



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

January 19, 2010

10 CFR 50.4

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555-0001

Watts Bar Nuclear Plant, Unit 1
Facility Operating License No. NPF-90
NRC Docket No. 50-390

Subject: Unit 1 Cycle 9 90-Day Inservice Inspection Summary Report

Reference: TVA letter to NRC, "Watts Bar Nuclear Plant (WBN) Unit 1 – American Society of Mechanical Engineers (ASME) Section XI Inservice Inspection (ISI) Summary Report for the Eight Cycle of Operation," dated June 24, 2008.

In accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, Article IWA-6230, and Code Case N-532-4, Tennessee Valley Authority (TVA) is providing the Watts Bar Nuclear Plant (WBN) Inservice Inspection (ISI) Summary Report within 90 days from completion of the inspections performed during the Unit 1 Cycle 9 (U1C9) refueling outage. The summary report contains an overview of the inservice examination results that were performed on ASME Class 1 and 2 components up to and including the U1C9 refueling outage during the first inspection period of the second 10-year inspection interval.

Enclosure 1 contains the limitations noted during the U1C9 refueling outage, a list of items with flaws that required evaluation (Table 1), an evaluation of conditions for continued service (Table 2), the ASME Section XI subsection IWE steel containment inspections, and the Owner's Activity Report. Enclosure 2 contains two forms that were omitted from the Cycle 8 90-day ISI summary report (Reference). Enclosure 3 contains a commitment to submit a relief request by the end of the second interval.

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NRC

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Secretary Commission

If you have questions regarding this letter, please call Kevin Casey, Senior Project Manager at (423) 751-8523.

Respectfully,



R. M. Krich
Vice President
Nuclear Licensing

Enclosures:

1. American Society of Mechanical Engineers Section XI Inservice Inspection Summary Report for the Ninth Cycle of Operation
2. Forms Omitted from Cycle 8 Summary Report
3. Commitment Summary

cc (Enclosures):

NRC Regional Administrator – Region II

NRC Senior Resident Inspector – Watts Bar Nuclear Plant

ENCLOSURE 1

**American Society of Mechanical Engineers Section XI Inservice
Inspection Summary Report for the Ninth Cycle of Operation**

The following limitation was noted during the performance of examinations during the Unit 1 Cycle 9 refueling outage. In accordance with 10 CFR 50.55a(g)(5)(iv), a relief request will be submitted later in the current inspection interval.

Component	Exam Category	Item Number	Limitation percentage, configuration
BIT-1	C-B	C2.21	67.65%, nozzle-to-shell weld

**Table 1
Items with flaws or relevant conditions that required evaluation for continued service**

Examination Category and Item Number	Item Description	Evaluation Description
None		

**Table 2
Abstract of Repair/Replacement Activities required for continued service**

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
1	Flange studs	Replace the inlet flange studs with Class 1 material. This work is required to correct a 91-18, non-conforming condition; reference Problem Evaluation Report (PER) 145979.	11/09/2009	Work Order (WO) 08-816335-000
1	Flange studs	Replace the inlet flange studs with Class 1 material. This work is required to correct a 91-18, non-conforming condition; reference PER 146327.	12/17/2009	WO 08-817446-002

Steel Containment Vessel Inspection Program

10 CFR 50.55a(b)(2)(ix) requires the reporting of inaccessible areas and additional examinations identified during the performance of American Society of Mechanical Engineers (ASME) Section XI subsection IWE Steel Containment Vessel (SCV) Inspection Program when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas.

For the examinations performed during the Unit 1 Cycle 9 refueling outage, there were no degraded conditions identified in accessible portions of the SCV which would require additional examinations or evaluation of inaccessible areas.

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number U1C9 RFO
Plant Watts Bar Nuclear Plant, P O Box 2000, Spring City TN 37381-2000
Unit No. 1 Commercial Service Date May 27, 1996 Refueling Outage Number RFO9
(if applicable)
Current Inspection Interval 2nd
(1st, 2nd, 3rd, 4th, other)
Current Inspection Period 1st
(1st, 2nd, 3rd)
Edition and Addenda of Section XI applicable to the Inspection Plans 2001 Edition with 2003 Addenda
Date / Revision of Inspection Plans September 17, 2009 / 1-TRI-0-10.2, Revision 3
Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans same
Code Cases used: N-460, N-526, N-586, N-624, N-532-4, N-706, N-616, N-722, N-729-1

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests, meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of RFO9 conform to the requirements of Section XI (refueling outage number)

Signed Charles Duvel 151 PROGRAMS Date 1-7-10
(Owner or Owner's designee. Title) ENG. IN CH.

