



State Water Resources Control Board

December 22, 2023

Tony Gigliotti
Senior Licensing Project Manager
Power Generation
12840 Bill Clark Way
Auburn, CA 95602
Sent via email: PV Surrender@pge.com

**Potter Valley Hydroelectric Project
Federal Energy Regulatory Commission Project No. 77
Mendocino and Lake Counties
Eel and East Branch Russian Rivers**

COMMENTS ON PACIFIC GAS AND ELECTRIC COMPANY’S INITIAL DRAFT SURRENDER APPLICATION AND CONCEPTUAL DECOMMISSIONING PLAN FOR THE POTTER VALLEY HYDROELECTRIC PROJECT

Dear Mr. Gigliotti:

On November 17, 2023, Pacific Gas and Electric Company (PG&E) released for public review an Initial Draft Surrender Application and Conceptual Decommissioning Plan (Initial Draft Surrender Application) for the Potter Valley Hydroelectric Project (Project). The Federal Energy Regulatory Commission (FERC) Project license expired on April 14, 2022. On July 8, 2022, PG&E filed with FERC a proposed schedule for submittal of a license surrender application, which FERC approved on July 29, 2022. Initial Draft Surrender Application Table 1-1 shows PG&E’s Project license surrender application development and submittal schedule and is reproduced in Table 1 below.

Table 1. PG&E’s FERC License Surrender Application Development Schedule

Process	Schedule
Distribution of Initial Draft Surrender Application	Nov 17, 2023
Deadline for Comments on Initial Draft Surrender Application	Dec 22, 2023
Initial Consultation with Resource Agencies and Tribes	Dec 2023 - Feb 2024
Distribution of Final Draft Surrender Application	Jun 3, 2024
Consultation with Resource Agencies and Tribes	Jun 2024
Deadline for Comments on Final Draft Surrender Application	Jul 18, 2024
Filing and Distribution of Final Surrender Application	Jan 29, 2025

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

State Water Resources Control Board (State Water Board) and North Coast Regional Water Quality Control Board (North Coast Regional Water Board) (collectively Water Boards) staff hereby submit the enclosed comments regarding PG&E's November 17, 2023 Initial Draft Surrender Application. Water Boards staff understand PG&E intends to include potential Project decommissioning effects, proposed license surrender conditions, a conceptual restoration plan, and associated exhibits in its Final Draft Surrender Application (anticipated to be distributed to Tribes, regulatory agencies, and other interested parties for review and comment by June 3, 2024). The enclosed comments are intended to inform PG&E's Final Draft Surrender Application for the Project. The Water Boards' comments in Attachment A are based on our initial review of the Initial Draft Surrender Application and are intended to provide helpful suggestions to PG&E on ways to expedite the Project decommissioning process. The comments highlight data and questions that the Water Boards are required to consider as part of our statutory and regulatory responsibilities, and addressing these topics early on will result in a more efficient and effective process. Water Boards staff look forward to future consultation with PG&E, as outlined in its schedule and as needed to act on a water quality certification application for the Project's license surrender when appropriate.

If you have questions for the State Water Board related to this letter, please contact Derek Wadsworth, Project Manager, by email to: Derek.Wadsworth@waterboards.ca.gov. If you have questions for the North Coast Regional Water Board related to this letter, please contact Matt St. John, Climate Specialist, by email to: Matt.St.John@waterboards.ca.gov.

Sincerely,

Derek Wadsworth
Water Resource Control Engineer
Water Quality Certification Program
Division of Water Rights

Matt St. John
Climate Specialist
North Coast Regional
Water Quality Control Board

Attachment: Attachment A: Water Boards Staff Comments on Initial Draft Surrender Application and Conceptual Decommissioning Plan for the Potter Valley Hydroelectric Project

ec: Mr. Matt Myers, Senior Environmental Scientist
California Department of Fish and Wildlife
Email: Matt.Myers@wildlife.ca.gov

Ms. Dawn Alvarez, Regional Hydro Assistance Team Program Manager
United States Forest Service
Email: Dawn.Alvarez@usda.gov

Mr. Steve Edmondson, Branch Chief
National Marine Fisheries Service
Email: Steve.Edmondson@noaa.gov

Mr. Joshua Fuller, Fisheries Biologist
National Marine Fisheries Service
Email: Joshua.Fuller@noaa.gov

Mr. Josh Boyce, Fisheries Biologist
United States Fish and Wildlife Service
Email: Josh_Boyce@fws.gov

Mr. Lewis "Bill" Whipple, President
Round Valley Indian Tribes
Email: LWhipple@council.rvit.org

