

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9309150265      DOC. DATE: 93/09/09      NOTARIZED: NO      DOCKET #  
 FACIL: 50-259 Browns Ferry Nuclear Power Station, Unit 1, Tennessee      05000259  
 50-260 Browns Ferry Nuclear Power Station, Unit 2, Tennessee      05000260  
 50-296 Browns Ferry Nuclear Power Station, Unit 3, Tennessee      05000296

AUTH. NAME      AUTHOR AFFILIATION  
 ZERINGUE, O.J.      Tennessee Valley Authority  
 RECIPIENT AFFILIATION  
 RECIPIENT AFFILIATION  
 Document Control Branch (Document Control Desk)

SUBJECT: Responds to NRC 930812 ltr re violations noted in insp repts  
 50-259/93-26, 50-260/92-26 & 50-296/93-26. C/As: pipe stress &  
 pipe support section supervisors have been notified to  
 increase attention to detail to prevent recurrence of event.

DISTRIBUTION CODE: IE01D      COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 7  
 TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES:

	RECIPIENT		COPIES			RECIPIENT		COPIES	
	ID CODE/NAME		LTTR	ENCL		ID CODE/NAME		LTTR	ENCL
	PD2-4-PD		1	1		ROSS, T.		1	1
	WILLIAMS, J.		1	1					
INTERNAL:	ACRS		2	2		AEOD/DEIB		1	1
	AEOD/DSP/ROAB		1	1		AEOD/DSP/TPAB		1	1
	AEOD/TTC		1	1		DEDRO		1	1
	NRR/DORS/OEAB		1	1		NRR/DRCH/HHFB		1	1
	NRR/DRIL/RPEB		1	1		NRR/DRSS/PEPB		1	1
	NRR/PMAS/ILPB1		1	1		NRR/PMAS/ILPB2		1	1
	NUDOCS-ABSTRACT		1	1		<del>OE DIR</del>		1	1
	OGC/HDS3		1	1		REG FILE	02	1	1
	RES/HFB		1	1		RGNZ FILE	01	1	1
EXTERNAL:	EG&G/BRYCE, J.H.		1	1		NRC PDR		1	1
	NSIC		1	1					

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,  
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTR 25 ENCL 25

R  
I  
D  
S  
/  
A  
D  
D  
S  
  
R  
I  
D  
S  
/  
A  
D  
D  
S



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

SEP 09 1993

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

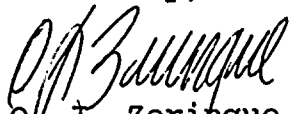
BROWNS FERRY NUCLEAR PLANT (BFN) - NRC INSPECTION REPORT 50-259, 50-260, 50-296/93-26 REPLY TO NOTICE OF VIOLATION (NOV)

On August 12, 1993, NRC issued Inspection Report No. 93-26 which identified two violations. The first violation cited TVA for failure to take adequate corrective actions for a previously identified vendor welding program nonconformance. The second violation cited TVA for failure to update pipe support calculations to incorporate the latest revised stress loads.

Enclosure 1 provides TVA's "Reply to the Notice of Violation" (10 CFR 2.201). Enclosure 2 contains a commitment for this reply.

If you have any questions regarding this reply, please telephone Pedro Salas at (205) 729-2636.

Sincerely,

  
J. Zeringue

Enclosures  
cc: See page 2

15-007

9309150265 930909  
PDR ADOCK 05000259  
G PDR



*Handwritten initials/signature*



U.S. Nuclear Regulatory Commission  
Page 2

SEP 09 1993

Enclosures

cc (Enclosures):

Mr. R. V. Crlenjak, Project 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. Thierry M. Ross, Project Manager  
U.S. Nuclear Regulatory Commission  
One White Flint, North  
11555 Rockville Pike  
Rockville, Maryland 20852

ENCLOSURE 1

Tennessee Valley Authority

Browns Ferry Nuclear Plant (BFN)

Reply to Notice of Violation (NOV)

Inspection Report Number  
50-259, 260, 296/93-26

RESTATEMENT OF VIOLATION

"During an NRC inspection conducted on July 12-16, 1993, two violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," the violations are listed below:

- A. 10 CFR 50, Appendix B, Criterion XVI, requires that measures shall be established to assure that conditions adverse to quality such as nonconformances are promptly identified and corrected. Criterion XVI also requires that the measures shall assure that the cause of the condition is determined and corrective actions taken preclude repetition.

TVA's letter of response, dated February 10, 1993, to NRC Notice of Violation No. 50-259,260,296/92-43-01 stated that to prevent recurrence of a welding program discrepancy, "GE has initiated the development and use of a Design Change Notice (DCN) requirements checklist. This checklist identifies the requirements in the DCN and provides a tracking method of accounting for completion of each requirement. In addition, the complete checklist is then reviewed and is approved by the Project Manager and GE's QC group. The effective date for implementing the DCN checklist form was January 5, 1993..

Contrary to the above, on July 15, 1993, discussions with GE's QC personnel and review of DCN W-18096A revealed that GE's DCN checklist is presently not being used by GE for DCNs involving welding and weld repairs in the plant. In addition, GE had not revised their welding manual or administrative procedures to implement this commitment for preventing recurrence of the nonconforming condition.

