TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE
37401

June 3, 1974

Mr. John F. O'Leary, Director
Directorate of Licensing
Office of Regulation
U.S. Atomic Energy Commission
Washington, DC 20545

50-259

Dear Mr. O'Leary:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 - DOCKET NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - ABNORMAL OCCURRENCE REPORT BFAO-7312W, REVISION 1

The enclosed revised report is to correct the error concerning unit of pressure in BFAO-7312W submitted September 21, 1973.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

E. F. Thomas
Director of Power Production

Enclosure
CC (Enclosure):
Mr. Norman C. Moseley, Director
Region II Regulatory Operations Office, USAEC
230 Peachtree Street, NW., Suite 818
Atlanta, Georgia 30303

50-259

COPY SENT REGION 2

ABNORMAL OCCURRENCE REPORT

Report No.: BFAO-7312W (Revision 1)
Report Date:
Occurrence Date: September 12, 1973
Facility: Browns Ferry Nuclear Plant - Unit 1

The purpose of this report is to provide details concerning the failure of Browns Ferry unit 1 reactor building to suppression chamber vacuum breakers to operate. This occurrence was reported on September 12, 1973, to W. S. Little, AEC-DRO Inspector, who was on site, and by telegram on September 12, 1973, to the Region II Directorate of Regulatory Operations in Atlanta, Georgia.

Description of the Incident

During reactor cooldown on September 12, 1973, the drywell pressure decreased to less than atmospheric. At about 4:00 a.m. on this date, the operator noticed the drywell pressure approaching -0.5 psi. It continued to decrease to -0.6 psi at which time the operator manually opened the reactor building to suppression chamber vacuum breakers. The vacuum breakers should have opened automatically at 0.5 psid, as sensed by PdIS-64-20 and PdIS-64-21, but failed to do so.

Investigation and Corrective Action

PdIS-64-20 and PdIS-64-21 sense the difference in pressure between the reactor building and suppression chamber and initiate logic circuitry to open the vacuum breakers when the suppression chamber is 0.5 psi lower than the reactor building.

An investigation subsequent to the incident revealed that the pressure differential switches were isolated. A check of operating instructions showed these instrument root valves were not included in the valve checklists. They were inadvertently omitted from the checklists because drawings from which the checklists were made did not show these valves.

The switches were valved in and a calibration check was made which found them to be set at the proper setpoint.

Operating instruction checklists were reviewed against the drawings and the as-built condition to determine if isolation valves for other similar instruments were omitted from checklists. Some cases were found, primarily on the ventilation system, where instrument valves were not shown on valve checklists.

To eliminate this type of oversight, instrument checklists which include all instrumentation in critical plant systems have been prepared and are now included in normal operating instructions. These instrument checklists will be used to verify that all instruments are in service. No other instrumentation required to be in service by technical specifications was found to be isolated. Additionally, "System Status Report" procedures have been broadened to include documentation when instrumentation is removed from service.