Ms. Janet Walther, Senior Manager Hydro Licensing
Pacific Gas and Electric Company
Email: JMW3@pge.com

ATTACHMENT A:
**WATER BOARDS STAFF COMMENTS ON THE INITIAL DRAFT SURRENDER
APPLICATION AND CONCEPTUAL DECOMMISSIONING PLAN FOR THE POTTER
VALLEY HYDROELECTRIC PROJECT**

The following comments are provided by State Water Resources Control Board (State Water Board) and North Coast Regional Water Quality Control Board (North Coast Regional Water Board), collectively Water Boards, staff on Pacific Gas and Electric Company's (PG&E's) Initial Draft Surrender Application and Conceptual Decommissioning Plan (Initial Draft Surrender Application) for the Potter Valley Hydroelectric Project (Project).

1. Section 401 of the federal Clean Water Act (33 U.S.C. § 1341) requires any applicant for a federal license or permit for an activity that may result in any discharge to navigable waters to obtain certification from the State that the activity will comply with applicable water quality requirements, including the requirements of section 303 of the Clean Water Act (33 U.S.C. § 1313) for water quality standards and implementation plans. Clean Water Act section 401 directs that water quality certifications (certifications) shall prescribe effluent limitations and other conditions necessary to ensure compliance with the Clean Water Act and with any other appropriate requirements of state law. Other appropriate requirements of state law include the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.). Conditions of certification shall become conditions of any federal license or permit for a project subject to certification. (33 U.S.C. § 1341(d).) Decommissioning of Project facilities will result in a discharge to navigable waters and PG&E must obtain certification from the State Water Board as part of Federal Energy Regulatory Commission (FERC) license surrender. The State Water Board is the state agency responsible for issuing certification for hydropower projects in California. (Wat. Code, § 13160.)

A certification issued by the State Water Board for Project decommissioning must ensure compliance with the applicable regional and state water quality control plans. Water quality control plans designate the beneficial uses of water that are to be protected, water quality objectives for the reasonable protection of the beneficial uses and the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (Wat. Code, §§ 13241, 13050, subds. (h), (j).) The beneficial uses, together with the water quality objectives contained in the water quality control plans, and applicable antidegradation requirements, constitute California's water quality standards for purposes of the Clean Water Act. In issuing a certification for a project, the Water Boards must ensure consistency with the designated beneficial uses of waters affected by the project, the water quality objectives developed to protect those uses, and antidegradation requirements. (*PUD No. 1 of Jefferson County v. Washington Dept. of Ecology* (1994) 511 U.S. 700, 714-719.)

The Project facilities proposed to be decommissioned are located on the Eel and East Branch Russian Rivers. The *Water Quality Control Plan for the North Coast*

Region (North Coast Basin Plan) identifies the Lake Pillsbury and Coyote Valley Hydrologic Subareas as having the following beneficial uses: municipal and domestic supply; agricultural supply; industrial service supply; groundwater recharge; freshwater replenishment; navigation; hydropower generation; water contact recreation; non-contact water recreation; commercial and sport fishing; warm and cold freshwater habitat; wildlife habitat; rare, threatened, or endangered species; migration of aquatic organisms; spawning, reproduction, and/or early development; and aquaculture. Water quality objectives identified in the North Coast Basin Plan that are applicable to Project decommissioning activities, include, but are not limited to chemical constituents, biostimulatory substances, dissolved oxygen, oil and grease, pH, sediment, settleable material, suspended material, temperature, toxicity, and turbidity.

Additionally, the Water Boards must ensure that any project is consistent with the Statement of Policy with Respect to Maintaining High Quality Waters in California (Antidegradation Policy). The Antidegradation Policy requires that the quality of existing high-quality water be maintained unless any change will be consistent with the maximum benefit to the people of the state, will not unreasonably impact present or anticipated future beneficial uses of such water, and will not result in water quality less than that prescribed in water quality control plans or policies. The Antidegradation Policy further requires best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the state will be maintained. The state Antidegradation Policy incorporates the federal Antidegradation Policy (40 C.F.R. § 131.12 (a)(1)), which requires "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."

The State Water Board exercises independent authority in issuing water quality certifications and must maintain its impartiality as a decision-maker; therefore, its role in any pre-decisional activities is advisory, rather than necessarily reflective of the State Water Board's ultimate determinations. State Water Board staff will participate in this advisory role during the license surrender process and provide comments, as necessary.

Pursuant to California Code of Regulations, title 23, section 3856, a complete certification application shall include a full, technically accurate description of the entire activity (e.g., dam removal methods, timing, and sequencing) as well as a complete identification of all federal licenses/permits being sought for or applying to the proposed activity. Water Boards staff recommend the Final Draft Surrender Application include a full, technically accurate description of the proposed decommissioning activities as well as a list of all agency regulatory approvals being sought.

