



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

May 29, 1981

R. H. ENGELKEN, DIRECTOR
REGION V OFFICE OF INSPECTION & ENFORCEMENT
U. S. NUCLEAR REGULATORY COMMISSION
1990 N CALIFORNIA BLVD
WALNUT CREEK PLAZA, SUITE 202
WALNUT CREEK CA 94596



OPERATING LICENSE DPR-54
DOCKET NO. 50-312
REPORTABLE OCCURRENCE 81-26

In accordance with Technical Specifications for Rancho Seco Nuclear Generating Station, Section 6.9.4.1(c) and Regulatory Guide 1.16, Revision 4, Section C.2.a(3), the Sacramento Municipal Utility District is hereby submitting a follow-up report to Reportable Occurrence 81-26 which was initially reported to the Duty Officer at Bethesda, Maryland on May 16, 1981 and by a confirmation letter to your office of May 18, 1981.

On May 16, 1981, the Rancho Seco Plant was operating at approximately 98% full power. At 2200 an alert indication on the condenser air ejector radiation monitor was received. This was followed by a high alarm on the same monitor 25 minutes later. Subsequently both the gland steam radiation monitor and the "B" loop main steam line radiation monitors also gave indication of activity.

Personnel were sent into the area to verify the indications, and a primary system leak calculation was performed. Verification of the alarm indications, a calculated leak rate of 1.7 gpm, and an independent leak rate calculation using the change in tritium concentration in the condenser all indicated the existence of a small primary to secondary leak.

After acknowledging the existence of a small primary to secondary leak and identifying the "B" OTSG as the source, a reduction in reactor power was initiated. The reactor was runback in a controlled manner

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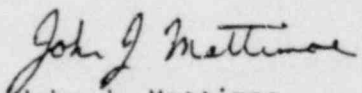
to a subcritical condition. The controlled runback and control of the turbine bypass valves during the subsequent cooldown prevented the main steam safety valves from opening during the transient. The RCS was sufficiently cooled down and depressurized so that by 0514 on May 17, 1981, the RCS cooling was maintained by the decay heat removal system.

Inservice inspection personnel from Babcock and Wilcox, the NSSS vendor, were brought on site to perform an eddy current inspection of the "B" OTSG. Both a visual inspection (i.e., filling the primary side and observing the secondary side tube sheet for leakage) and subsequent eddy current inspection identified one tube, No. 77-17, as the source of the leakage. Subsequent fiber optic examination of the tube indicated a 360° through-wall crack at the upper end of the 15th tube support plate.

Since tube No. 77-17 is a lane row tube, all of the lane row tubes, three rows out from the lane row and from the 13th tube support plate up, were inspected. Additionally, all tubes which had known indications from previous inspections were given a full-length inspection. This inspection encompassed 400 plus tubes.

Besides the leaking tube, three additional tubes in the lane region had indications which were determined to warrant plugging. These tubes are identified as tube No.s 75-18, 75-19 and 75-27. All four tubes were stabilized and plugged.

Presently a program for processing the secondary system water which was contaminated as a result of this occurrence is in progress. Power operation will be resumed upon satisfactory processing of the water and secondary system cleanup.



John J. Mattimoe
Assistant General Manager
and Chief Engineer

cc: I&E Washington (30)
MIPC (3)
EPRI-NSAC