

TENNESSEE VALLEY AUTHORITY REGION II
CHATTANOOGA, TENNESSEE 37401 ATLANTA, GEORGIA
400 Chestnut Street Tower II

November 13, 1981

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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 80-11 - REL: JPO
50-259, -260 -296 - BROWNS FERRY NUCLEAR PLANT

In my letter to you dated October 1, 1981, TVA provided a revised response to the subject bulletin. Enclosed is a copy of page 2 of that response which was inadvertently omitted from the enclosure to the October 1 response due to an apparent reproduction error. 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 Regulation and Safety

Enclosure

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

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implemented by the addition of structural steel restraining elements. The results of our evaluation, as stated above, is summarized in appendix B to this response. TVA's planned methods of restraining the remaining 14 walls are given in appendix C of this response. TVA's methods for analyzing masonry block walls in the reevaluation program are discussed in our response to item 2b(iii) and appendix D (TVA Reevaluation Criteria for Concrete Masonry Block Walls at Browns Ferry Nuclear Plant).

RESPONSE TO ITEM 2B(i)

There were four types of masonry block walls encountered in category I structures at Browns Ferry Nuclear Plant (BFN). They are (1) reinforced, (2) nonreinforced hollow core, (3) nonreinforced solid shield block with mortared joints, and (4) solid shield block with nonmortared joints. The function of the walls are to act as shielding or as partitions. They are not main structural load bearing walls. The materials used in construction of the walls were as follows.

Block

Hollow core load bearing, lightweight units conforming to American Society for Testing Materials (ASTM) C-90, grade A, in the sizes shown on the drawings. Solid shield block, load bearing, normal weight units conforming to ASTM C-145, 6 inches by 6 inches by 12 inches.

Mortar

Medium strength, type S conforming to ASTM C-270.

Grout for cell filling

Structural grade concrete with design compressive of 3000 pounds per square inch (lbs/in²), at 28 days.

Reinforcing steel

Vertically - No. 6 bar conforming to ASTM A-432 (equivalent to A-615, grade 60, yield stress = 60,000 lbs/in²) spaced at the center of the cell, 16 inches on center.

Horizontally - Equal to Blok-Lok, Corner-Lok, and Partition-Lok as manufactured by AA Wire Products Company, Chicago, Illinois, standard grade with No. 9 gauge side rods and No. 9 gauge crossties conforming to ASTM A-82 (yield stress = 70,000 lbs/in²). The horizontal reinforcing was neglected in the structural reevaluation program.

RESPONSE TO ITEM 2B(ii)

Construction practices used were investigated and evaluated. TVA personnel which were responsible for the construction of the masonry walls were contacted and the results of the tests