

## Memorandum

To : California Regional Water Quality Control Board  
Central Coast Region  
1122 Laurel Lane, Suite A  
San Luis Obispo, California 93401

Date: 1 October 1974

ATTENTION: Mr. Kenneth R. Jones  
Executive Officer

From : Department of Fish and Game - MRR-LB

Subject: State Certification of Compliance with Applicable Water Quality Standards,  
Pacific Gas and Electric Diablo Canyon Nuclear Power Plant

In our memorandum of 20 August 1974, we indicated non-compliance of present waste discharge requirements by the Diablo Canyon Nuclear Power Plant, and we recommended denial of certification until certain identified water quality problems were adequately resolved. We wish to suggest a procedure by which the Department of Fish and Game would not object to conditional approval for compliance with applicable water quality standards for the Diablo Canyon Nuclear Power Plant.

We believe it is appropriate to require Pacific Gas and Electric (P.G.&E.) to demonstrate that the power plant can be tested and operated in the absence of short-term acute and chronic toxicity or accumulative damage to the marine environment prior to our acceptance of conditional water quality certification. Revised waste discharge requirements and a monitoring program should reflect the new evidence of water quality impairment, especially heavy metal accumulation and foaming problems observed during pre-start up operations.

It is apparent, at present, that insufficient information exists to indicate the presence and/or the control method for toxic substances and the foaming phenomena recently experienced in Diablo Cove. We are extremely concerned with reported information that would indicate the discharge of 1000 pounds per year, or more, of copper and the interference of light penetration resulting from the surface foaming. We suggest that P.G.&E. formulate a suitable study plan in response to these concerns which will lead to remedial changes in operation or design of the plant if necessary. Should a satisfactory work plan, an adequate mechanism for our review participation, and satisfactory assurance and legal commitment to effect a solution by P.G.&E. be adopted, we would no longer object to granting of water quality certification.

Questions which the P.G.&E. work plan and program of remedial action should include follow:

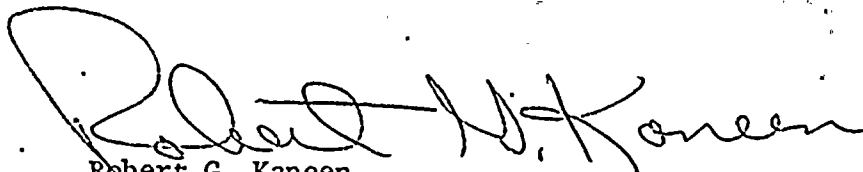
1. Is there a chronic problem (in the sense of problems that should be regulated by a NPDES or AEC permit) related to design, materials, and/or operation of the plant?

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2. Is there any change in possible toxic constituents between the intake and outfall; in marine organisms between area influenced by discharge versus control area; and in sediments of the area influenced by discharge versus control area?
3. If there are changes, what are the constituents, ranges, form, frequency, and reasons for the changes?
4. Will there be any changes associated with the discharge of heated effluent?
5. If there is a change in water quality, marine organism composition or abundance, and/or sediment distributions, what is its significance to marine life?
6. Is the recent abalone mortality reported by Fish and Game a singular event? Chronic with each start-up and shut down?
7. Is the problem associated with both normal and start-up-shut-down operations?
8. Is the monitoring program adequately responsive to potential harmful effects or evidence of irreversible damage?

As we have indicated in past communication concerning certification for the Diablo Canyon plant, the Department of Fish and Game is conducting a pre-operational survey to determine impact of the plant operation upon marine resources, and believes that, if demonstrated and necessary, modification of the plant operations must be sought to assure protection of the marine environment.

We look forward to review and comment upon any study proposals submitted by P.G.&E. Should you have any additional questions, please let us know.



Robert G. Kaneen  
Regional Manager

cc: ESB  
MRR-Monterey  
MRR-LB

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In conclusion, we recommend denial of State Certification of compliance with applicable water quality standards for Pacific Gas and Electric Company -- Diablo Canyon Nuclear Power Plant until such time as the identified water quality problems are resolved. In addition, we suggest any appropriate interim action be taken by the Board Staff to assure that operation of the facility does not continue to violate Waste Discharge Requirements or the Water Quality Control Plan.

We also wish to inform the Board Staff that the Department of Fish and Game is continuing its investigation of the Diablo Canyon Facility in regard to our responsibilities under the Fish and Game Code. We would be most willing to formally present our evidence of the waste discharge problems encountered during the pump testing operations at Diablo Canyon, should you so desire.

Robert G. Kaneen  
Regional Manager  
Marine Resources Region

RM/lr

bcc: CO  
ESB  
R. Mall - Long Beach  
M. Martin - Monterey  
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