



DEPARTMENT OF ENERGY
Federal Energy Regulatory Commission

Pacific Gas and Electric Company

Project No. 96-048

Notice of Application Tendered For Filing with the Commission and Establishing
Procedural Schedule For Relicensing and Deadline For Submission of Final Amendments

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection.

- a. Type of Application: New Major License
- b. Project No.: 96-048
- c. Date Filed: November 24, 2020
- d. Applicant: Pacific Gas and Electric Company (PG&E)
- e. Name of Project: Kerckhoff Hydroelectric Project
- f. Location: The existing project is located on the San Joaquin River, in Fresno and Madera Counties, California. The project occupies 328.1 acres of federal land administered by the United States Forest Service and Bureau of Land Management.
- g. Filed Pursuant to: Federal Power Act, 16 U.S.C. §§ 791 (a)-825(r)
- h. Applicant Contact: Maureen Zawalick, Pacific Gas and Electric Company, PO Box 770000, MC N11D-1138, San Francisco, CA 94177-0001, (805) 545-4242
- i. FERC Contact: Evan Williams, (202) 502-8462 or evan.williams@ferc.gov
- j. This application is not ready for environmental analysis at this time.
- k. Project Description: The existing Kerckhoff Hydroelectric Project consists of: (1) a 175-acre, 3-mile-long impoundment at normal full pond elevation 985.0 feet; (2) a 114.5-foot-high, 507-foot-long concrete arch dam with a spillway crest of 91 feet that includes: (a) fourteen 14.3-foot-high by 20-foot-wide radial gates, and (b) three 72-inch-diameter low-level outlet pipes at an elevation of 897.0 feet, with a maximum combined discharge capacity of 3,900 cubic feet per second; (3) a 75-foot-long, 18-inch-diameter instream flow pipe; (4) two powerhouse facilities (Kerckhoff 1 and Kerckhoff 2); and (5) appurtenant facilities.

The Project's Kerckhoff 1 (K1) powerhouse and associated facilities include: (1) a 73.3-foot-high, 29.5-foot by 26-foot-wide reinforced concrete intake structure located in Kerckhoff Reservoir; (2) a 16,913-foot-long, 17-foot-wide by 17-foot-high unlined tunnel; (3) two approximately 120-foot-long, 20-foot in cross section adits; (4) one approximately 507.8-foot-long, 16- to-18-foot in cross section adit; (5) a 75-foot-high, unlined vertical shaft surge chamber with a 40-foot maximum diameter lower section and 17-foot maximum diameter upper section; (6) one 913-foot-long, 84- to- 90-inch-diameter steel penstock; (7) one 946-foot-long, 84- to- 90-inch-diameter steel penstock; (8) an approximately 45-foot-wide by 99-foot-long reinforced concrete powerhouse containing three vertical reaction-type Francis turbine units; and (9) appurtenant facilities. The project's K1 transmission facilities include: (1) a switchyard located on a steep hillside immediately behind the powerhouse; (2) two transformer banks consisting of one, three-phase and seven, single-phase 6.6/115-kilovolt (kV) transformers; and (3) three, 115-kV circuit breakers. Three sets of non-project 115-kV transmission lines exit the switchyard.

K1 Powerhouse Unit No. 2 is not operational and was removed from the current project license in 2013. K1 Powerhouse Units No. 1 and No. 3 are rated at 11.36 megawatts (MW) each for an authorized installed capacity of 22.72 MW; however, both units have not operated since 2018. The three adits were sealed with concrete walls about 200 feet from their entrances, effectively eliminating access to the adits and to the tunnel via the adits. K1 penstock No. 2 is no longer operational; it was abandoned in place and removed from the current project license in 2013. PG&E permanently closed and sealed the main shutoff and bypass valves at K1 penstock No. 2, removed an approximately 12-foot-long section of the penstock immediately downstream of the shutoff valve, removed exposed air valves and cap, and permanently closed the turbine shutoff valve.

The Project's Kerckhoff 2 (K2) powerhouse and associated facilities include: (1) a 63-foot-high, 43-foot by 52-foot-wide reinforced concrete intake structure located in Kerckhoff Reservoir; (2) a 21,632-foot-long, 24-foot-diameter unlined tunnel; (3) an 8-foot-diameter adit tunnel; (4) a 216.8-foot-high, vertical shaft surge chamber composed of a 20-foot-diameter lower section, a 71-foot-diameter middle section, and a 110-foot-diameter upper section, capped at the surface by a 34-foot-high, 111.5-foot-diameter above-ground steel surge tank; (5) one approximately 1,013-foot-long penstock composed of three sections: (a) a 481-foot-long, 20-foot-diameter concrete-lined upper section; (b) a 338-foot-long, 18-foot-diameter concrete-lined middle section; and (c) a 194-foot-long, 15-foot-diameter steel-lined lower section; (6) an approximately 85-foot-diameter, 124-foot-high three-floor (basement floor, turbine floor, and generator floor) underground powerhouse chamber containing one vertical shaft, Francis-type turbine rated at 140 MW; (7) an approximately 531-foot-long, 25-foot-diameter concrete-lined discharge tunnel, with two 19-foot-high, 13-foot-wide gates; (8) a 40-foot-wide open tailrace channel; and (9) appurtenant facilities. The project's K2 transmission facilities include: (1) an approximately 152-foot-wide by 177-foot-long switchyard located at ground level immediately above the underground powerhouse; (2) a transformer; and (3) four, 115-kV circuit breakers. Two sets of non-project 115-kV transmission lines exit the switchyard. From 1984 to 2019, with both powerhouses in operation, average annual generation was approximately 471,424 megawatt-hours.

