FEDERAL ENERGY REGULATORY COMMISSION

Office of Energy Projects

Division of Dam Safety and Inspections – San Francisco Regional Office

100 First Street, Suite 2300

San Francisco, CA 94105-3084

(415) 369-3300

September 13, 2024

In reply refer to: Project No. 137-CA

VIA FERC Service

Mr. Russell Cruzen, P.E., Director Power Generation, Asset Excellence Pacific Gas and Electric Company 300 Lakeside Dr. Oakland, CA 94612-3534

Re: Lower Tiger Creek Canal Construction Authorization Request

Dear Mr. Cruzen:

This is in response to a letter dated July 11, 2024 from Mr. Neil Flemmer that submitted Erosion Protection for Lower Tiger Creek Canal, which is part of the Mokelumne Project, FERC No. 137. We have reviewed the submittal, and we have the following comments:

- 1. Your approach is to place riprap and compact it. Riprap is typically placed without compaction, which could break the riprap reducing its effectiveness. Explain in more detail how you will maintain the integrity of the riprap, as well as the fabric being placed under the riprap, if you plan to compact it.
- 2. Provide the specifications of the fabric to be used.
- 3. Your plan is unclear how you will place 12 to 18-inch rock under the foundation in a manner that will restore full support to the foundation as it was designed. Provide more details of how you will restore the original design support to the foundation.
- 4. With the placement of permeable materials under the foundation, it is unclear how these repairs will prevent the flow of water from going under the footing causing more erosion. Provide more details on the measures taken to prevent this from occurring.

Provided you address the comments above within 10 days of the date of this letter, you are authorized to proceed with construction. Failure to adequate address our comments will require the construction to cease until our comments are adequately addressed.

During construction, we typically require monthly construction reports. However, due to the short duration of this project, we will not require monthly construction reports.

Within 90 days of completion of construction of the facilities authorized by this letter, or no later than 01/31/2025, you must file the following:

- 1. A final construction report, which addresses the applicable items in Enclosure 1.
- 2. The following construction certifications, which must be verified in accordance with Title 18, Section 12.13 of the Code of Federal Regulations (18 CFR 12.13):
 - a. A certification by the Design Engineer that the project was constructed in accordance with the design intent.
 - b. A certification by the Quality Control Manager that the inspection and testing program resulted in the conclusion that the project was constructed in accordance with the plans and specifications reviewed by us.
 - c. A certification by the Licensee (PG&E) that the project was constructed in accordance with the design intent and in accordance with the plans and specifications reviewed by us.

Sample certifications are given in Enclosure 2.

- 3. Submit for our approval, revised Exhibits A, F, and G, as applicable, to describe and show those project facilities as built. If you determine that previously approved exhibits reflect the as-built facilities and no revisions are necessary, you must file a letter stating the approved exhibits reflect the as-built project facilities. To assist Commission staff in the review of any revised Exhibit A, we strongly recommend that you file a revised Exhibit A, in its entirety, in two forms:
 - a. A strikethrough format (*i.e.*, strikethrough items to be removed, and underline or bold items to be added to the exhibit), and
 - b. A final, clean copy incorporating the changes (*i.e.*, without the strikethrough, underline, and bold notations).

You must separate Exhibit F drawings from the other project exhibits, and label and file them as Critical Energy Infrastructure Information (CEII) material under 18 CFR § 388.113. The submission should consist of, as applicable: 1) a public portion consisting of a cover letter and the Exhibits A and G; and 2) a CEII portion containing only the Exhibit F drawings.

EFile all revised exhibit drawings to the Acting Secretary of the Commission with the transmittal addressed as follows:

Ms. Debbie-Anne A. Reese, Acting Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

If the plans and specifications are revised during the construction process, it is your responsibility to ensure that these changes are properly coordinated between the Design Engineer, the Resident Engineer, the Project Manager, us, and you, prior to proceeding with the changes. Also, you are reminded that no changes may be made to the operation of the project without first coordinating those proposed changes with the FERC.

PG&E is responsible for ensuring completion of any necessary environmental coordination with resource agencies as well as the procurement of any federal, state, or local permits required for the work.

File your submittal using our eFiling system at https://www.ferc.gov/ferc-online/overview. When eFiling, select Hydro: Dam Safety; San Francisco Regional Office from the eFiling menu. The cover page of the filing must indicate that the material was eFiled. For assistance with eFiling, contact FERC Online Support at FERCOnlineSupport@ferc.gov, (866) 208-3676 (toll free), or (202) 502-8659 (TTY).

We appreciate your continued efforts in this aspect of our dam safety program. If you have any questions, please contact Mr. Vince Vigil at (415) 369-3315.