Finally, Water Boards staff note that some Project activities may be considered construction activities subject to the State's General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order

2009-0009-DWQ (Construction General Permit).¹ Construction activities that disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the Construction General Permit. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit for discharges of storm water from construction activities requires the site owner to apply with the State, to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), and to monitor the effectiveness of the plan. The Water Boards anticipate that the Final Draft Surrender Application will inform whether enrollment and compliance with the Construction General Permit will be required or whether these activities will be addressed through the water quality certification for Project decommissioning.

2. Compliance with the California Environmental Quality Act (CEQA) is required as part of the certification process. CEQA requires the lead agency to evaluate a project's potential impacts to environmental resources as well as identify mitigation measures and alternatives to reduce project impacts. CEQA also requires public input on identified impacts and mitigation measures. CEQA documentation must analyze and evaluate the project's impacts to all relevant resources, including aquatic biological resources, special status species, and water quality.

The State Water Board is the public agency with the responsibility of issuing a certification for the Project's license surrender and decommissioning and likely will act as the CEQA lead agency for the Project license surrender and decommissioning. If the State Water Board is the CEQA lead agency, the State Water Board plans to commence the CEQA process prior to PG&E submitting a certification application. The CEQA process can occur independent of FERC's National Environmental Policy Act (NEPA) process and may, depending on its timing, inform the State Water Board of potential water quality impacts associated with Project decommissioning. Without adequate information on the Project's potential impacts to water quality from Project decommissioning, the State Water Board may be unable to issue a certification. State Water Board staff anticipate entering into a three-party memorandum of understanding with PG&E and a consultant to provide for development of the environmental documentation and other requirements necessary to comply with CEQA.

3. According to FERC's July 29, 2022 letter to PG&E, a license surrender application filed with FERC must be in accordance with section 6.1 of FERC's regulations and, in part, include a description of any environmental effects that are expected to occur

¹ Water Quality Order No. 2009-0009-DWQ and NPDES No. CAS000002, as amended by Order No. 2010-0014-DWQ, Order No. 2012-0006-DWQ, Order No. 2022-0057-DWQ, and any amendments thereto. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html Accessed on December 21, 2023.

upon license surrender and any measures that would be taken to mitigate those effects. For the purposes of informing a State Water Board certification action and CEQA analysis, Water Boards staff recommend the Final Draft Surrender Application include an assessment of the existing environment of the Project area and expected Project license surrender and decommissioning environmental effects for the following resource areas: visual resources; aquatic resources (e.g., fish populations in Project-affected waterbodies including presence, abundance, timing, and distribution; habitat for fish migration, holding, spawning, and rearing; fish passage and barriers; suspended sediment impacts to organisms, wetlands, and habitats; amphibian species and habitat; and mollusk populations); water quality constituents (e.g., suspended sediment concentrations; sediment transport; reservoir sediment contaminants, toxicity, and bioaccumulation potential; toxins from cyanobacteria; temperature; and dissolved oxygen); aquatic invasive species (e.g., pikeminnow and invasive mollusk populations); terrestrial species and habitat (e.g., revegetation potential of reservoir footprint and reservoir slope stability); hydrology and water supply (e.g., flows; flood risk; and water availability for potentially impacted legal users of water); recreation (e.g., whitewater and reservoir boating); transportation (e.g., roads and trails); hazardous materials; tribal cultural resources; and cultural resources. Water Boards staff also recommend PG&E consider the benefits and drawbacks, including to short-term and long-term downstream suspended sediment levels, associated with rapid removal or phased removal of Scott Dam as well as the timing and sequencing of removing Scott Dam and Cape Horn Dam.

According to Title 18, Code of Federal Regulations, section 6.1, every application for surrender of a license shall be executed by the licensee and filed in the same form and manner as the application for license. For a typical application for a FERC license, studies are developed in consultation with stakeholders and implemented prior to license application submittal. Water Boards staff note that no studies are proposed in support of PG&E's license surrender application. If, after PG&E assesses the existing Project area environment and expected Project license surrender and decommissioning environmental effects, PG&E or the Water Boards determine that additional data collection is necessary, Water Boards staff recommend the implementation of study plans developed in consultation with stakeholders.

Information collected through the implementation of study plans will likely be used by FERC to develop its license surrender order and fulfill its obligations under NEPA and by other agencies that must take permitting actions during the license surrender proceedings. Study plan information will assist the State Water Board in developing CEQA documentation and certification conditions to ensure compliance with the Clean Water Act and other appropriate requirements of state law.

