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AUTH. NAME AUTHOR AFFILIATION
 SALAS, P. Tennessee Valley Authority
 RECIPIENT NAME RECIPIENT AFFILIATION
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SUBJECT: Provides response to NRC 940419_ltr re GL 92-01, Rev 1,
 "Reactor Vessel Structural Integrity."

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Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609

MAY 23 1994

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) - TVA'S RESPONSE TO NRC'S LETTER DATED APRIL 19, 1994, GENERIC LETTER (GL) 92-01, REVISION 1, "REACTOR VESSEL STRUCTURAL INTEGRITY,"

The purpose of this letter is to provide TVA's response to NRC's April 19, 1994, letter. In that letter, NRC requested that TVA provide additional information regarding GL 92-01. Specifically, NRC requested that TVA confirm the plant-specific applicability of topical report NEDO-32205, Revision 1, and request approval of the NEDO document as the basis for demonstrating compliance with 10 CFR Part 50, Appendix G. Also, NRC requested that TVA verify the BFN plant specific information entered into NRC's computerized Reactor Vessel Integrity Database (RVID). TVA's response to the requested information and corrections to the RVID are contained in Enclosure 1.

Additionally, in the April 19, 1994 letter, NRC states that one open issue remains for Unit 1. Specifically, NRC has not validated the initial RT_{NDT} values for the Unit 1 reactor vessel because NRC has not approved General Electric's (GE) initial methodology used in the RT_{NDT} calculation. NRC also considers that the Boiling Water Reactor Owners Group (BWROG) report GE-NE-523-109-0893, "Basis for GE RT_{NDT} Estimation Method," is not sufficient to resolve this issue. As a result, NRC requested that TVA either commit to the BWROG's effort to resolve this issue, or provide a schedule for a plant specific analysis. In response to NRC's request, TVA is committing to the BWROG's effort.

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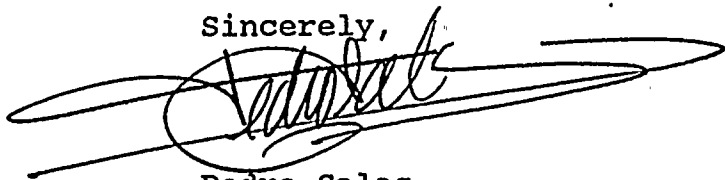
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Enclosure 2 contains the commitments contained in this letter. If you have any questions, please telephone me at (205) 729-2636.

Sincerely,

A handwritten signature in black ink, appearing to read "Pedro Salas", is written over a large, horizontal, hand-drawn oval scribble.

Pedro Salas
Manager of Site Licensing

Enclosure
cc: See page 3



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Enclosure

cc (Enclosure):

Mr. Mark S. Lesser, Section Chief
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

NRC Resident Inspector
Browns Ferry Nuclear Plant
Route 12, Box 637
Athens, Alabama 35611

Mr. J. F. Williams, Project Manager
U.S. Nuclear Regulatory Commission
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852

Mr. D. C. Trimble, Project Manager
U.S. Nuclear Regulatory Commission
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852



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ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3

GENERIC LETTER (GL) 92-01, REVISION 1
RESPONSE TO NRC APRIL 19, 1994, REQUEST FOR
ADDITIONAL INFORMATION

I. Introduction

During NRC's review of TVA's responses to GL 92-01, Revision 1, NRC identified the need for additional information. Specifically, by letter dated April 19, 1994, (Reference 1) NRC requested certain information regarding topical report NEDO-32205, Revision 1. NRC also requested that TVA verify the information contained in NRC's Reactor Vessel Integrity Database (RVID). The specific information requested and TVA's responses are provided below.

II. RESPONSE TO NRC REQUESTS

NRC Request

Provide confirmation of the plant-specific applicability of topical report NEDO-32205, Revision 1, as specified in Appendix B to the NEDO.

