

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 16, 1994

Docket Nos. 50-361 and 50-362

> Mr. Harold B. Ray Senior Vice President Southern California Edison Co. Irvine Operations Center 23 Parker Street Irvine, California 92718

Mr. Edwin A. Guiles Vice President Engineering and Operations San Diego Gas & Electric Co. 101 Ash Street San Diego, California 92112

Gentlemen:

SUBJECT:

GENERIC LETTER 89-10, SUPPLEMENT 5, "INACCURACY OF MOTOR-OPERATED VALVE DIAGNOSTIC EQUIPMENT" STATUS FOR SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 2 (TAC M87998) AND UNIT NO. 3 (TAC NO. M87999)

On June 28, 1993, the NRC staff issued Supplement 5, "Inaccuracy of Motor-Operated Valve Diagnostic Equipment," to Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance," requesting nuclear power plant licensees and construction permit holders (1) to re-examine their Motor-Operated Valves (MOV) programs and to identify measures taken to account for uncertainties in properly setting valve operating thrust to ensure operability, and (2) to evaluate the schedule necessary to consider the new information on MOV diagnostic equipment inaccuracy and to take appropriate action in response to that information. Within 90 days of receipt of Supplement 5 to GL 89-10, licensees were required (1) to notify the NRC staff of the diagnostic equipment used to confirm the proper size, or to establish settings, for safety-related MOVs, and (2) to report whether they had taken actions or planned to take actions (including schedule) to address the new information on the accuracy of MOV diagnostic equipment.

The staff has reviewed the responses, and has found that, for the most part, licensees and permit holders have been actively addressing the uncertainties regarding the accuracy of MOV diagnostic equipment. The increased inaccuracy of MOV diagnostic equipment can raise questions regarding (1) the adequacy of torque switch settings to provide sufficient thrust while not exceeding thrust or torque structural limits and (2) the capability of actuator motors at current settings. In their responses, licensees and permit holders indicated that many MOVs had the potential for underthrusting or overthrusting as a result of the higher than expected inaccuracy of MOV diagnostic equipment. Consequently, some licensees reported that MOVs have been retested, adjusted, or modified to resolve the concerns regarding the accuracy of MOV diagnostic equipment.

You responded to Supplement 5 by letter dated September 30, 1993, which included the following statements:

 The ITI-MOVATS Thrust Measuring Device (TMD), Teledyne Engineering sensors, and Yoke Mounted Strain Gages from Micro-Measurement are used for MOV diagnostic testing.

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- When an MOV is set and tested using a MOVATS TMD, a ITI-MOVATS Engineering Report 5.2 evaluation will be performed to account for the uncertainties associated with the TMD.
- testing program has been established to determine the accuracy of stem and yoke-mounted strain gages.
- 4. Documentation and validation of the new information on MOV diagnostic equipment inaccuracies and the evaluation uncertainties will be complete by the Unit 3 Cycle 8 refueling outage.

During a future inspection, the NRC staff will discuss the resolution of the MOV diagnostic equipment accuracy issue for the San Onofre units. Particularly, the staff will discuss the findings from the licensee's evaluations of MOVs setup using the TMD and whether any operability problems were identified.

This completes all efforts on TAC Nos. M87998 AND M87999. If you have any questions regarding this issue, please call me at (301) 504-3062.

Sincerely,

Mel B. Fields, Project Manager

Mr. ( B. Fields

Project Directorate V

Division of Reactor Projects III/IV/V Office of Nuclear Reactor Regulation

cc: See next page

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- 2. When an MOV is set and tested using a MOVATS TMD, a ITI-MOVATS Engineering Report 5.2 evaluation will be performed to account for the uncertainties associated with the TMD.
- A testing program has been established to determine the accuracy of stem and yoke-mounted strain gages.
- 4. Documentation and validation of the new information on MOV diagnostic equipment inaccuracies and the evaluation uncertainties will be complete by the Unit 3 Cycle 8 refueling outage.

During a future inspection, the NRC staff will discuss the resolution of the MOV diagnostic equipment accuracy issue for the San Onofre units. Particularly, the staff will discuss the findings from the licensee's evaluations of MOVs setup using the TMD and whether any operability problems were identified.

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Sincerely,

Original signed by:

Mel B. Fields, Project Manager Project Directorate IV and V Division of Reactor Projects III, IV, V Office of Nuclear Reactor Regulation

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- When an MOV is set and tested using a MOVATS TMD, a ITI-MOVATS 2. Engineering Report 5.2 evaluation will be performed to account for the uncertainties associated with the TMD.
- A testing program has been established to determine the accuracy of stem and yoke-mounted strain gages.
- Documentation and validation of the new information on MOV diagnostic equipment inaccuracies and the evaluation uncertainties will be complete by the Unit 3 Cycle 8 refueling outage.

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