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## Southern California Edison Company

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January 11, 1990

R. M. ROSENBLUM MANAGER OF NUCLEAR REGULATORY AFFAIRS

> U. S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, D. C. 20555

Gentlemen:

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Subject: Docket Nos. 50-206, 50-361 and 50-362 Generic Letter 89-10: Safety-Related Motor-Operated Valve Testing and Surveillance San Onofre Nuclear Generating Station Units 1, 2 and 3

This letter provides the Southern California Edison (SCE) response to the scope, recommended actions and schedule requests in Generic Letter 89-10: Safety-Related Motor-Operated Valve Testing and Surveillance for San Onofre Units 1, 2 and 3.

In Generic Letter 89-10 the NRC has requested that all safety-related Motor Operated Valves (MOVs), including position-changeable MOVs in safety-related systems, be tested, inspected and maintained to provide the necessary assurance that they will function when subjected to normal operation and abnormal event design-basis conditions. The NRC also recommends that other MOVs in the balance of plant should be considered for inclusion in the program, commensurate with the licensee's assessment of their importance to safety. The SCE program which responds to this Generic Letter addresses recommended actions a. through h. in the Generic Letter.

SCE has completed a significant portion of recommended actions a. through h. by testing, evaluating and adjusting 292 MOVs at San Onofre Units 1, 2 and 3. These tests, evaluations and adjustments were performed in accordance with the actions required by IE Bulletin 85-03. Additionally, 46 of the 292 MOVs were tested at or near design-basis conditions to establish switch settings for "like-kind" valves. Switch settings were established and changed on the valves as appropriate. SCE recognized the potential for increased MOV reliability and voluntarily expanded the scope of Bulletin 85-03 from only the high pressure safety injection and auxiliary feedwater system MOVs to include all safety-related non-butterfly type MOVs at San Onofre. The SCE MOV program scope will be expanded to include all safety-related MOVs (including positionchangeable MOVs) and balance of plant MOVs that, as a minimum, SCE identifies to have safety significance. Taking credit for the work which has been completed, as allowed in this Generic Letter, SCE commits to completing recommended actions a. through h. for San Onofre Units 1, 2 and 3.

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The following interpretations of Generic Letter 89-10 scope and recommended actions are provided to clarify this commitment being made by SCE:

- 1. Although Motor Operated Dampers (MODs) were discussed in an NRC workshop, they are not considered to be included in the scope of this Generic Letter because of the differences in how they operate and the fact that they have not had a failure history similar to MOVs. Monthly surveillance testing of MODs is performed under actual design conditions and they are included in the preventive maintenance program. Additionally, because MODs were not evaluated in NUREG/CR-5140 (the NRC justification to increase the scope of IE Bulletin 85-03 to include all safety-related MOVs) MODs are not considered to be within the scope of this Generic Letter.
- 2. An extensive MOV testing program was conducted at San Onofre in response to IE Bulletin 85-03. Under this program, the valves were divided into "like-kind" groups of valves. In the context of the testing program, "like-kind" is defined as a group of valves that are of the same size and type (i.e., butterfly, gate, etc.), same manufacturer model for each type, similar service (i.e., pressure differential), same actuator type and size, and same actuator model. Grouping "like-kind" MOVs allows a reduction in the number of design basis tests and associated personnel radiation exposure by performing differential pressure tests on only selected valves in each group. Since all the valves in each group are characteristically the same, the same test results would be expected of the remaining MOVs in the valve group. This same approach will be used in conducting the GL 89-10 items c. and f. testing. Forty-six representative MOVs have already been design basis tested as part of evaluating MOVs within the scope of this Generic Letter. Additional "like-kind" groups will be established which will require design basis testing of one additional representative valve in each new group to establish setpoints for the new groups. Differential pressure and flow testing of at least one of each "like-kind" valve in conjunction with the inservice stroke testing and static testing of all safety-related MOVs is believed to be sufficient to assure valve operation when needed.

A design-basis (differential pressure and flow) test provides a characteristic curve showing the effects of differential pressure and flow. Static testing of all valves is used to set the control switches to their appropriate settings. The industry data base and specific San Onofre tests document that use of a representative MOV tested under design basis conditions to bound the setpoints of a "like-kind" group is valid for determining the ۰ I

proper control switch settings. This is due largely to the identical configuration of all valves within a group and to the margin provided in the switch settings at San Onofre due to 1. bypassing the open torque switch until transition from differential pressure effects to nominal running load (no differential pressure) has occurred and 2. the minimum torque switch setting is normally at least 2.5 times the nominal running load to allow for valve and packing degradation.

SCE hereby commits to complete the recommended actions a. through h. of Generic Letter 89-10 for all safety-related MOVs as clarified above. As requested in the Generic Letter, this work will be completed by June 28, 1994 or three refueling outages from December 28, 1989, whichever is later.

In addition, as requested in the second paragraph of Generic Letter 89-10, schedule item i, the program descriptions and schedules for recommended actions a. through h. will be available by June 28, 1990 for Units 2 and 3 and by the end of the next Unit 1 refueling outage which is scheduled to begin on June 30, 1990.

If you have any questions or would like additional information, please let me know.

Respectfully submitted,

By:

Manager of Nuclear Regulatory Affairs

Subscribed and sworn to before me this \_\_\_\_\_ day of <u>January 1990</u>.

Notary Public in the State of California



cc: J. B. Martin, Regional Administrator, NRC Region V C. Caldwell, NRC Senior Resident Inspector, San Onofre Units 1, 2 and 3