Sincerely,

Frank L. Blackett, P.E. Regional Engineer

Enclosures (2)

cc:

Ms. Sharon Tapia, Division Manager Division of Safety of Dams California Department of Water Resources P.O. Box 942836 Sacramento, CA 94236-0001

Items to be Addressed in Final Construction Reports for Tiger Creek Canal Erosion Protection FERC No. 137

FINAL CONSTRUCTION REPORTS FROM LICENSEES

The Final Construction Report should be submitted within 90 days of completion of the work. This report should include all information pertinent to dam safety in a concise form. It should be included in the project file and should be given to the independent consultant for his or her safety inspection and analyses, if applicable. As such, the report should contain a summary of information in each of the applicable sections indicated below (the information was previously presented in the monthly reports). Construction difficulties should be reported under the appropriate sections. For conciseness, test results should be presented in a tabular format, with an indication of the applicable standards. Finally, in those cases where there is nothing to report under a specific heading, a statement of non-applicability will suffice.

- 1. <u>General</u>. Briefly present the reason for construction and description of the work with dates of the beginning and end of construction. Include reservoir drawdown and filing dates, and any findings regarding the original structure.
- 2. <u>Foundations</u>. Discuss the condition of the foundation (faults, etc.) and the treatment of the foundation. Attach a foundation mapping.
- 3. <u>Embankments</u>. Describe the equipment and the types of materials used in filters and fills. Attach gradation and compaction requirements and all test results.
- 4. <u>Concrete work</u>. Describe the equipment and the types of materials used in all concrete work. Include all grout test results and describe any surface treatments.
- 5. <u>Anchors</u>. Present a summary of any drilling operations, including boring logs; results of water pressure tests; anchor design calculations, design loads, and specifications; results of grout tests; results of proof and performance tests; and a summary of the acceptance criteria.
- 6. <u>Instrumentation</u>. Present plots of existing instrumentation readings taken during construction if the readings are affected by the work. Include a plan and schedule for calibration of all new instrumentation.
- 7. <u>Drawings</u>. Attach as-built drawings reduced in size to 8.5"x11" or 11"x17". The drawings should include plan and section views, and details of the structures affected by the new work. The plan and section views should show any new instrumentation that was installed as part of the work.

Enclosure 2 CERTIFICATION By Design Engineer

CERTIFICATION OF CONSTRUCTION PAGE 1 OF 3

FERC Project No.	
Construction Project Description:	
Design Drawings/Specifications:	
Quality Control and Inspection Program (QCIP) dated:
	at the project was constructed in accordance *************** CATION
STATE OF CALIFORNIA]	
COUNTY OF],SS:	
The undersigned, being first duly sworn, stat and knows the contents of it, and that all of t true and correct, to the best of his/her knowledge Paragraph 12.13).	he statements contained in that document are
Design Engineer (Print Name)	_
Signature	_
Sworn to and subscribed before me	[STAMP]
this, 20	_
NOTARY PUBLIC	- [SEAL]

Enclosure 2 CERTIFICATION By Quality Control Manager

CERTIFICATION OF CONSTRUCTION PAGE 2 OF 3

FERC Project No.	
Construction Project Description:	
Design Drawings/Specifications:	
Quality Control and Inspection Program (QCIP)	dated:
This is a certification by the Quality Control Ma resulted in the conclusion that the project was conspecifications reviewed by the Commission. ***********************************	onstructed in accordance with the plans and
STATE OF CALIFORNIA]	
COUNTY OF],SS:	
The undersigned, being first duly sworn, state and knows the contents of it, and that all of the true and correct, to the best of his/her knowled Paragraph 12.13).	e statements contained in that document are
Quality Control Manager (Print Name)	
Signature	
Sworn to and subscribed before me	[STAMP]
this, 20	
NOTARY PUBLIC	[SEAL]

Enclosure 2 CERTIFICATION By Licensee or Exemptee

CERTIFICATION OF CONSTRUCTION PAGE 3 OF 3

FERC Project No.	
Construction Project Description:	
Design Drawings/Specifications:	
Quality Control and Inspection Program (Q0	CIP) dated:
This is a certification by the Licensee or Exe accordance with the design intent and in acc by the Commission. ***********************************	
STATE OF CALIFORNIA]	
COUNTY OF],S	SS:
	states that he/she has read the above document of the statements contained in that document are owledge and belief (per 18CFR Part 12,
For Licensee or Exemptee (Print Name)	
Signature	
Sworn to and subscribed before me	[STAMP]
this, 2	0
NOTARY PUBLIC	[SEAL]