

April 10, 1980

Mr. R. H. Engelken, Director
Region V Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
1990 North California Boulevard
Walnut Creek Plaza, Suite 202
Walnut Creek, California 94396

Re: Operating License DPR-54
Docket No. 50-312
Reportable Occurrence 80-17

Dear Mr. Engelken:

In accordance with Technical Specifications for Rancho Seco Nuclear Generating Station, Section 6.9.4.2b, 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 80-17.

On March 22, 1980, the Borated Water Storage Tank (BWST) isolation valve SFV-25003 to the Decay Heat Pump suction was manually opened several turns to increase the level in the pressurizer. Upon obtaining the desired level increase, an attempt to close the valve via the motor operator was unsuccessful. An investigation revealed that the motor was operating but the valve stem was not moving.

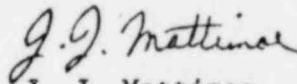
The motor operator on the valve was disassembled to determine the reason for the malfunction. The particular operator, a Model SMB-2, manufactured by Limatorque, employs a locking mechanism, consisting of a worm shaft clutch and worm shaft clutch gear. This locking mechanism engages to drive the shaft by either the motor or the manual handwheel. The dogs on the worm shaft clutch and the worm shaft clutch gear were found to be significantly rounded off. They were sufficiently worn to allow rotation of the worm shaft clutch gear against the worm shaft clutch without locking or engaging. The worn parts were replaced and the valve tested to assure operability.

A similar occurrence with the valve was reported to your office via LER 77-12. At that time the District contacted the vendor and an investigation into the premature failure was conducted. The results of the investigation indicated that accelerated wear can be expected if the operators are placed in manual. The District imposed a requirement to cycle the valve via the motor operator following any manual operation of any safety features valve with a similar operator. The four Limatorque operator model numbers of concern were SMB 0, 1, 2, and 3. That self-imposed requirement, still in effect, provides for early detection of a problem and ensures safety features operability.

Additionally, following the 1977 occurrence, the vendor has changed the material and heat treating process for the worm shaft clutch and clutch gear. The vendor informed the District that replacement components of the new material and heat treating process would be available in the latter part of 1978. The replacement parts for SFV-25003 are of the new type. Additionally, SFV-25004, the redundant BWST isolation valve, will be inspected. If accelerated wear is noted, the affected components will be replaced with the new type material.

Since the plant was shut down for refueling, there were no power reductions nor plant transients associated with this event.

Respectfully submitted,



J. J. Mattimoe
Assistant General Manager
and Chief Engineer

JJM:HH:jim

cs: Director, I&E (30)
Director, MIPC (3)