PG&E operates the project for power generation, making use of available flows from upstream hydroelectric projects. The project operates in a run-of-river mode because of the project reservoir's limited storage capacity. Water used by the project for power generation is released back into the San Joaquin River and flows into Millerton Lake, a United States Bureau of Reclamation facility, located immediately downstream of the K2 Powerhouse.

The San Joaquin River basin upstream of the project is extensively developed for hydroelectric power generation, which influences the timing and magnitude of inflows into the project. Current operational requirements include flow requirements to protect American shad and water temperature requirements to protect smallmouth bass. PG&E is required to discharge a minimum flow of 25 cubic feet per second (cfs) downstream of Kerckhoff Dam during Normal water years and a minimum flow of 15 cfs during Dry water years. Minimum flows are temporarily modified in response to operating emergencies and for fishery management purposes upon agreement between PG&E and the California Department of Fish and Wildlife (CDFW). Additional releases can be determined necessary by CDFW to maintain stream temperatures and to flush sediments in the streambed below Kerckhoff Dam. Kerckhoff Reservoir has an estimated capacity of 2,434 acre-feet of usable capacity at normal maximum water surface elevation and is generally operated as a forebay with no seasonal targets, therefore maintaining storage relatively constant at near full pool. Although, operational limitations of the K2 Powerhouse result in an operational storage of the reservoir of 692 acre-feet. PG&E has primarily operated the K1 Powerhouse only when the K2 Powerhouse is offline, at capacity, or during the American shad spawning releases; although, the K1 Powerhouse has not been operational since 2018. The K2 Powerhouse has a rough operating zone that occurs during flows of approximately 1,750 cfs to 3,200 cfs that generate 45 – 92 MW. To manage the rough operating zone, PG&E does not allow the unit to linger in the 45 – 92 MW range. Instead, the K2 Powerhouse operates above or below the range, in order to avoid damaging equipment. Further, the K2 Powerhouse cannot operate with flows less than approximately 580 cfs.

PG&E proposes to modify the existing project boundary to encompass all facilities necessary for operation and maintenance of the project. PG&E proposes to adjust the boundary around Kerckhoff Reservoir, Smalley Cove Recreation Area and the adjacent dispersed day use area, the K1 and K2 developments, the fiber optics and 12-kV distribution lines running from the K2 Switchyard to a non-project substation, and gaging stations and associated facilities. PG&E also proposes to eliminate a shared public access road from the project boundary. With these proposed changes, the area of PG&E-owned land within the project boundary will decrease to 122.8 acres, and federal lands will decrease to 114.4 acres. The area of private lands encompassed by the project boundary will increase to 54.2 acres.

PG&E also proposes to retire the K1 Powerhouse by making certain facilities, including turbine-related facilities, Adits 1 and 2, surge chamber, penstocks, and headworks, inoperable. However, PG&E proposes to retain: (1) the K1 intake structure, tunnel, and North Adit to continue providing instream flow releases, (2) the K1 Powerhouse building for operations support, and (3) the K1 switchyard because it is part of the electric transmission system.

PG&E further proposes the following plans and measures to protect and enhance environmental resources: (1) American Shad Spawning Season Flow Release Regime; (2) Aquatic Resources Plan; (3) Wildlife Management Plan; (4) Vegetation Management and Pest Control Plan; (5) Project Road and Trail Maintenance Plan; (6) Recreation Management Plan; (7) Whitewater Recreation Flow Release Measure; and (8) Historic Properties Management Plan.

l. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents via the Internet through the Commission's Home Page (<http://www.ferc.gov>) using the "eLibrary" link. Enter the docket number excluding the last three digits in the docket number field to access the document. At this time, the Commission has suspended access to the Commission's Public Reference Room, due to the proclamation declaring a National Emergency concerning the Novel Coronavirus Disease (COVID-19), issued by the President on March 13, 2020. For assistance, contact FERC at FERCOnlineSupport@ferc.gov or call toll-free, (866) 208-3676 or TYY, (202) 502-8659.

m. You may also register online at <https://ferconline.ferc.gov/FERCOOnline.aspx> to be notified via email of new filings and issuances related to this or other pending projects. For assistance, contact FERC Online Support.

n. Final amendments to the application must be filed with the Commission no later than 30 days from the issuance date of the notice of ready for environmental analysis.

DATED: December 8, 2020.

Kimberly D. Bose,
Secretary.

[FR Doc. 2020-27435 Filed: 12/11/2020 8:45 am; Publication Date: 12/14/2020]