

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

May 26, 1981

81-436-000

SQRD-50-328/81-33

Mr. James P. O'Reilly, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Region II - Suite 3100  
101 Marietta Street  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

SEQUOYAH NUCLEAR PLANT UNIT 2 - REACTOR COOLANT PUMP NO. 3, SEAL  
NO. 1 BYPASS, PIPING ANALYSIS ERROR - SQRD-50-328/81-33 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector  
R. V. Crlenjak on May 6, 1981 in accordance with 10 CFR 50.55(e) as  
NCR SQN CEB 8111. Enclosed is our final report. We consider 10 CFR 21  
applicable to this deficiency.

If you have any questions, please get in touch with D. L. Lambert at  
FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager  
Nuclear Regulation and Safety

Enclosure

cc: Mr. Victor Stello, Director (Enclosure) ✓  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

S 8106110454

## ENCLOSURE

SEQUOYAH NUCLEAR PLANT UNIT 2  
REACTOR COOLANT PUMP NO. 3, SEAL NO. 1 BYPASS  
PIPING ANALYSIS ERROR  
SQRD-50-328/81-33  
10 CFR 50.55(e)  
FINAL REPORT

### Description of Condition

The 3/4-inch No. 1 seal bypass piping for reactor coolant pump (RCP) No. 3 had piping movements during hot functional testing which caused certain snubbers to move in a direction opposite to that anticipated by design. The piping analysis for the affected piping is 0600154-08-17 and is a reanalysis of an EDS Nuclear problem performed by Gilbert Commonwealth. The current analysis was found to have incorrect input movements of the RCP No. 3, which were determined by Gilbert Commonwealth.

### Safety Implications

Pipe movement in a direction opposite to that for which the snubbers are oriented would cause the snubbers to lock, which would greatly increase the stresses in the pipe. An inordinate increase in pipe stresses could cause the pipe to break, resulting in a LOCA.

### Corrective Action

TVA has performed a piping analysis which indicates that changing out one snubber and resetting one spring hanger will resolve this problem. These changes will be accomplished before fuel loading.

TVA has instructed the contractor to ensure that existing check procedures, which are designed to catch deficiencies of this nature, are more closely adhered to. In addition, TVA has developed an independent checklist to be completed by TVA which reviews the contractor's analyses. This checklist will be attached to the analysis reports, documenting TVA's review.

PART 21 IDENTIFICATION NO. 81-436-000 COMPANY NAME TVA

DATE OF LETTER 5/26/81 DOCKET NO. 50-328

DATE DISTRIBUTED \_\_\_\_\_ ORIGINAL REPORT ☒ SUPPLEMENTARY ☐

DISTRIBUTION:

REACTOR (R) ☒

IE FILES

EES - *Mills*

REGIONS I,II,III,IV,V

VENDOR BR. R-IV

LOEB / MPA MNB 5715

AEOD MNB 7602

CEOD/dmu mnb 7217

NRR/DOE

NRR/DSI

NRR/DST

NRR/DOL

ASLBP E/W 450

CENTRAL FILES 016

CENTRAL FILES (CHRON)

PDR

LPDR

TERA

ACTION:

PRELIMINARY EVALUATION OF THE ATTACHED REPORT INDICATES LEAD RESPONSIBILITY FOR FOLLOWUP AS SHOWN BELOW:

IE ☐

NRR ☐

NMSS ☐

OTHER ☐

EES

FUEL CYCLE & ☐

MATERIALS (M)

IE FILES

AD/FF/ISI

REGIONS I,II,III,IV,V

VENDOR BR. R-IV

NMSS / FCMS SS-396

LOEB / MPA MNB 5715

AEOD MNB 7602

CEOD/dmu mnb 7217

ASLBP E/W 450

SAP/SP MNB-7210A

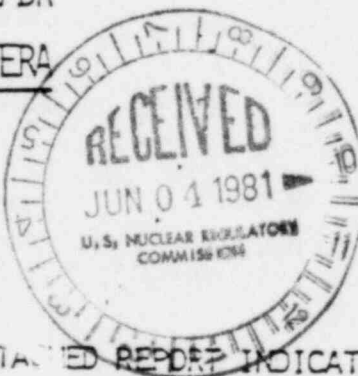
CENTRAL FILES 016

CENTRAL FILES (CHRON)

PDR

LPDR

TERA



SAFEGUARDS (S) ☐

IE FILES

AD/SG

AD/ROI

REGIONS I,II,III,IV,V

VENDOR BR. R-IV

NRR/DOL

NMSS / SG SS-881

LOEB / MPA MNB 5715

AEOD MNB 7602

CEOD/dmu mnb 7217

ASLBP E/W 450

CENTRAL FILES 016

CENTRAL FILES (CHRON)

CENTRAL FILES SS-396

PDR

LPDR

TERA