

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

September 11, 1980

Mr. James P. O'Reilly, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Region II - Suite 3100  
101 Marietta Street  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - NRC INSPECTION REPORT RII:  
390/80-19 AND 391/80-13 - RESPONSE TO DEFICIENCY 390/80-19-01, INFRACTION  
391/80-13-01, INFRACTION 391/80-13-02, AND DEFICIENCY 391/80-13-03

The subject letter dated August 20, 1980, cited TVA with two infractions  
and two deficiencies. Enclosed is TVA's response.

If you have any questions, please get in touch with D. L. Lambert at  
FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager  
Nuclear Regulation and Safety

Enclosure

cc: Mr. Victor Stello, Director (Enclosure)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
NRC INSPECTION REPORT 390/80-19 AND 391/80-13  
DEFICIENCY 390/80-19-01  
INFRACTION 391/80-13-01  
INFRACTION 391/80-13-02  
DEFICIENCY 391/80-13-03

Deficiency 390/80-19-01

As required by Criterion VI of Appendix B to 10CFR and implemented by FSAR, Paragraph 17,1A.6, "Measures shall be established. . . these measures shall assure that documents, including changes are distributed to and used at the location where the prescribed activity is performed."

Contrary to the above, on July 2, 1980, the following was noted:

1. Watts Bar site has no documented requirement for procedures controlling activities affecting quality to be at the location where that activity is being accomplished.
2. An NDE examiner was observed performing liquid penetrant inspection in unit 1 containment building on 14 ASME Class 2 welds. When questioned, he did not know the acceptance criteria for rounded indications.
3. The above inspector did not have a liquid penetrant procedure on the job.

This is a deficiency, and applies to License No. CPPR-91 only.

Corrective Action Taken

This matter was discussed with the welding inspector interviewed by the NRC inspector and we believe there is no noncompliance with NRC or TVA requirements. TVA's justification is as follows: Upon request to inspect a weld, the weld inspector is required to proceed to the job to perform the inspection. The weld inspector follows the appropriate procedure for performing the test and notes any discontinuities. Once the inspector has completed the required test, the results are then compared with the acceptance criteria. This comparison may be performed at a different location than that at which the test was performed. Welding inspectors are not required to memorize the acceptance criteria and there is no requirement for a welding inspector to have a written procedure at the inspection site when the inspector has satisfactorily demonstrated knowledge of the methodology specified by that procedure and has proven the ability to perform the inspection.

Action Taken to Prevent Recurrence

Not applicable.

Date of Full Compliance

We are now in full compliance.

Infraction 391/80-13-01

As required by Criterion V of Appendix B to 10CFR50 and implemented by FSAR, Paragraph 17.1a.5, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings." TVA's General Construction Specification G29M, R12, Process Instruction 1.M.1.2(b), Paragraph 14.4, requires the area where temporary attachments have been removed to be examined.

Contrary to the above, Watts Bar does not have a procedure to ensure that temporary attachments welded within 1 inch of either side of the weld will be examined after their removal. Watts Bar Liquid Penetrant Process Instruction 3.M.1.1c, Paragraph 6.1.3, requires PT examination for only 1/2 inch on each side of the weld and this 1/2 inch of additional coverage is for Class 1 welds only. Temporary attachments were observed adjacent to weld joints 2-058A-D148-05 and 2-058A-D146-05 and no record of the temporary attachments installation or removal was noted on the weld joint history record.

This is an infraction and applies to License No. CPPR-92 only.

Corrective Action Taken

Watts Bar Nuclear Plant QCP 4.13 is being revised to include the requirement to inspect 1 inch on either side of the weld.

Action Taken to Prevent Recurrence

We have always performed inspections in the area of questions but the requirement was never explicitly in a procedure. We have reviewed QCP 4.13 and believe that with this revision it meets all of the requirements, and we, therefore, expect no recurrence of this problem.

Date of Full Compliance

Full compliance will be achieved by September 29, 1980.

Infraction 391/80-13-02

As required by Criterion V of Appendix B to 10CFR50 and implemented by FSAR, Paragraph 17.1A.5, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings." TVA's Process Specification 4.M.1.1(g) requires that when stamping permanent identification on austenitic stainless steel that a blunt-nosed continuous or interrupted dot die stamp having 1/32-inch minimum radius shall be used. Material shall not be stamped without consideration for minimum wall thickness.

Contrary to the above, completed weld joints 2-062b-D138-03A and 2-062B-D138-03B were observed marked with a center punch for radiography and inservice inspection. Several of the indentations had been punched with a sharp pointed center punch and one of the indentations measures 0.057" deep in 0.437 nominal wall pipe.

This is an infraction and applies to License No. CPPR-92 only.

#### Corrective Action Taken

The following has been completed to resolve this infraction.

We have measured the wall thickness around the punch marks noted in the report. The deepest punch mark was 0.057 inch. The wall thickness adjacent to this punch mark was measured with ultrasonics to be 0.475 inch. The wall thickness at the punch mark is 0.418 inch.

The nominal wall thickness is 0.437 inch. The ASME Code allows minimum wall thickness to be 12-1/2 percent less than nominal wall thickness. The minimum wall thickness would be 0.382 inch.

The worst case of the punch marks is 0.036 inch above the minimum wall thickness.

#### Action Taken to Prevent Recurrence

We have obtained dot die stamps with 1/32 inch radii. All craft personnel have been instructed to use only these stamps when making punch marks on safety-related piping.

#### Date of Full Compliance

We are now in full compliance.

#### Infraction 391/80-13-03

As required by Criterion V of Appendix B to 10CFR50 and implemented by FSAR, Paragraph 17.1A.5, "Activities affecting quality shall be prescribed by documented instructions, procedures or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures or drawings." Watts Bar Radiographic Process Instruction 3.M.3.1(b), paragraph 13.1.4(b) states: "The minimum pore dimension shall be 20 percent of T or 1/8 inch, whichever is less, except that an isolated pore separated from an adjacent pore by a minimum of 1 inch may be 30 percent of T or 1/4 inch, whichever is less."

Contrary to the above, for weld joint #2-074A-D027-05A which had a pipe wall thickness of 0.322 inch, the radiographic film reviewer classified a 5/32-inch indication between film station 0-1 and 7/32-inch indication between film station 2-3 as porosity and accepted both indications.

This is a deficiency and applies to License No. CPPR-92 only.

Corrective Action Taken

The weld has been nonconformed on NCR 2537R and will be repaired.

Action Taken to Prevent Recurrence

We feel that this is an isolated condition. However, the film reviewer has been instructed to exercise more care when accepting film showing questionable indications.

Date of Full Compliance

Full compliance will be achieved by September 29, 1980.