



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION V
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DEC 6 1972

DIRECTORATE OF REGULATORY OPERATIONS BULLETIN 72-3

Pacific Gas and Electric Company
77 Beale Street
San Francisco, California 94106

Docket No. 050-0275
Docket No. 050-0323

Attention: Mr. Frederick T. Searls
Vice President and General Counsel

Gentlemen:

We recently received information relating to the malfunction of electric type valve operators at two reactors. The valve operators were identified as Limitorque Models SMB-00 and SMB-000 which are used extensively in safety related systems at a number of PWR and BWR reactor facilities. Subsequent investigation identified a specific production group of these models which were manufactured between 1969 and mid-1971. The specific deficiencies are described as follows:

Plant A

Testing of valves and valve operators used in safety related systems at this facility disclosed ten valves that failed to close following a "valve full open operation" test. The cause of failure was attributed to malfunction of the valve operator torque switch due to a lack of proper clearance between the moving parts of the torque switch unit and the inability of the "torque switch torsion spring" to return the electrical contacts to a closed position following operation of the valve. The weak torsion spring is considered a common mode of failure. Approximately 150 valves ranging up to eight inches in size were equipped with valve operators having the faulty switches.

Plant B

During a reactor startup, the inboard steam supply valve of the reactor core isolation coolant (RCIC) system failed in the open position. Several attempts were made unsuccessfully to close the valve. The failure was attributed to an internal torsion spring in the valve operator torque switch which normally resets the electrical contacts. The valve operator in question is similar to the units which failed at Plant A.

Two additional facilities have recently experienced similar failures since those reported at plants A and B.

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It is requested that you determine whether valve operators of the described make, model and vintage are installed or scheduled to be installed in your facility. If your findings show that valves installed or scheduled to be installed are equipped with the described valve operators, please inform this office within thirty days, in writing, of the number of valves equipped with the valve operators, the systems in which the subject valves are installed or scheduled to be installed, a description of corrective actions taken or planned, and the scheduled completion date of your corrective actions.

Should you have any question concerning this matter we will be pleased to discuss them with you.

Sincerely,



R. W. Smith
Director

cc: J. D. Worthington, PG&E
G. Richards, PG&E

bcc: RO Files (2)
DR Central Files (2)
PDR (2)
Local PDR (2)