This is a Severity Level IV violation (Supplement 1).

- B. 10 CFR 50, Appendix B, Criteria III, Design Control, requires that design changes, including field changes, shall be subject to design control measures commensurate with



those applied to the original design and be approved by the organization that performed the original design unless the applicant designates another responsible organization.

TVA Nuclear Engineering Procedure, NEP-3.1, calculations, page 1 of 1 of Attachment 4, requires that design inputs, including information such as loads, temperatures, and pressures originated within engineering or supplied by vendors, and codes, standards, regulatory requirements, and FSAR commitments, shall be current and correctly selected, referenced and applied.

TVA Procedure BFN-RAH-401, Rigorous Analysis Handbook, Section 7.0 of Rigorous Analysis checklist, requires that the correct support loads from the post processor output, or adjusted loads from hand calculations be transmitted to the support designer.

Contrary to the above, TVA did not update and revise pipe support calculations CD-Q2074-894004 and -894005 for pipe supports 2-47B452S0247 and 2-47B452S0248 to reflect the latest revised stress loads shown in the stress calculation CD-Q2074-893811, Revision 4.

This is a Severity IV violation (Supplement I)"

#### TVA's Reply to Violations A and B

##### 1. Reason For Violation A

TVA considers that the cause of this event was inadequate TVA management oversight. TVA failed to ensure that a commitment made to disposition NOV 92-43 was properly implemented. Specifically, a design change notice (DCN) requirement checklist was not incorporated into a General Electric Nuclear Energy (GENE) procedure to be used at BFN.

As a contributing factor to this event, GENE (TVA contractor) understood at the time of the initial event (i.e., the violation identified in NRC Inspection Report 50-259, 260, 296/92-43) that the corrective action only applied to the affected GENE modification. Accordingly, since no additional DCNs have been initiated for this piping group from the time of the initial event, it was the opinion of GENE that the DCN requirement checklist was no longer a requirement. In





addition, this GENE piping group was not permanently assigned to the BFN site which further enforced GENE's opinion that the DCN requirement checklist did not have to be incorporated in a BFN site GENE procedure.

**2. Corrective Steps Taken and Results Achieved**

GENE has implemented the use of the DCN requirement checklist via procedure GE-BFN-CR-2 (GE procedure for the identification of DCN welding requirements at BFN). This procedure is applicable to field work performed by GENE under Quality Manual "QAM-001" to provide Quality Assurance for the work being performed.

Additionally, GENE has reviewed DCNs that it performed between January 7, 1993 and August 3, 1993, for which welding was required, and has determined that welding requirements found in those DCNs were properly implemented.

The GENE Site Projects Manager also provided written guidance to his direct reports that TVA commitments made to the NRC for which GENE assistance is required to obtain compliance shall be reviewed in detail to assure that the anticipated GENE actions meet TVA expectations and commitments.

Because of this event, TVA management's awareness to ensure that corrective actions are fully implemented has been heightened.

**3. Corrective Steps That [have been or] Will Be Taken To Prevent Recurrence**

TVA believes that these above corrective actions will preclude a recurrence of this violations.

**4. Date When Full Compliance Will Be Achieved**

Full compliance has been achieved.

**1. Reason For Violation B**

The primary cause of this violation is personnel error resulting from lack of attention to detail. Specifically, the support designer failed to ensure that the revised pipe support calculations reflected the latest revised pipe stress loads shown in the stress calculations.

In the Inspection Report (IR) 93-26, NRC stated that this violation was a repeat case in that a similar update oversight on support calculations was documented in IR 92-38. TVA had reviewed approximately 70 support calculations as a corrective action to NOV 92-38 and had not identified any additional deficiencies. As a corrective action for this NOV, TVA has reviewed 20 additional support calculations and has not identified any additional deficiencies. Based on the above preliminary investigations, these cited events appear to be isolated in nature. However, an additional investigation will be performed as discussed in Step 2 below.

2. Corrective Steps Taken and Results Achieved

TVA has revised the affected support calculations to reflect the latest loads from the pipe stress calculations. TVA has also issued a Problem Evaluation Report (BFPER930088) to document that redesign of certain pipe supports did not incorporate the latest pipe stress loads. As part of the corrective action for this PER, TVA will review additional 79-14 pipe supports for Unit 2. If additional deficiencies are identified, calculations will be revised as required.

3. Corrective Steps That [have been or] Will Be Taken To Prevent Recurrence

The pipe stress and pipe support section supervisors (TVA and Contractor) have been notified by BFN Lead Civil Engineer to increase attention to detail and communications between Engineering sections to preclude a recurrence of this event.

4. Date When Full Compliance Will Be Achieved

Full compliance will be attained upon completion of TVA's review of the representative samples of 79-14 pipe supports and any corrective actions that may result. The review and subsequent revised calculations, if required, will be completed by December 10, 1993.



ENCLOSURE 2

Tennessee Valley Authority

Browns Ferry Nuclear Plant (BFN)

Reply to Notice of Violation (NOV)

Inspection Report Number

50-259,260,296/93-26

COMMITMENTS

BFN Engineering will review a representative sample of 79-14 pipe support for Unit 2. If additional deficiencies are identified, calculations will be revised as required. The review and subsequent revised calculations, if required, will be completed by December 10, 1993.

