

## UNITED STATES' NUCLAR REGULATORY COMMISSION WASHINGTON, D. C. 20555



December 8, 1988

Docket No. 50-260

Mr. Oliver D. Kingsley, Jr.
Senior Vice President, Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. Kingsley:

SUBJECT: GENERIC LETTERS (GL) 84-11 (INSPECTION OF BWR STAINLESS STEEL

PIPING) AND GL 88-01 (NRC POSITION ON IGSCC IN BWR AUSTENITIC STAINLESS STEEL PIPING) - EVALUATION OF BROWNS FERRY, UNIT 2

RESPONSES (TAC 61049)

The staff's enclosed Safety Evaluation (SE) addresses your responses to GL 84-11, "Inspections of BWR Stainless Steel Piping," which was superseded by GL 88-01, "NRC Position on IGSCC in BWR Austenitic Stainless Steel Piping." Because of the prolonged outage at Browns Ferry, the work performed under GL 84-11 continued under GL 88-01. We have reviewed your responses regarding the required inspections, analyses, and corrective actions undertaken during the Browns Ferry Nuclear (BFN), Unit 2, Cycle 5 outage. These inspections were discusser in your submittals dated June 7, 1984, March 11, November 10, and December 15, 1986, December 31, 1987, and August 1, 1988.

We conclude that the BFN intergrannular stress corrosion cracking (IGSCC) analyses and corrective/mitigation actions for Unit 2 were performed in accordance with GL 84-11 and 88-01. However, contrary to GL 84-11 and GL 88-01, adequate sample expansion inspections were not performed when IGSCC indications were found in induction heating stress improvement (IHSI) treated welds. The need to expand the sample inspections when crack indications were found had been previously discussed in our March 26, 1986 letter to you. Because complete sample expansion inspections were not performed after IGSCC indications were found in post-IHSI inspection and leak tests, we are unable to conclude that all welds in the austenitic piping systems in BFN 2 are satisfactory.

In general, we conclude that your responses to the subject generic letter are acceptable. However, Section 3.0 of the SE identifies certain areas of concern that need to be resolved prior to restart. Specifically, the staff requests a submittal within 30 days: (1) addressing commitments concerning sample expansion inspections in accordance with GL 88-01; and (2) addressing a restart inspection schedule for the 71 welds which have not been post-IHSI inspected. In addition, the staff requests proposed technical specification changes reflecting leak detection requirements specified in GL 88-01 within 90 days of Unit 2 restart.

8812140042 881208 PDR ADOCK 05000260 PDC PDC DFO!

Atho

3

The reporting and/or recordkeeping requirements in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

If you have any questions, please contact your Project Manager, Gerald Gears, at 301-492-0767.

Sincerely, ....

Original Signed by

Suzanne C. Black, Assistant Director for Projects TVA Projects Division Office of Special Projects

Enclosure: Safety Evaluation

cc w/enclosure: See next page

## DISTRIBUTION

Docket File

NRC PDR

Local PDR

Projects Reading

OSP Reading

J. Partlow

S. Richardson

S. Black

B. D. Liaw

F. McCoy

W. S. Little

M. Simms

G. Gears

D. Moran

J. Rutberg

D. Crutchfield

B. Grimes

E. Jordan

ACRS (10)

