted, and the State Water Board and the U.S. Environmental Protection Agency approved, the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan). The Basin Plan identifies the beneficial uses for the streams, lakes and reservoirs within the North Fork Feather Hydrologic Area involved with this Project as: municipal and domestic supply; hydropower generation; water contact recreation; canoeing and rafting; other non-contact water recreation; cold freshwater habitat; wildlife habitat; and cold water spawning, reproduction, and development.

The State Water Board reviewed and considered the plans and Project description provided by PG&E. Further, the State Water Board considered the Basin Plan, the existing water quality conditions and Project-related controllable factors. After reviewing and considering all of the pertinent information available for the Project, the State Water Board determined that there will be no significant effect on the environment from the Project, and that the Project meets the criteria for a Class 1 categorical exemption under the California Environmental Quality Act for the ongoing operation, repair, and maintenance of an existing facility. (Pub. Resources Code, § 21083; Cal. Code Regs., tit. 14, §§ 15301) The State Water Board prepared a notice for the Class 1 categorical exemption and State Water Board staff will file a Notice of Exemption within five days of the issuance of this water quality certification.

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES THAT THE PACIFIC GAS AND ELECTRIC COMPANY ROCK CREEK POWERHOUSE EFFICIENCY UPGRADE PROJECT will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, if PG&E complies with the following terms and conditions during the Project activities certified herein.

#### III. Conditions

#### Conditions Specific to Project

- All management practices described in the application for water quality certification and supplemental information are hereby incorporated by reference and are conditions of approval of this certification. Notwithstanding any of the following specific conditions in this certification, PG&E shall comply with all measures described in the application for water quality certification and its supplements.
- 2. Turbidity monitoring shall be conducted before and after installation of the power generation units.

3. Project activities shall not cause an increase in turbidity downstream of the Project area greater than those levels identified in the Basin Plan. The Basin Plan requires turbidity increases which result from controllable water quality factors to comply with the following:

Natural Turbidity	Maximum Increase
Less than 1 nephelometric turbidity unit (NTU)	Total Turbidity must stay below 2 NTU
Between 1 and 5 NTU	1 NTU
Between 5 and 50 NTU	20%
Between 50 and 100 NTU	10 NTU
Greater than 100 NTU	10%

- 4. A minimum setback of 50 feet from the high water mark of any stream or surface water body shall be established and maintained for staging during construction activities.
- 5. Control measures to prevent erosion and sediment discharges to surface waters shall be implemented and be in place at commencement of, during and after any ground clearing activities, excavation, stockpiling or any other Project staging or construction activities.
- 6. Construction materials shall not be discharged into surface water at any time. A minimum setback of 50 feet shall be established for temporary stockpiling of construction materials.
- Onsite containment for storage of chemicals not classified as hazardous shall include a ground barrier made of impermeable materials with a perimeter berm or similar containment feature.
- Onsite containment for storage of chemicals classified as hazardous shall include secondary containment and appropriate management as specified in California Code of Regulations, title 27, section 20320.
- 9. Temporary sanitary facilities, if necessary, shall be installed 200 feet from any stream or surface water and shall be properly maintained. Sanitary waste shall be taken offsite for disposal using certified methods.
- 10. All equipment brought to the Project site, including hand tools, must be free of sediment, debris, living material and other foreign matter.

## Monitoring and Reporting

- 11. All monitoring and reporting described in the application for water quality certification and supplemental information are hereby incorporated by reference and are conditions of approval of this certification.
- 12. The Deputy Director of the Division of Water Rights (Deputy Director) and the Executive Officer of the Central Valley Regional Board (Executive Officer) shall be notified one week prior to the commencement of Project construction activities. A construction schedule shall be provided to agency staff upon request in order for staff to be present onsite, to answer any public inquiries during construction, and to document compliance with this certification.

