TENNESSEE VALLEY AUTHORITY

JAN 17 1990

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U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of	)	Docket Nos. 50-259
Tennessee Valley Authority	)	50-260
		50-296

BROWNS FERRY NUCLEAR PLANT (BFN) - RESPONSE TO NRC BULLETIN (NRCB) 89-02 "STRESS CORROSION CRACKING OF HIGH-HARDNESS TYPE 410 STAINLESS STEEL INTERNAL PRELOADED BOLTING IN ANCHOR DARLING MODEL S350W SWING CHECK VALVES OR VALVES OF SIMILAR DESIGN

Bulletin 89-02 requests licensees identify, disassemble, and inspect Anchor Darling Model S350W swing check valves and/or swing check valves of a similar design which contain type 410 stainless steel preloaded bolting material. BFN performed a thorough review of its safety-related check valves. The results of this review indicate that BFN does not have any check valves in its safety-related systems within the scope of NRCB 89-02. Enclosed is a description of how BFN conducted its review and the results.

If you have any questions on this matter, please telephone Patrick P. Carier, BFN, (205) 729-3570.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

M J Ray for

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and Regulatory Affairs

Enclosure
cc: See page 2

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U.S. Nuclear Regulatory Commission

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Enclosure

BROWNS FERRY NUCLEAR PLANT

Response to NRC Bulletin (NRCB) 89-02

The following is a brief discussion of the methodology used in making the determination that there are no Anchor Darling model S350W swing check valves or valves of similar design that are subject to stress corrosion cracking as described in NRCB 89-02 used at TVA's BFN:

BFN's Mechanical Engineering section in conjunction with the Plant Maintenance section reviewed the safety related check valves found on the "Q-list" (Quality assurance list). The Q-list is a formal quality assurance document containing a list of safety related items including safety related check valves. The review of the Q-list indicated that BFN had approximately 1400 safety related check valves. This list was supplemented by using maintenance history files on the check valves, Design Baseline Verification Program walkdown information, ISI Section XI Pump and Valve program information, and vendor contract files.

This valve information was then further categorized by type of check valve, size, vendor, manufacturer's model or type, and system. BFN then proceeded to eliminate the check valves that were not included within the scope of NRCB 89-02 by applying the following criteria:

1. Type

   There are numerous check valve types and body configurations with many adaptations or versions of each. Those types which were considered outside the scope of NRCB 89-02 were eliminated, such as ball, piston lift, tilting disc, folding disc, in-line check, and stop check. An example of this would be the approximate 900 check valves that were omitted because they were ball type lift check valves. These valves would not contain the hinge block preloaded bolting.

2. Manufacturer

   The Nuclear Management and Resources Council (NUMARC) has conducted an industrial survey of valve manufacturers in order to identify other check valves which would fall under the scope of NRCB 89-02. Those manufacturers that responded indicating that they had not supplied safety-related check valves using type 410SS internal bolting, were excluded from the scope (i.e, Kerotest, Borg-Warner, etc.).

   The remaining check valves on the list were given a final review. This review consisted of examining manufacturer's catalog information for the applicable types and models or vendor drawings in order to determine if they had similar internal design characteristics as the Anchor Darling model S350W.

After the completion of this process it was concluded that there are no Anchor Darling model S350W swing check valve or similar designed checks valve, using type 410SS bolting on disc retaining block (within the scope of NRCB 89-02) in use at BFN.