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TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

3:05:05

July 26, 1979

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

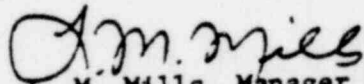
Dear Mr. O'Reilly:

OFFICE OF INSPECTION AND ENFORCEMENT BULLETIN 79-01A - RII:JPO
50-259, -260, -296 - BROWNS FERRY NUCLEAR PLANT UNITS 1, 2, AND 3

As a result of additional review of OIE Bulletin 79-01A, TVA is providing
a response to the subject bulletin. The results of our investigations
at Browns Ferry are enclosed.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

cc: Mr. Norman C. Moseley, Director (Enclosure)
Division of Reactor Operations Inspection
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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ADDITIONAL RESPONSE AS A RESULT
OF REVIEWING OIE BULLETIN 79-01A

DEFICIENCIES IN THE ENVIRONMENTAL QUALIFICATION OF
ASCO SOLENOID VALVES
BROWNS FERRY NUCLEAR PLANT

ACTION ITEMS:

1. Determine whether or not ASCO solenoid valves are used or planned for use in safety-related systems at your facility(ies).
2. If such valves are used or planned for use, identify the safety system involved and determine that: (a) valves which could be subjected to a LOCA environment are qualified to that environment. Specifically that no parts made of acetal plastic or Buna "N" materials or Class "A", "B", or "F" solenoid coils are used in such valves; (b) a preventive maintenance program is being conducted such that the solenoid coil, the manual operator (if applicable), and the resilient parts of the valves are being replaced in accordance with the time period established by the manufacturer and documented as the qualified life of the assembled component.

RESPONSE:

As stated in our reply to IE Bulletin 79-01 dated June 11, 1979, (J. E. Gilleland to N. C. Moseley) ASCO solenoid valves (catalog No. WPHTX8300B86F) are used on the automatic depressurization system (ADS) relief valves at Browns Ferry Nuclear Plant. These solenoid valves have stainless steel seats, are operated by a coil having a Class H insulation rating (as indicated by the "HT" in the catalog number), and the coil is enclosed in a NEMA "6" enclosure (as indicated by the "WP" in the catalog number). The environmental qualification of these solenoid valves was shown in our response to IE Bulletin 79-01. Discussions with ASCO have revealed, however, that our solenoid valves may have O-rings made of Buna "N" elastomer material.

Our main steam relief valve (MSRV) maintenance procedures will be modified to ensure that those solenoid valves on all MSRV's are maintained in accordance with the manufacturer's recommendations.

Our engineers have disassembled and examined one of the ASCO solenoid valves and have concluded that even if the Buna "N" O-rings were to become brittle, the small amount of possible leakage would not affect the proper operation of the solenoid valve.

In light of the fact that the ASCO solenoid valves installed have stainless steel seats, as opposed to the resilient seats in the ASCO valve that failed (as discussed in Bulletin 79-01A), and the conclusions of our engineers that the valve will continue to operate properly if the Buna "N" gaskets become brittle, we plan no additional actions at this time.

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