If existing information and implementation of any future study plans do not provide sufficient information needed in connection with the issuance of certification, or the State Water Board determines that additional information is necessary to inform the

certification process, the State Water Board may request such information under the Porter-Cologne Water Quality Control Act, Water Code section 13383, or other applicable authority. To avoid unnecessary delays in the Project license surrender process, Water Boards staff strongly encourage PG&E to work collaboratively with Water Boards staff and other surrender participants to resolve differences. When possible, working collaboratively with all license surrender participants often allows for expedited resolution of issues.

4. Initial Draft Surrender Application section 1.0 states, “The Final Draft Surrender Application will include an environmental analysis (Exhibit E).” FERC’s regulations require Exhibit E to contain a report on water use and quality, which should include existing water quality, impacts to water quality, and proposed protective measures. The Water Boards are the state agencies responsible for regulation of water quality in the affected waters and the State Water Board is the state agency responsible for management of water quantity in the affected waters. Water Boards staff anticipate consulting with PG&E regarding potential effects of Project decommissioning to instream flows; and seasonal variation in water quality, including significant ions, chlorophyll *a*, nutrients, specific conductance, pH, total dissolved solids, total alkalinity, total hardness, dissolved oxygen, bacteria, toxicity, temperature, suspended sediments, turbidity and vertical illumination, and groundwater.
5. PG&E’s Initial Draft Surrender Application Table 1-1 indicates consultation with Tribes and agencies will occur from December 2023 through February 2024 and during June 2024. Water Boards staff look forward to participating in this process.
6. Section 4.0 of PG&E’s Initial Draft Surrender Application does not include a discussion of any proposed changes in land ownership following Project decommissioning. Water Boards staff request PG&E identify any anticipated land ownership changes following Project decommissioning in its Final Draft Surrender Application.
7. Section 4.1 of PG&E’s Initial Draft Surrender Application states, “The Regional Entity comprised of Sonoma County Water Agency, Mendocino County Inland Water and Power Commission, and the Round Valley Indian Tribes is responsible for modifications (construction) at Cape Horn Dam.” Water Boards staff note that the Regional Entity may require a separate federal license or permit from FERC and/or the United States Army Corps of Engineers for the construction, which may necessitate a separate certification and additional analysis to inform CEQA compliance.
8. Section 4.2.1.1 of the Initial Draft Surrender Application states, “At the downstream terminus of the tunnel, a channel (approximately 80 – 90-feet-in-length and 7.5 – 14.5-feet-deep) and concrete buttress will be constructed in the spillway apron to facilitate downstream sediment transport.” Water Boards staff request the Final Draft Surrender Application specify the quantities of materials needed to construct the channel, note if dewatering of the spillway apron is necessary, and whether the

materials used to form the channel will be removed following Project decommissioning.

9. Section 4.2.1.1 of PG&E's Initial Draft Surrender Application states, "Rubble and other material generated from the dam lowering and notching will be sidecast down the face of the spillway or placed on barges and hauled to a temporary holding area on PG&E-owned land near the dam for later placement." Water Board staff recommend clarifying what measures will be implemented to ensure sidecast material will not be discharged into waters of the state.
10. Section 4.2.1.1 of PG&E's Initial Draft Surrender Application states, "Some large clean material from the dam (e.g., no rebar protruding, greater than about 2 feet diameter) will be placed in the plunge pool area below the final river grade. Material will be large enough, and placed deep enough, so that it will not be eroded/mobilized before the accumulated bedload in the reservoir is released and has an opportunity to occupy the space." Water Boards staff recommend the Final Draft Surrender Application: discuss what material testing procedures will be implemented to confirm the material is "clean" (e.g., pH monitoring); describe appropriate best management practices that will be implemented for placement of material within waters of the state; and describe post-placement monitoring to confirm that material is not eroded/mobilized. The Final Draft Surrender Application should include information supporting the assumption that materials from the dam will be below the final river grade.
11. Section 4.2.1.1 of the Initial Draft Surrender Application includes dredging sediments near the new tunnel intake. The Final Draft Surrender Application should specify what measures, or potential measures (e.g., cofferdams, turbidity curtains), will be used to minimize contact, reduce suspended sediment and turbidity, and protect water quality in Lake Pillsbury and in downstream waterbodies during dredging activities as well as how dredged sediments will be disposed. The Final Draft Surrender Application should also identify the temporary and permanent dredge and fill impacts of Project decommissioning.
12. Section 4.2.1.1 of the Initial Draft Surrender Application states, "Following pre-established protocols related to river flow forecasting, the explosives would be detonated during or preceding an anticipated flood event of sufficient magnitude to evacuate fine sediment deposits from the reservoir (likely between December and March)." The Final Draft Surrender Application should specify when these protocols will be developed and what information is necessary to determine the magnitude of flood event sufficient to evacuate fine sediment deposits from Lake Pillsbury. Water Boards staff recommend the protocols be informed by a sediment transport model that provides an estimate of the magnitude, geographic extent, and duration of impacts to federal Endangered Species Act (ESA) or California Endangered Species Act (CESA) listed species and their habitats.

