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## State Water Resources Control Board

March 27, 2024

Ms. Jamie Visinoni  
Hydro License Coordinator  
Pacific Gas and Electricity Company  
77 Beale Street  
San Francisco, CA 94105  
Sent via Email: [JNVS@pge.com](mailto:JNVS@pge.com)

**Bucks Creek Hydroelectric Project  
Federal Energy Regulatory Commission Project No. 619  
Plumas County  
Bucks Creek, Grizzly Creek, Milk Ranch Creek, and Tributaries to Milk Ranch  
Creek**

### **CONDITIONAL APPROVAL OF LOWER BUCKS DAM SPILLWAY REHABILITATION PROJECT WATER MANAGEMENT PLAN**

Dear Ms. Visinoni:

On December 21, 2023, Pacific Gas and Electric Company (PG&E) submitted the Lower Bucks Dam Spillway Rehabilitation Project Water Management Plan (Plan) for review and approval by the State Water Resources Control Board (State Water Board) Deputy Director of the Division of Water Rights (Deputy Director). The Deputy Director approved the original plan for the first year (2023) of the Lower Bucks Dam Spillway Rehabilitation Project (Spillway Project) on August 22, 2023. The updated Plan describes how PG&E will manage water during the second and third year (planned for 2024 and 2025) of the Spillway Project. The updated Plan also describes how PG&E will relocate fish during dewatering of the plunge pool and how it will stabilize the Spillway Project area after completion of construction. PG&E's Plan is requested per Condition 23: *Dewatering* of the Bucks Creek Hydroelectric Project (Hydroelectric Project) water quality certification (certification).<sup>1</sup>

#### **Background**

Lower Bucks Lake is owned and operated by PG&E as part of the Hydroelectric Project. Lower Bucks Lake is located on Bucks Creek in Plumas County on lands managed by Plumas National Forest and PG&E. Lower Bucks Lake is impounded by Bucks Diversion Dam (Lower Bucks Dam) and serves as the forebay to Grizzly Powerhouse.

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<sup>1</sup> The State Water Board Executive Director issued the Hydroelectric Project certification on October 22, 2020.

Lower Bucks Dam is a concrete arch dam approximately 99-feet-high and 500-feet-long with two ungated spillways: (1) the service spillway; and (2) an emergency spillway. The service spillway is located on the left dam abutment and discharges to Bucks Creek approximately 100 feet downstream of Lower Bucks Dam. The emergency spillway consists of five 20-foot-wide overpour bays located at the center of the dam. The Spillway Project involves rehabilitation of the service spillway. PG&E is implementing the Spillway Project to address recommendations from a 2020 dam safety inspection that found severe spalling and surface delamination of concrete at the service spillway.

Minimum instream flows (MIFs) below Lower Bucks Dam are primarily met through releases at Lower Bucks Dam's low-level outlet (LLO), which discharges into a plunge pool at the base of the service spillway. MIFs below Lower Bucks Dam are established in the Hydroelectric Project certification, which was incorporated into the license issued by Federal Energy Regulatory Commission (FERC) on June 16, 2022.<sup>2</sup> No changes to MIFs are proposed as part of the Spillway Project. MIFs required below Lower Bucks Dam, per Condition 1 (Table 2) of the certification, are as follows:

**Table 2. Bucks Creek Minimum Instream Flow Requirements  
below Lower Bucks Lake by Water Year Type (in cubic feet per second),  
as measured at USGS [United States Geologic Survey] Gage No. 11403530  
(also referred to as Project ID NF82)**

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Critically Dry</b>	6	4	4	4	6	7	7	7	6	6	6	6
<b>Dry</b>	6	5	5	5	6	8	8	8	8	6	6	6
<b>Normal</b>	6	6	6	6	8	12	12	12	9	8	8	7
<b>Wet</b>	8	8	8	8	10	15	15	15	11	10	8	8

Condition 13: *Streamflow and Reservoir Level Gaging* of the certification establishes MIF gage compliance locations. For Bucks Creek below Lower Bucks Dam, Condition 13 establishes the NF82 gage as the MIF compliance location. The NF82 gage is located at the Lower Bucks Dam LLO. For the Spillway Project, PG&E has constructed a temporary bypass water system to redirect MIFs at the LLO outside of the work area, to approximately 150 feet downstream of Lower Bucks Dam. Accordingly, the NF82 gage will not correctly measure flow released from the Lower Bucks Dam LLO. In the August 22, 2023 approval letter for the first year of construction of the Spillway Project, the Deputy Director approved PG&E's request to modify its MIF compliance point during the Spillway Project from NF82 to NF118.

