

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

August 1, 1984 A9:17

BLRD-50-438/83-39

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Mr. O'Reilly:

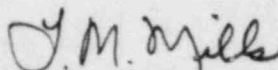
BELLEFONTE NUCLEAR PLANT UNIT 1 - WATER DAMAGE TO REACTOR BUILDING NORMAL
SUMP ISOLATION VALVE MOTOR OPERATOR - BLRD-50-438/83-39 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
P. E. Fredrickson on June 9, 1983 in accordance with 10 CFR 50.55(e) as
NCR 2381. This was followed by our interim reports dated July 8 and
October 20, 1983. Enclosed is our final report.

If you have any questions, please get in touch with R. H. Shell at
FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager
Nuclear Licensing

Enclosure

cc: Mr. Richard C. DeYoung, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNIT 1
WATER DAMAGE TO REACTOR BUILDING
NORMAL SUMP ISOLATION VALVE MOTOR OPERATOR
NCR 2381
BLRD-50-438/83-39
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency:

The motor operator and other internal electrical parts on the Reactor Building (RB) normal sump isolation valve (IWL-IFCV-068-B) were immersed in water during flooding of the RB Normal Sump Tank Room. The cause of this flooding was valve misalignment during a flushing process. Because of a failure to take prompt corrective action on the operator, corrosion subsequently damaged the internal electrical parts. This failure to take corrective action stemmed from a failure of TVA's engineering personnel to evaluate the quality control investigation report (QCIR) which identified the soaked operator and generate a nonconformance report (NCR) from this QCIR. The NCR would then have required corrective action to be determined and performed which could have prevented any serious corrosion from occurring.

Safety Implications

If the isolation valve motor operator had rusted to the point where it would fail to perform its intended function upon demand, then, during a loss of coolant accident (LOCA), primary containment could be breached in that highly radioactive water from the sump tank could be pumped into the Auxiliary Building through the isolation valve. Therefore, this condition, had it remained uncorrected, could have adversely affected the safe operation of the plant.

Corrective Action

TVA is shipping this motor-operator to Limitorque, the vendor, for repair and expects its reinstallation to be complete by April 19, 1985.

To prevent a recurrence of this condition, responsible personnel have been retrained in Bellefonte Nuclear Plant Construction Test Procedure (BNP-CTP) 6.1, "Cleaning and Flushing of Systems," which defines the alignment of the valves to be checked by quality control personnel before flushing. Also, BNP-CTP-10.4 has been revised (revision 10) to eliminate the use of QCIRs and this revision had an effective date of November 1, 1983. Conditions adverse to quality are now directly documented by NCR.