

**FEDERAL ENERGY REGULATORY COMMISSION
Washington, D. C. 20426**

OFFICE OF ENERGY PROJECTS

**Project No. 803-099--California
DeSabra-Centerville Project
Pacific Gas and Electric Company**

**Mr. Randal S. Livingston
Pacific Gas and Electric Company
Mail Code: N11C
P.O. Box 770000
San Francisco, CA 94177-0001**

Subject: Turbidity incident response letter

Dear Mr. Livingston:

We received your February 25, 2011 report, regarding an elevated turbidity incident that occurred downstream of the Centerville powerhouse at the DeSabra-Centerville Project. You filed the report in response to our February 20, 2011 letter concerning the incident.

In our February 20, 2011 letter, we reviewed the initial information that we had received regarding the incident. This information indicated that a release of turbid water had occurred during start up testing at the Centerville powerhouse. We requested that you file a report with the Commission that was to include: (1) an account of the events leading up to and including the incident, including applicable data and corrective actions taken; (2) an account of any environmental impacts and any preventative or mitigative measures; (3) documentation of consultation with the resource agencies; and (4) a summary of procedures for bypassing flows around the Centerville powerhouse, coordinating in advance with the resource agencies, and for avoiding similar future events.

Your February 25, 2011 filing provided the information requested in our February 20, 2011 letter. In your filing you stated that on February 8, 2011, you began start-up testing on Unit 1 at the Centerville Powerhouse, which required higher than normal operating flows in the Centerville Powerhouse bypass spill channel. You explained that it appears the increased flow traveling through the bypass spill channel likely contributed to the turbidity, which mobilized sediments that had previously settled into the bottom of the channel and also eroded the outer margins of the channel. You stated that the bypass spill channel was inspected previous to the increased flow through the channel. You also

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stated that the header box upstream of the spill channel was inspected prior to the turbidity event and was determined to be low in sediment. Additionally, you stated that during the increased flow release, you followed approved canal ramping rates.

Due to the potential for increased turbidity, you conducted background and event turbidity monitoring. Results of your monitoring at the steel bridge located approximately $\frac{1}{4}$ mile downstream of the Centerville Powerhouse reached a high of 28.2 Nephelometric Turbidity Units (NTU). You discounted these levels, stating that a recent rainstorm resulted in Butte Creek turbidity levels of over 42 NTU, and events of similar or greater magnitude frequently occur during winter months. As a result, your biologist and water quality scientist concluded that the event likely caused "slight impairment" to resident and anadromous salmonids, including short-term feeding and behavioral effects. You also concluded that no long-term effects to the fishery or aquatic community were expected.

Your filing also included a summary and documentation of agency consultation prior to, and following the turbidity event. Your filing indicates that you regularly consulted with the California Department of Fish and Game, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the U.S. Forest Service prior to, and following the incident. Your filing also included a February 18, 2011 letter from the California Regional Water Quality Control Board (Regional Water Board) discussing the incident and providing recommendations. The Regional Water Board concluded that the incident exceeded basin plan water quality objectives and the confinement limit of 300 feet imposed for in-water work. The Regional Water Board recognized that the source of the sediment was likely due to accumulated sediments in the feeder canal and overflow channel resulting from 1.5 years of limited use and the difficulty in accessing the channel to remove accumulated sediments. As a result the Regional Water Board requested that you: reassess your water quality monitoring protocol to provide more timely feedback to enable faster response to water quality problems; consider using controlled flow releases in the overflow channel to reduce the spike in turbidity during sudden flow releases in the canal; and consider routine use of a portable suction dredge to remove accumulated material in the feeder canal and small basin at the top of the penstock. You stated that you would respond to the Regional Water Board's letter by March 18, 2011.

As a result of the incident, you stated that you initiated a review of your operational practices and are working with external stakeholders to further minimize the risk of turbidity in future operations. Your filing also included a summary of current practices to minimize the risk of releasing turbid water to Butte Creek and for coordinating in advance with the resource agencies.

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Review of your filing indicates that you took appropriate measures to reduce the risk for turbidity in Butte Creek. We also note that you took appropriate measures to consult with the resource agencies prior to, and following the incident. Further, you followed established ramping rate protocols and conducted turbidity monitoring in Butte Creek to assess any potential impacts from the bypassed flows in the spill channel. Therefore, we will not consider the February 8, 2011 incident to be a violation of your project license.

Nevertheless, we are concerned about the potential for similar future events in the bypass channel, and their potential effect on aquatic resources in Butte Creek. Review of the project history indicates that turbidity events resulting from large flow events through in the Centerville Powerhouse bypass spill channel have previously resulted in elevated turbidity in Butte Creek. In particular, the Commission addressed similar turbidity events that occurred on July 6, 2006, January 24, 2005, September 21, 2004, and October 21, 2003. We also note that the potential for similar occurrences in the bypass channel is under review¹ by the Commission's Division of Hydropower Licensing (DHL) as part of your application for a new project license. Please continue to work with DHL and the natural resource agencies to minimize the potential for similar future incidents.

In the interim, we ask that you please keep the Commission apprised of your efforts to reduce the risk for similar future events, including your response to the Regional Water Board's February 8, 2011 letter. Please file a copy of your response to the Regional Water Board's letter with the Commission, along with your response to any additional resource agency comments received, within 30 days of the date of this letter. Please note that the Commission strongly encourages electronic filings via the Internet. For guidance, see 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's website at www.ferc.gov/docs-filing/efiling.asp. Alternatively, an original and eight copies of your response may be mailed to:

The Secretary
Federal Energy Regulatory Commission
Mail Code: DHAC, PJ-12.7
888 First St., NE
Washington, D.C. 20426

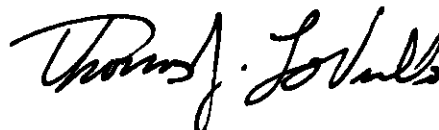
¹ See Final Environmental Assessment for New Major Hydropower License. FERC Project No. 803-087 (Issued July 24, 2009)

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Thank you for your cooperation. If you have any questions regarding this matter, please contact Mr. John Aedo at (415) 369-3335.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas J. LoVullo". The signature is written in a cursive style with a large initial 'T' and 'L'.

Thomas J. LoVullo
Chief, Aquatic Resources Branch
Division of Hydropower Administration
and Compliance

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