Pre-construction site development took place in 2023, which included the initial dewatering of the plunge pool and installation of a temporary bypass water system at the LLO. PG&E will also dewater the plunge pool at the start of the 2024 and 2025

<sup>2</sup> Per Ordering Paragraph D of the new FERC license for the Hydroelectric Project, the license is subject to the conditions submitted by the State Water Board under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1341(a)(1).

work seasons and as needed throughout Spillway Project activities to maintain dewatered conditions necessary to perform the project. Work in 2024 and 2025 includes rehabilitation of the service spillway to repair concrete spalling and delamination. As part of this work, in 2024, PG&E will install debris barriers around the dewatered plunge pool to prevent debris from entering the plunge pool. The Plan notes that no concrete work will occur in or around the spillway plunge pool as part of the Spillway Project.

In an email dated July 13, 2023, PG&E states the Spillway Project does not require a United States Army Corp of Engineers Clean Water Act Section 404 permit or FERC license amendment action.

**Conditional Approval:** State Water Board staff reviewed PG&E's Plan as submitted on December 21, 2023. The Plan is hereby approved with the following modifications:

- **Water Management Plan:** This approval is for the work proposed for the second and third year of the Spillway Project (planned for 2024 and 2025 construction seasons). PG&E shall notify the Hydroelectric Project Manager of the construction start date for each season no less than 60 days prior to the anticipated start day for the season. PG&E shall notify the Hydroelectric Project Manager of the completion of construction for each season no later than 30 days following completion of construction of the Spillway Project for the season.
- **Fish Rescue Report:** If any fish become stranded during dewatering activities, PG&E shall relocate the fish to a suitable location downstream of the Spillway Project area. If fish relocation is required, PG&E shall submit a Fish Relocation Report to the State Water Board, United States Fish and Wildlife Service, United States Forest Service, and California Department of Fish and Wildlife within 30 days of concluding Spillway Project work for each construction season (planned for 2024 and 2025). The Fish Relocation Report shall include at a minimum:
  - Location and date of capture for each fish;
  - Fish species, life stage, fork length, and weight for each fish;
  - Location of relocation as depicted on a map that includes the Spillway Project area;
  - Total number of fish captured and relocated; and
  - The number of and related information above for any deceased fish.
- **Water Quality Monitoring:** As proposed by PG&E in its July 13, 2023 email and Plan, during dewatering of the plunge pool PG&E shall monitor turbidity at: (1) the LLO temporary bypass release point; and (2) approximately 300 feet downstream of the LLO temporary bypass release point. The Deputy Director and the Central Valley Regional Water Quality Control Board Executive Officer shall be notified promptly, and in no case more than 24 hours following a turbidity exceedance of a *Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin* (SR/SJR Basin Plan) turbidity water quality objective. Regardless of when such notification occurs, activities associated with the SR/SJR Basin Plan exceedance shall cease immediately upon detection of the exceedance. Work activities may resume after any appropriate corrective actions have been implemented, water quality meets the applicable SR/SJR Basin Plan water quality objective(s), and the Deputy Director has provided

approval to proceed. Within 60 days of concluding Spillway Project work for each construction work season (planned for 2024 and 2025), PG&E shall submit a Water Quality Monitoring Report to the Hydroelectric Project Manager. The Water Quality Monitoring Report shall include at a minimum:

- Turbidity levels measured in Nephelometric Turbidity Units (NTUs) for all monitoring locations, as well as the applicable water quality objective from the SR/SJR Basin Plan;
- If applicable, a description of best management practices implemented to ensure turbidity levels remained in compliance with SR/SJR Basin Plan water quality objectives; and
- A summary of any exceedances and any corrective actions taken to address the exceedance(s).

If you have questions regarding this letter, please contact Bryan Muro, Hydroelectric Project Manager, by email to: [Bryan.Muro@waterboards.ca.gov](mailto:Bryan.Muro@waterboards.ca.gov) or by phone call to: (916) 327-8702. Written correspondence should be mailed to:

State Water Resources Control Board  
Division of Water Rights – Water Quality Certification Program  
Attn: Bryan Muro  
P.O. Box 2000  
Sacramento, CA 95812-2000.

Sincerely,



Erik Ekdahl, Deputy Director  
Division of Water Rights

ec: Debbie-Ann Reese, Acting Secretary  
Federal Energy Regulatory Commission  
**Via e-filing to FERC Project Docket**

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