TVA Response

TVA's review of NEDO-32205, Revision 1, indicates that the end-of-life (EOL) upper shelf energy (USE) drops (predicted by Regulatory Guide 1.99, Revision 2) for the limiting plates or limiting welds for BFN Units 1, 2, and 3 are smaller than the corresponding values contained within the topical report. Since no surveillance capsule data exists at this time for BFN, TVA considers BFN to be bounded by the equivalent margin analysis as defined in the topical report. TVA will confirm full applicability following removal and analysis of the surveillance capsules for each unit. TVA will inform NRC of the results within 90 days of issuance of the final surveillance capsule analysis report.

NRC Request

Submit a request for approval of topical report NEDO-32205, Revision 1, as the basis for demonstrating compliance with 10 CFR Part 50, Appendix G, Paragraph IV.A.1.



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TVA Response

In the enclosure of the Reference 3 letter, Item 2.a response, TVA stated that it plans to use NEDO-32205, "BWR Owners' Group Topical Report on Upper Shelf Energy Equivalent Margin Analysis," as its licensing basis to demonstrate that beltline materials maintain adequate USE margins. Since this response was submitted, the NEDO report was revised. TVA hereby requests approval of Revision 1 of this NEDO as the basis for demonstrating compliance with 10 CFR 50, Appendix G, Paragraph IV.A.1 for BFN Units 1, 2, and 3.

NRC Request

Verify that the information provided for BFN Units 1, 2, and 3 was accurately entered in the Reactor Vessel Integrity database.

TVA Response

TVA has reviewed the BFN Units 1, 2, and 3 specific information entered into NRC's Reactor Vessel Integrity database. The data for BFN is accurate with the following exceptions:

1. Reference 1, Enclosures 1 and 2, BFN Unit 2, the Heat Number for one of the Lower Shell Courses is incorrectly identified as C2460-1. The reference 2 letter defines the correct Heat Number as C2460-2.
2. Reference 1, Enclosure 1, BFN Unit 3, incorrectly identifies Circumferential Weld (Heat Number D51852) as having the same percent nickel concentration (0.66 percent nickel) and Chemistry Factor (117.1) as Heat Number D55733. The reference 2 letter defines the percent nickel for Circumferential Weld (Heat Number 51852) as 0.67, which provides a Chemistry Factor of 117.45.
3. Reference 1, Enclosure 2, BFN Units 1, 2, and 3 states that the material type is A 302B for the lower and intermediate shell courses. Although, the Reference 2 letter also specified the material type as A 302B, NEDO-32205, Revision 1 now differentiates between material types A 302B and A 302B Modified. Accordingly, TVA provides clarification that BFN Unit 1, 2, and 3 material type for the lower and intermediate shell courses is A 302B Modified.



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III. REFERENCES

1. Letter from NRC to TVA dated April 19, 1994 Generic Letter (GL) 92-01, Revision 1, "Reactor Vessel Structural Integrity," Tennessee Valley Authority Browns Ferry Nuclear Plant Units 1, 2, and 3 (TAC Nos. M83438, M83439, and M83440)
2. Letter from TVA to NRC dated July 7, 1992, Browns Ferry Nuclear Plant (BFN), Sequoyah Nuclear Plant (SQN), and Watts Bar Nuclear Plant (WBN) - Response to Generic Letter 92-01 (Reactor Vessel Structural Integrity)
3. Letter from TVA to NRC dated August 2, 1993, BFN Response To Request For Additional Information, Generic Letter 92-01, Revision 1
4. Letter from TVA to NRC dated December 1, 1992, BFN Completion Of Commitment Made In Response To Generic Letter 92-01, "Reactor Vessel Structural Integrity"

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3

GL 92-01 REVISION 1 RESPONSE TO APRIL 19, 1994,
REQUEST FOR ADDITIONAL INFORMATION

LIST OF COMMITMENTS

1. TVA will confirm full applicability of NEDO-32205, Revision 1, "BWR Owners Group Topical Report on Upper Shelf Energy Equivalent Margin Analysis," following removal and analysis of the surveillance capsules for each Unit.
2. TVA will inform NRC of the applicability of NEDO 32205, Revision 1, to each Unit within 90 days of issuance of the final surveillance capsule analysis report.
3. TVA is committed to the BWROG effort to validate the GE methodology for resolving the initial RT_{NDT} issue for BFN Unit 1.