- 13. The sampling location for turbidity monitoring shall be approximately 100 feet downstream of the Rock Creek Powerhouse outflow, within the stream channel. The turbidity at the sampling location will be compared before, during, and after the removal and reinstallation of the power generating equipment. Monitoring shall continue daily until construction is complete and turbidity levels return to pre-Project levels.
- 14. Monitoring data shall be presented in spreadsheet format (Excel). Monitoring results shall be reported electronically and in hard copy within four weeks of Project completion to the Deputy Director and the Executive Officer. The report shall include a narrative summary of the data.

### **General Conditions**

- 15. A copy of this certification shall be provided to all contractors and subcontractors conducting the work and copies shall remain in their possession at the work site. PG&E shall be held responsible for any violation of the conditions of this certification caused by a contractor or subcontractor.
- 16. PG&E shall provide State Water Board staff access to the Project site to document compliance with this certification. Where necessary for access to unmanned or otherwise inaccessible Project facilities, State Water Board staff will provide at least 72 hours advance notice.
- 17. The Deputy Director reserves the authority to modify the conditions of this water quality certification to incorporate load allocations developed in a Total Maximum Daily Load developed by the State Water Board or Central Valley Regional Board.
- 18. This certification is contingent on compliance with all applicable requirements of the Basin Plan.
- 19. Notwithstanding 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. PG&E shall take all reasonable measures to protect the beneficial uses of the water bodies associated with this Project.
- 20. PG&E must submit any anticipated changes to the Project, including changes to Project operation, that would have a significant or material effect on the findings, conclusions, or conditions of this certification, to the Deputy Director for prior review and written approval.
- 21. This certification does not authorize any act which results in the take 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 (Fish & G. Code, §§ 2050 2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531 1544). If a take will result from any act authorized under this certification or water rights held by PG&E, PG&E shall obtain authorization for the take prior to any construction or operation of the Project. PG&E shall be responsible for meeting all requirements of the applicable Endangered Species Act for the Project authorized under this certification.

- 22. The authorization to operate the Project pursuant to this certification is conditioned upon payment of all applicable fees for review and processing of the application for water quality certification and administering the State's water quality certification program provided under California Code of Regulations, title 23, section 3833, including but not limited to the timely payment of any annual fees or similar charges that may be imposed by future statutes or regulations for the State's reasonable costs of a program to monitor and oversee compliance with conditions of water quality certification.
- 23. 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, processes 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.
- 24. In response to a suspected violation of any condition of this certification and pursuant to Water Code, section 13383, 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.
- 25. 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 needed to ensure compliance.
- 26. This certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code, section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with section 3867).
- 27. The State Water Board reserves authority to modify this certification if monitoring data indicates that Project activities, if allowed to continue, could violate water quality objectives or impair the beneficial uses of the water bodies associated with this Project.
- 28. 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.
- 29. The State Water Board may add to or modify the conditions of this certification as appropriate to coordinate the operations of this Project and other water development projects, where coordination of operations is reasonably necessary to achieve water quality standards or protect beneficial uses of water.

30. When exercising its reserved authority as described in the General Conditions above, the State Water Board may provide notice and an opportunity to be heard.

Thomas Howard Executive Director

Date

Attachment 1 - List of Project Activities

# **Attachment 1 – List of Project Activities**

PG&E provided the following list of activities for its Rock Creek Powerhouse Efficiency Upgrade Project. All activities apply to Rock Creek Powerhouse Generating Units 1 & 2.

- Rewind both generators.
- Install transformer cooling system, and other ancillary equipment upgrades.
- New runners, wicket gates, discharge rings and seals.
- New turbine guide bearings.
- Replace cooling water pumps, if required.
- Modify the existing main shafts to accommodate the additional generation load with the addition of two additional keyways in the rotor shafts.
- Replace generator exciters.
- Install new pressure relief valves and controls.
- Install new turbine governor control systems including high-pressure hydraulic system.
- Install arc flash remediation equipment.