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SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

October 5, 1978

Nuclear Regulatory Commission
ATTN: Mr. R. H. Engelken
NRC Operations Office,
Region V
1990 North California Boulevard
Walnut Creek Plaza, Suite 202
Walnut Creek, California 94596



Re: Operating License DPR-54
Docket No. 50-312
Reportable Occurrence 78-12

Dear Mr. Engelken:

In accordance with Technical Specifications for Rancho Seco Nuclear Generating Station, Section 3.14.4.1, and Regulatory Guide 1.16, Revision 4, Section C.2.b.2, the Sacramento Municipal Utility District is hereby submitting a thirty-day report of Reportable Occurrence 78-12.

On September 22, 1978, during routine testing of the Cardox (CO₂) Fire Protection System (specifically zone 40 and 41, Diesel Generator Rooms), the header failed to discharge. In accordance with Technical Specifications section 3.14.4.2a, a continual fire watch with backup fire suppression equipment was initiated. Subsequent investigation revealed that the solenoid that operates pilot valve FV-99809 was not operating. The failure of the pilot valve rendered FV-99809, the main header isolation valve, inoperable for an automatic initiation. At that time, contrary to Technical Specifications section 3.14.4.1, none of the CO₂ zones could be considered operable. The situation was corrected by disconnecting the malfunctioning solenoid and manually placing the main header isolation valve, FV-99809, in the open position. This pressurized the header up to all the zone control valves and made the system operable from automatic zone controls as well as manual pull stations.

Failure of the solenoid was traced to a faulty microswitch which kept a coil energized, arc closed a relay contact and allowed the solenoid to draw up to 20 amps continuously.

All the failed and faulty components were replaced.

Background investigation revealed that prior to the fire protection Technical Specifications, several failures had occurred with this system. At least one of these previous failures was the same mode of failure as the latest occurrence. As a result, the District is contacting the vendor in an attempt to obtain a more reliable automatic control mechanism for FV-99809. Until this is resolved, or some other fix is initiated which the District feels will preclude a recurrence, the system will be left in the mode previously described (FV-99809 in the open position and the entire CO₂ header

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pressurized up to the zone control valves). This mode of operation is conservative and adequately meets the requirements of Technical Specifications section 3.14.4.1.

The equipment and circuitry involved is supplied by CARDOX, a Division of Chemetron Corporation.

There was no plant transient or shutdown associated with this event.

Respectfully submitted,

J. J. Mattimoe

J. J. Mattimoe
Assistant General Manager
and Chief Engineer

JJM:RJR:HH:jim

Enclosure

cs: Director, MIPC (3)
Director, IE (30)