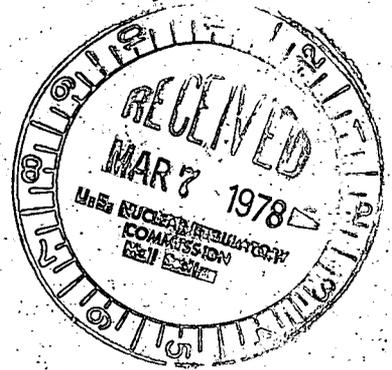


TENNESSEE VALLEY REGULATORY DOCKET FILE COPY
CHATTANOOGA, TENNESSEE 37401

FEB 27 1978



Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 1217
230 Peachtree Street, NW.
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNIT 1 - CONTAINMENT VESSEL PENETRATION SLEEVES
OUT OF TOLERANCE - NCR 1047R - FIRST INTERIM REPORT

The subject reportable condition was initially reported to NRC-OIE
Region II, Inspector J. K. Rausch, on January 25, 1978. Enclosed is our
first interim report. We anticipate providing our final report by
April 5, 1978.

Very truly yours,

J. E. Gilleland
Assistant Manager of Power

Enclosure

cc: Dr. Ernst Volgenau, Director (Enclosure) ✓
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1 -
CONTAINMENT VESSEL PENETRATION SLEEVES
OUT OF TOLERANCE - NCR 1047R

FIRST INTERIM REPORT

Description of Condition

Containment vessel penetrations 13A, 13B, 13C (main steam line penetrations) and 12B, 12C (feedwater line penetrations) were found to have inside pipe diameters and weld prep thicknesses which differed from the specified diameters and thicknesses. The actual and specified values are listed in table 1. The penetration assemblies were manufactured by Chicago Bridge and Iron (CBI). The dimensional differences were discovered by TVA site employees. These dimensional changes are thought to be caused by welding stresses induced in the manufacture of the penetration.

Interim Progress

TVA and CBI are investigating this deficiency to determine appropriate corrective actions.

WATTS BAR NUCLEAR PLANT UNIT 1
NCR 1047R

TABLE 1

1. Main Steam - Theoretical Machined Inside Diameter is 51.303 +0.010 inches;
-0.000

Theoretical thickness of weld prep is 0.348 inches. (Reference Chicago Bridge & Iron Dwg. #72-4333 320 R2) field measurements of Unit 1 Main Steam Penetrations are as follows:

<u>Penetration</u>	<u>Weld Prep (Inches)</u>		<u>Inside Diameter* (Inches)</u>	
	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
13A	0.400	0.195	51.440	51.350
13B	0.450	0.292	51.458	51.319
13C	0.445	0.252	51.449	51.328

2. Feedwater - Theoretical Machined Inside Diameter is 29.303 +0.010 inches;
-0.000

Theoretical thickness of weld prep is 0.348 inches (Reference Chicago Bridge & Iron Dwg. #72-4333 313 R2) field measurements of Unit 1 Feedwater Penetrations are as follows:

<u>Penetration</u>	<u>Weld Prep (Inches)</u>		<u>Inside Diameter* (Inches)</u>	
	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
12B	0.375	0.340	29.462	29.363
12C	0.435	0.291	29.517	29.365

*Actual I.D. \pm 0.063 because field measurement was unable to get a precise reading on length of measuring device but differences in the various readings (High vs. low) is accurate.