

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

February 22, 1993

Docket Nos. 50-275 and 50-323

Mr. Gregory M. Rueger
Nuclear Power Generation, B14A
Pacific Gas and Electric Company
77 Beale Street, Room 1451
P.O. Box 770000
San Francisco, California 94177

Dear Mr. Rueger:

SUBJECT: HUMAN PERFORMANCE IN OPERATING EVENTS

We want to bring to your attention a report which may be of value during reviews or modifications of human factor programs. A copy of this report, NUREG-1275, Volume 8, "Operating Experience Feedback Report -- Human Performance in Operating Events," is enclosed for your information.

The report is a summary of the results of an NRC program begun in 1990 to conduct onsite studies of operating events in which human performance was a significant contributor to the course of the event. The staff conducted the program to find those factors that either contributed to or hindered good operator performance during the events. During the program, the staff visited 16 sites for study. Before publishing the NUREG report, the staff issued the information to utilities and other interested industry groups for comment.

In the report, the NRC compiled experience with control room staffing and organization, the "dual role" of the shift technical advisor, use of shift resources, operator control of engineered safety features, the effect of simulator training, operator teamwork, task awareness, use of procedures, human/machine interface, and the results of reviewing operator performance after an event. The report contains useful insights on how operating crews perform during actual events.

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February 22, 1993

Mr. Gregory M. Rueger

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This study contains no requirements or requests for action and is intended for your information and use as you find appropriate. We recognize that the interaction among procedures, training, and organizational factors is complex such that there is no single solution for all plants.

Sincerely,

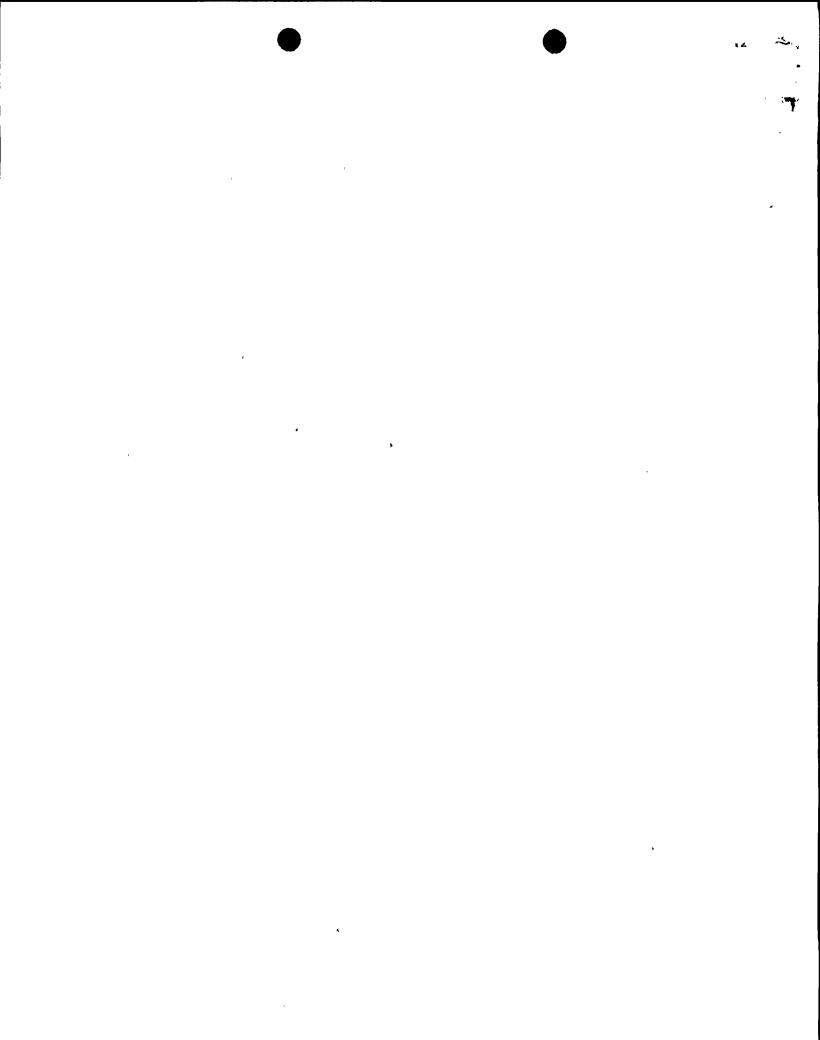
Thomas E. Murley, Director Office of Nuclear Reactor Regulation

Edward L. Jordan, Director Office for Analysis and Evaluation

of Operational Data

Enclosure: **NUREG-1275** 

cc w/o enclosure: See next page



Mr. Gregory M. Rueger Pacific Gas and Electric Company

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cc:
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Sincerely,

Original Signed By

Thomas E. Murley, Director Office of Nuclear Reactor Regulation

Original Signed by: E. L. Jordan

Edward L. Jordan, Director Office for Analysis and Evaluation of Operational Data

Enclosure: NUREG-1275

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