13. Section 4.2.1.1 of the Initial Draft Surrender Application states, “The bulk of the remaining materials will be stored and capped on site (e.g., along the left abutment, on the cribwall, and/or behind the remainder of the dam upstream of the pinnacle).” The Final Draft Surrender Application should specify how materials will be “capped” to avoid potential water quality impacts, assess the condition of the abutment and cribwall to retain waste dam materials, evaluate soil stability, and describe how waste material would be stored to avoid mobilization following a landslide or seismic event.
14. The Initial Draft Surrender Application does not specify when and how (e.g., plugging the needle valve intake) the needle valve and Valve Control House would be decommissioned. The Final Draft Surrender Application should specify when and how the needle valve would be decommissioned and at what point Scott Dam releases would become uncontrolled.
15. Initial Draft Surrender Application Figures 4-2 and 4-6 include an “abandon remaining portions abutment” annotation and the legend defines the orange areas as “remaining dam features.” Water Boards staff recommend the Final Draft Surrender Application include a list of remaining dam portions, a description of how all abandoned dam portions will be stabilized, and justification for leaving infrastructure in place.
16. Initial Draft Surrender Application Table 4-1 indicates River Gage E2 would be left in place or potentially transferred, and Table 4-2 indicates River Gage E11 would be left in place. The Final Draft Surrender Application should specify whether the Regional Entity or United States Geological Survey will be responsible for ongoing gage calibration and maintenance and how flows and any water quality constituents will be accurately measured and data made available during and following Project decommissioning activities (i.e., dam removals).
17. Section 4.3.1.1 of the Initial Draft Surrender Application notes sediment upstream of Cape Horn dam and dam materials will be removed and placed on adjacent PG&E land above the 100-year floodplain for future disposal. Water Boards staff recommend the Final Draft Surrender Application include robust sediment and material testing procedures for relevant contaminants (e.g., mercury, pesticides), describe how sediment spoil areas will be located to control runoff to waters of the state, and include proposed stockpile best management practices.
18. Sections 4.3.1.2 and 4.3.1.3 of the Initial Draft Surrender Application state, “Dewatering and construction sequencing is in development and will be included in the Draft Final Surrender Application.” Water Boards staff recommend dewatering plans describe where water from dewatering activities will be discharged and proposed monitoring to ensure dewatering does not violate water quality standards.

19. Section 4.3.1.1 of the Initial Draft Surrender Application notes that Cape Horn Dam removal activities include excavating and armoring a channel through the earthen embankment to pass Eel River flows downstream during construction. Water Boards staff recommend the Final Draft Surrender Application include additional information regarding the proposed channel's stability and potential for flows bypassed through the proposed channel to seep into the dewatered area or erode the existing wingwall.
20. Section 4.3.1.1 of the Initial Draft Surrender Application notes that Cape Horn Dam removal activities include removing the dam wingwall (earthen embankment portion of the dam), fish hotel, exclusion barrier, and fish ladder. Water Boards staff recommend the Final Draft Surrender Application include an evaluation of the relative impacts to fish and wildlife of the alternatives, timing, and sequencing for removal of fish passage facilities. Water Boards staff also recommend PG&E collaborate with appropriate stakeholders to ensure that Project decommissioning activities minimize impacts to fish and wildlife species, especially those that are federally ESA or CESA listed. Mitigation may be needed to offset potential impacts to fish and wildlife species (e.g., trap and haul of threatened or endangered salmonids to waterbodies unaffected by Project decommissioning activities).
21. Section 4.3.1.3 of the Initial Draft Surrender Application states, "The stability of the roughened channel bed material would be enhanced through the design process by undertaking sediment transport modeling and other measures to guide the specification for material size." Water Boards staff recommend similar sediment transport modeling also be performed for the channel created following Scott Dam removal. Water Boards staff recommend PG&E collaborate with Water Boards staff to ensure sediment transport modeling adequately assesses Project decommissioning impacts to all affected waterbodies.
22. Initial Draft Surrender Application Map 4-5 should include the criteria or flow magnitude used to define the bankfull extents and low flow channel extents.