



**Pacific Gas and
Electric Company**

August 11, 2000

David H. Oatley
Vice President—Diablo Canyon
Operations and Plant Manager

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PG&E Letter DCL-2000-554

Mr. Roger Briggs, Executive Officer
California Regional Water Quality Control Board
Central Coast Region
81 Higuera, Suite 200
San Luis Obispo, CA 93401-5414

Attention: Mr. Michael Thomas

Dear Mr. Briggs:

Information Regarding Steam Generator Metal Cleaning Activities
Diablo Canyon Power Plant (DCPP) - NPDES Permit No. CA0003751

During a planned refueling outage this October, DCPP will be performing metal cleaning on Unit 1 steam generators. This activity will involve the application of a dilute chemical solution to weaken the oxide deposit matrix, followed by mechanical removal of the weakened deposits using high-pressure pulses of nitrogen (PP cleaning). The dilute chemical solution is collectively called a "scale condition agent," or SCA, and works by selectively dissolving a fraction of the metals in the oxides. The SCA solution will consist predominately of ethylenediaminetetraacetic acid (EDTA) and also contain lesser concentrations of L-ascorbic acid (vitamin C), triton x-100 (a non-ionic surfactant), and triethanolamine (TEA) to adjust pH to 5 - 7.

After cleaning is complete, the spent SCA solution will contain dissolved metals (primarily iron and copper, present as metal: EDTA complexes), oxidized L-ascorbic acid, and residual surfactant. This solution will be treated by filtration to remove suspended solids, then with ion exchange resin to remove the dissolved metals and residual chemicals. The resulting liquid from this treatment will be analyzed to confirm compliance with NPDES discharge limitations prior its addition to a NPDES permit designated flowpath.

A worst-case calculation was performed to determine the maximum concentration that would be expected if the EDTA SCA solution (at the concentration that will be used in the steam generators) was added to a designated flowpath and released from NPDES Discharge 001 - Once Through Cooling Water at minimum flow (only one circulating water pump operating). This calculation considers the maximum flow that the solution could be added to

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a designated flowpath. Chronic toxicity testing was performed at a concentration greater than two times this calculated concentration to add an additional degree of conservatism and to provide an even ratio for the solution that was tested. The results of the test ($TUc = 1.79$) indicate that at this concentration DCP's calculated effluent limit for chronic toxicity from the California Ocean Plan ($TUc = 5.1$) is not exceeded.

Effluent from the steam generator cleaning activity will not significantly change the nature or increase the quantity of pollutants not controlled by effluent limitations at DCP.

Please contact Rick Hernandez of my staff at 545-4662 if you have any questions regarding this matter.

Sincerely,



David H. Oatley

2000554/RDH/kmo

Enclosure

cc: Ellis W. Merschoff
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U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

David Proulx
U.S. NRC Resident Inspector
DCPP (M/C 104/5/544)