

Pacific Gas and Electric Company

> James R. Becker Vice President-Diablo Canyon Operations and Station Director

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February 6, 2004

PG&E Letter DCL-2004-512

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Mr. Roger Briggs, Executive Officer California Regional Water Quality Control Board (CCRWQCB) Central Coast Region 895 Aerovista, Suite 101 San Luis Obispo, CA 93401-7906

Attention: Mr. Michael Thomas

Dear Mr. Briggs:

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

During planned refueling outages this March and October 2004, DCPP will be performing metal cleaning on Unit 1 (March) and Unit 2 (October) steam generators. This activity will involve the application of cleaning solutions to remove oxide deposits of copper and iron, followed by rinses, and mechanical removal of remaining deposits using high-pressure pulses of nitrogen (PP cleaning). The cleaning solutions will consist predominately of ethylenediaminetetraacetic acid (EDTA) and also contain lesser concentrations of ammonium hydroxide, dimethylamine (DMA), ethylenediamine (EDA), hydrazine, hydrogen peroxide, and CCI-801 inhibitor (less than or equal to 5% methanol).

After cleaning is complete, the spent cleaning solution and rinses will contain dissolved metals (primarily iron and copper, present as metal: EDTA complexes), and residual amounts of chemicals mentioned above. During draining of the spent cleaning solutions and rinses into collection tanks, these liquids will be filtered. Rinses may also be processed through ion exchange resin to remove the dissolved metals and residual chemicals during drains to collection tanks. The spent cleaning solutions will be shipped offsite to appropriate disposal facilities. The rinses will be analyzed to confirm compliance with NPDES discharge limitations. Only if analytical results show that a rinse will be in compliance with all NPDES discharge limitations will it be added to the appropriate NPDES designated flowpath.

Chronic toxicity bioassays were performed at the worst-case chemical and metals concentration of the rinses. An estimate of the maximum flow necessary to achieve a No Observable Effects Concentration (NOEC) if these cleaning solution rinses were discharged from NPDES Discharge 001 - Once Through Cooling Water was determined.

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This determination yielded the following results:

Typically, during DCPP refueling outages two circulating water pumps (CWP) are operating. However, to add an additional degree of conservatism, an estimate was made with only one CWP operating. Under these conditions, the maximum flow rate rinses could be added to the circulating cooling water and achieve NOEC would be 397 gallons per minute. Considering that the maximum flow rate achievable for adding rinses to circulating cooling water is only 125 gallons per minute, NOEC would be achieved with substantial margin if the rinses were added at the worst case concentrations. Rinses will only be discharged if analytical results confirm compliance with all NPDES discharge limitation for that specific flowpath.

Effluent from the steam generator cleaning activity will not "significantly change the nature or increase the quantity of pollutants not controlled by effluent limitations" (Standard Provisions C.7.) at DCPP.

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

Sincerely, James R. Becker

Vice President - Diablo Canyon Operations and Station Director

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