

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

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February 16, 1983

U.S. Nuclear Regulatory Commission
Region II
ATTN: James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

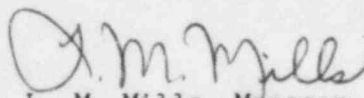
OFFICE OF INSPECTION AND ENFORCEMENT BULLETIN 81-01 - RII:JPO
50-259, -260, -296 - BROWNS FERRY NUCLEAR PLANT

Enclosed are the results of mechanical snubber inspections required by IE Bulletin 81-01 done on the Browns Ferry Nuclear Plant unit 2 during the cycle 4 refueling outage. The original response to the bulletin was submitted by my letter to you dated March 13, 1981. Specific responses for units 1 and 3 were submitted by my letters to you dated July 23, 1981 and February 10, 1982, respectively. This report completes the requirements of IE Bulletin 81-01 for Browns Ferry. If you have any questions, please call Jim Domer at FTS 858-2725.

To the best of my knowledge, I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY


L. M. Mills, Manager
Nuclear Licensing

Enclosure

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

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ENCLOSURE
FINAL RESPONSE TO OIE BULLETIN 81-01
BROWNS FERRY NUCLEAR PLANT UNIT 2

All International Nuclearsafeguards Corporation (INC) mechanical snubbers installed in unit 2, a total of 14, have been replaced with Pacific Scientific Corporation (PSC) mechanical snubbers. After removal, each of the INC snubbers was visually inspected and tested for operability in accordance with plant instructions which meet the requirements of OIE Bulletin 81-01 for testing. The drag force of all 14 snubbers was below (or in one case equal to) the established limit of 10 pounds.

All other mechanical snubbers already installed in safety-related systems in unit 2 before the beginning of the refueling and maintenance outage are PSC Model PSA-10. Forty-one PSC snubbers were functionally tested during the outage in accordance with plant instructions. Forty of the snubbers were determined to be acceptable.

One PSA-10 snubber (Mark No. MSD-upper, was replaced because of failure to meet the breakaway requirement of the functional test. The failure was reported under Licensee Event Report No. BFRO-50/260-82035. The snubber was attached to the pipe using a non-integral friction clamp. An examination of the affected piping was performed. The examination also included visual inspection of the piping and supports on either side of the failed snubber and testing of the other snubbers in the vicinity of the failed snubber. No evidence of physical damage or overstressing was observed. The snubber was removed from the system and disassembled in an attempt to determine the cause of the failure. Several fractures of the thrust bearing were observed; however, the initial fracture was believed to have occurred in the inner race at the connection to the ball screw shaft. Although not conclusively established, the cause of the failure was thought to be overloading. The replacement snubber will be functionally tested during the cycle 5 refueling outage. Those PSC snubbers not tested this outage were tested during the previous cycle 3 outage.