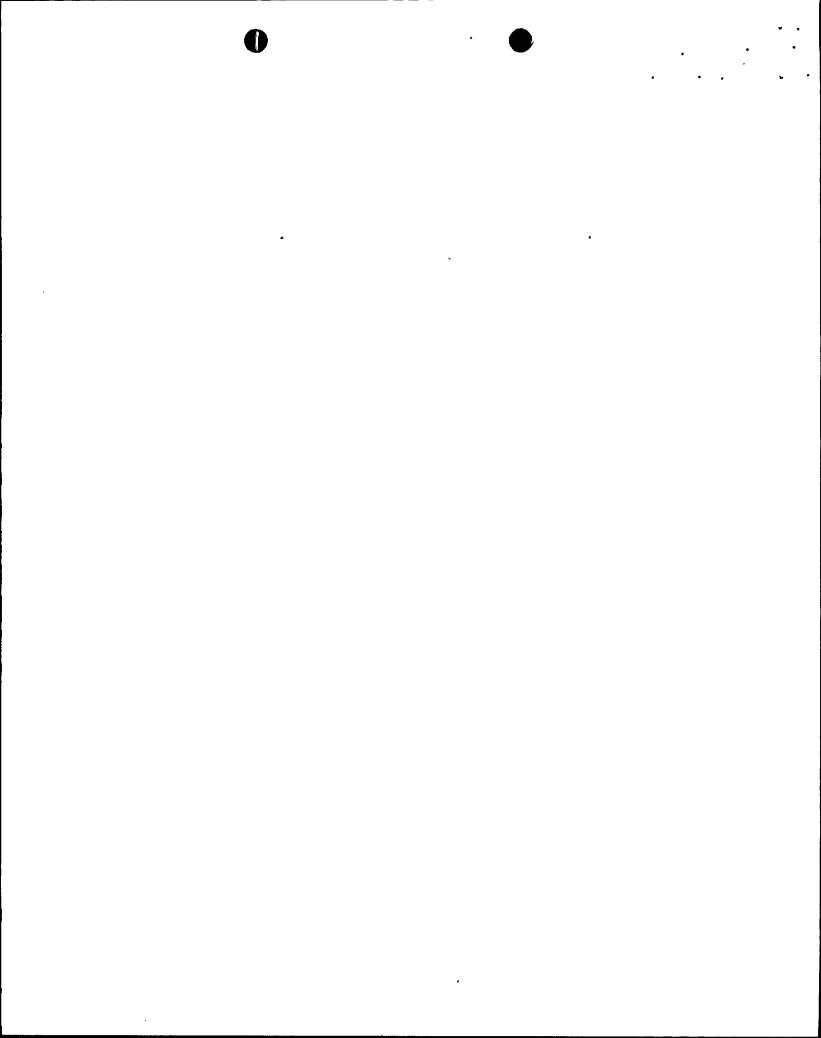
GPA/CA

GPA/PA

BFN Rdg. File

			, rail of the same					
			:TVA:ADXTP			•		
AME	:MSimms M&	:GGents as	BOLTAN	SBTack 1	:SRichardson	•	::	
ATE	11/3 /88	11/29/88	11/vi√88	14/ \ /88	134 7 /88	:		
CETA	TAL DECORD CO	nnv.	•					

FFICIAL RECORD COPY



The reporting and/or recordkeeping requirements in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

If you have any questions, please contact your Project Manager, Gerald Gears, at 301-492-0767.

Sincerely,

Original Signed by

Suzanne C. Black, Assistant Director for Projects TVA Projects Division Office of Special Projects

Enclosure: Safety Evaluation

cc w/enclosure: See next page

## **DISTRIBUTION**

Docket File

NRC PDR

Local PDR

Projects Reading

OSP Reading

- J. Partlow
- S. Richardson
- S. Black
- B. D. Liaw
- F. McCoy
- W. S. Little
- M. Simms
- G. Gears
- D. Moran
- J. Rutberg
- D. Crutchfield
- B. Grimes
  - E. Jordan

**ACRS (10)** 

GPA/CA

GPA/PA

BFN Rdg. File

			مستملنم م		,
OFC :OSP:TVA/LA :OSP:TVA/PM	:TVA;ADXTP	:TVA:AD/P	MRA D (AVI):	:	•
NAME : MSimms (8 : GGeafs) as	BDLTay	SBIJack 1	:SRichardson	•	:::
DATE :11/18/88 :11/24/88	11/2\\88	14/ / /88	1247/88	:	•
OFFICIAL RECORD COPY	•				

Mr. Oliver D. Kingsley, Jr.

cc:
General Counsel
Tennessee Valley Authority
400 West Summit Hill Drive
E11 B33
Knoxville, Tennessee 37902

Mr. R. L. Gridley Tennessee Valley Authority 5N 157B Lookout Place Chattanooga, Tennessee 37402-2801

Mr. C. Mason Tennessee Valley Authority Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, Alabama 35602

Mr. P. Carier Tennessee Valley Authority Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, Alabama 35602

Mr. D. L. Williams Tennessee Valley Authority 400 West Summit Hill Drive W10 B85 Knoxyille, Tennessee 37902

Chairman, Limestone County Commission P.O. Box 188 Athens, Alabama 35611

Claude Earl Fox, M.D. State Health Officer State Department of Public Health State Office Building Montgomery, Alabama 36130 -3- Browns Ferry Nuclear Plant

Regional Administrator, Region II U.S. Nuclear Regulatory Commission 101 Marietta Street, N.W. Atlanta, Georgia 30323

Resident Inspector/Browns Ferry NP U.S. Nuclear Regulatory Commission Route 12, Box 637. Athens, Alabama 35611

Dr. Henry Myers, Science Advisor Committee on Interior and Insular Affairs U. S. House of Representatives Washington, D.C. 20515

Tennessee Valley Authority
Rockville Office
11921 Rockville Pike
Suite 402
Rockville, Maryland 20852