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UNITED STATES NUCLEAR REGULATORY COMMISSION REGION V 1990 N. CALIFORNIA BOULEVARD SUITE 202, WALNUT CREEK PLAZA WALNUT CREEK, CALIFORNIA 94596

December 18, 1980

Docket No. 50-133

Pacific Gas and Electric Company P. O. Box 7442 San Francisco, California 94106

Attention: Mr. Philip A. Crane, Jr. Assistant General Counsel

Gentlemen:

Enclosed is IE Supplement No. 4 to Bulletin No. 80-17 which requires action by you with regard to your power reactor facility(ies) with an operating license.

In order to assist the NRC in evaluating the value/impact of each Bulletin on licensees, it would be helpful if you would provide an estimate of the manpower expended in conduct of the review and preparation of the report(s) required by the Bulletin. Please estimate separately the manpower associated with corrective actions necessary following identification of problems through the Bulletin.

Should you have any questions regarding this Bulletin or the actions required by you, please contact this office.

Sincerely,

Res Sme chan

R. H. Engelken Director

Enclosures: 1. IE Supplement No. 4 to Bulletin No. 80-17

 Recently issued IE Bulletins

cc w/enclosures:

- J. D. Shiffer
- E. Weeks

8101090775 Q

W. A. Raymond

SSINS No.: 6820 Accession No.: 8006190074 IEB 80-17 Sup. 4

## UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT WASHINGTON, D.C. 20555

December 18, 1980

IE Supplement 4 to Bulletin No. 80-17: FAILURE OF CONTROL RODS TO INSERT DURING A SCRAM AT A BWR

NRC staff evaluation of failures of the continuous monitoring system (CMS) for the scram discharge volume (SDV) at an operating BWR has identified the need for licensee actions in addition to those requested by IEB 80-17 and Supplements 1-3. The purpose of these actions is to provide assurance that the CMS has been tested to demonstrate operability as installed, remains operable during plant operation, and is periodically surveillance tested to demonstrate continued operability.

The occurrence of CMS failures at Dresden Nuclear Power Station was discussed in IE Information Notice 80-43, which was issued on December 5, 1980 to those operating BWR's with CMS recently installed. Subsequently, investigation into the cause of the failure to receive the alarm with the SDV essentially full revealed several items which required correction, including:

- Excess portions of transducer cable were placed in physical positions 1. which would increase external noise sensitivity.
- The UT transducers were not placed in a physical position to optimize 2. system sensitivity.
- A certain amount of "cross-talk" was occuring between redundant trans-3. ducers located a few feet apart on the same run of 4" pipe.

Station and vendor personnel shortened and rerouted transducer cables to improve noise rejection. Vendor specialists optimized transducer placement and synchronized both transducers to the same ultrasonic instrument internal clock to minimize cross-talk and improve signal to noise characteristics. Following these actions the CMS appeared to function properly.

Further difficulties were encountered when apparently minor quantities of water leaked into the SDV as a result of control rod drive scram valve maintenance activities and minor scram outlet valve leakage. It appears that the transducers are located on a section of SDV piping which forms a local low point.

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th which triggers the instrument performed a unit d reset the alarm ly. A five second rious alarms.