

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

OCT 12 1990

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

Gentlemen:

In the Matter of)
Tennessee Valley Authority)

Docket Nos. 50-259
50-296

BROWNS FERRY NUCLEAR PLANT (BFN) - PRA CONCERNS REGARDING OPERATION OF BROWNS FERRY, UNITS 1 AND 3

This letter is in response to NRC's August 13, 1990 request for Units 1 and 3 dependency matrices and expanded Individual Plant Examinations (IPEs). TVA will submit dependency matrices prior to the restart of Unit 3 which assumes Units 2 and 3 are operational. TVA will submit dependency matrices prior to the restart of unit 1 which assumes Units 1, 2, and 3 are operational. TVA is not pursuing the development of expanded IPEs for Units 1 and 3 for the following reasons:

- (1) BFN does not significantly rely on safety systems which are specific to one unit to achieve and maintain safe shutdown of another unit. BFN does have equipment common to all three units which will be evaluated in the Unit 2 IPE.
- (2) In response to NRC's June 6, 1990 request, TVA submitted reliability matrices for BFN Unit 2 by letter dated October 1, 1990. As discussed in TVA's letter, TVA did not identify any instances of cross-train dependencies that would compromise the safety-related systems analyzed. TVA estimates that the development of expanded IPEs for Units 1 and 3 would require approximately twenty thousand man-hours per unit. Since the work completed to date has not identified any instances of cross-train dependencies that would compromise the safety-related systems, expenditures of this magnitude to search for potential problems, without prior probable cause for concern, are not considered prudent.
- (3) As discussed in TVA's October 1, 1990 letter, the subject of unit sharing and interactions was reviewed at the time of the original licensing of BFN and is discussed in Appendix F of the BFN Final Safety Analysis Report.

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U.S. Nuclear Regulatory Commission

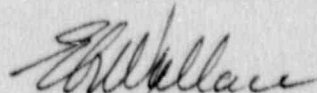
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- (4) Generic Letter 88-20, Initiation of the Individual Plant Examination for Severe Accident Vulnerabilities, does not require individual IPEs for each plant at a multi-unit site. The Generic Letter requires the differences between the analyzed plant the other units be summarized, evaluated, and reported. The summary of the Unit 1 and 3 differences will be done as a companion effort with the unit dependency matrix and submitted prior to restart for the respective unit.

A summary list of commitments contained in this letter is provided in the enclosure. If you have any questions, please contact Patrick P. Carier, Manager of Site Licensing, at (205) 729-3570.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



E. G. Wallace, Manager
Nuclear Licensing and
Regulatory Affairs

Enclosure

cc (Enclosure)

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ENCLOSURE
BROWNS FERRY NUCLEAR PLANT
SUMMARY OF COMMITMENTS

- (1) TVA will submit dependency matrices prior to the restart of Unit 3 which assumes Units 2 and 3 are operational.
- (2) TVA will submit dependency matrices prior to the restart of Unit 1 which assumes Units 1, 2, and 3 are operational.