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**California Regional Water Quality Control Board**  
**Central Valley Region**  
Katherine Hart, Chair

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Edmund G. Brown Jr.  
Governor

18 February 2011

Ms. Joelle Aiello  
Pacific Gas and Electric Company  
MC NIIC  
P.O. Box 77000  
San Francisco, Ca 94117

**PG&E CENTERVILLE POWERHOUSE TEST OF 8 FEBRUARY 2011, AND ASSOCIATED  
TURBIDITY EVENT IN BUTTE CREEK, BUTTE COUNTY**

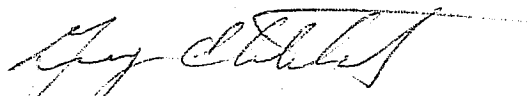
The letter is to inform you of our concern regarding the turbidity event of 8 February 2011 in Butte Creek generated by PG&E testing of the Centerville Powerhouse. PG&E monitoring and a video taken by Allen Harthorn on 8 February 2011 show a significant turbidity plume of sediment that extended from the powerhouse for miles downstream over a period of several hours. This event was clearly in excess of Basin Plan water quality objectives that limit turbidity to less than 15 NTUs above background during short term in-water work. The turbidity plume also extended greatly beyond the 300 feet limit imposed for in-water work.

Per verbal communication with PG&E staff, the source of the sediment was likely the overflow channel adjacent to the powerhouse penstock, and to a lesser degree accumulated material in the feeder canal. Apparently sediment had built up in the canal and overflow channel during the 1.5 years of limited use associated with shut down of the larger generator at Centerville. Because of the very steep slopes of the channel PG&E is unable to remove the accumulated sediment before bringing the powerhouse and overflow channel back fully on line.

In order to reduce the risk of similar turbidity events at Centerville Powerhouse we request PG&E take the following measures:

1. Reassess the water quality monitoring protocol and locations to provide more timely feedback to operations staff to enable faster response to developing water quality problems. We specifically request PG&E establish a monitoring station within 300 feet of the powerhouse and monitor turbidity at this station continuously as turbidity is increasing in order to shorten the response time to problematic turbidity events.
2. Consider using controlled flow increases in the overflow channel when the powerhouse is brought back on line following shut down periods when sediment may have accumulated. More gradual increases in flow may reduce the turbidity spike generated when flow jumps suddenly in the overflow channel.
3. 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.

Please respond in writing to the above requests. I can be reached at the letterhead address or by phone at 530-224-4997.



Guy F. Chetelat, PG  
Engineering Geologist  
Water Quality Certification and Storm-Water Unit

GFC: knr

cc: Mr. Russ Kanz, California State Water Resources Control Board, Sacramento  
Mr. Allen Harthorn, Friends of Butte Creek, Chico  
Mr. Takeshi Yamashita, Federal Energy Regulatory Commission, San Francisco  
Ms. Tracy McReynolds, California Department of Fish and Game, Chico  
Mr. Clint Graman, California Department of Fish and Game, Chico  
Ms. Gretchan Umlauf, National Marine Fisheries Service, Sacramento  
Ms. Deborah Giglio, U. S. Fish and Wildlife Service, Sacramento

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