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Tennessee and employed by HSB CT of Hartford, Connecticut have inspected the items described in this Owner's Activity Report, and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI

By signing this certificate neither the Inspector nor his employer makes any warranty expressed or implied concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Bruce M. Earnigh Commissions TN 2534
(Inspector's Signature) National Board, State, Province, and Endorsements
Date 1/7/10

ENCLOSURE 2

Forms Omitted from Cycle 8 Summary Report

Work orders 07-817846-000 and 07-817847-000 were completed during the eighth operating cycle but omitted from the 90-day summary report. This was documented in TVA's Corrective Action Program as Problem Evaluation Report 148935. The omitted forms are included on the following pages.

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

- 1- Owner: Tennessee Valley Authority (TVA) Date: 02/29/2008
Name
1101 Market Street
Address
Chattanooga, TN 37402-2801 Sheet 1 of 2
- 2 Plant: Watts Bar Nuclear Plant (WBN) Unit 1
Name
P. O. Box 2000, Spring City, TN 37381-2000 DCN / Work Order (WO) 07-R17846-000
Address Repair/Replacement Organization P.O. No., Job No., etc.
- 3 Work Performed by: TVA-WBN Type Code Symbol Stamp N/A
Name
P. O. Box 2000, Spring City, TN 37381-2000 Authorization No. N/A
Address Expiration Date N/A
- 4 Identification of System 026 HIGH PRESSURE FIRE PROTECTION (HPFP)
- 5 (a) Applicable Construction Code ASME III 19 21 Edition, 378 Addenda N/A Code Case
74 ASME 378/08 WTC ASME 378/08
- (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 2001 Ed, 2003 Add.
- (c) Applicable Section XI Code Cases N/A
- 6 Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
1-CKV-026-1260 DISK	BORG WARNER	NA	N/A	N/A	NA	REMOVED	NO <i>Y</i>
1-CKV-026-1260 DISK	BORG WARNER	90865-2	N/A	N/A	2008	INSTALLED	NO <i>Y</i> <i>ASME 2/29/08</i>

7. Description of Work:
REPLACE DISK ASSEMBLY ON CHECK VALVE BONNET, 1-CKV-026-1260.

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Exempt
 Other Pressure _____ psi Test Temp. _____ °F
ASME 2/29/08
1-52-26-701

NOTE: Supplemental Sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. X 11 in., (2) information in Items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

ASME 2/29/08 WTC

FORM NIS-2 (Back)

9. Remarks TRACKING NO RR-08-107 No # 07-817846-000
Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed J. Callin MSAGE Date 3/14 20 08
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Tennessee and employed by HSB-CT of Hartford CT.

have inspected the components described in this Owner's Report during the period 3/6/08 to 8/25/08, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Bruce M. Eganey Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 8/25/08 20

Handwritten initials and date: 8/25/08

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

FOR REPAIR/REPLACEMENT ACTIVITY

Owner: Tennessee Valley Authority (TVA)
Name
1101 Market Street
Chattanooga, TN 37402-2801
Address

Date 02-29-2008

Sheet 1 of 2

2 Plant: Watts Bar Nuclear Plant (WBN)
Name
P. O. Box 2000, Spring City, TN 37381-2000
Address

Unit 1
 W.O. 07-817847-000
Repair/Replacement Organization P.O. No., Job No., etc.

3 Work Performed by: TVA-WBN
Name
P. O. Box 2000, Spring City, TN 37381-2000
Address

Type Code Symbol Stamp N/A
 Authorization No. N/A
 Expiration Date N/A

4 Identification of System 026-HPFP

- 5 (a) Applicable Construction Code SECTION III 19 ^{02/7/2008} ~~1974~~ Edition, ^{02/7/2008} ~~SR 73 WTL~~ Addenda N/A Code Case
- (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 2001 Ed, 2003 Add.
- (c) Applicable Section XI Code Cases N/A

6 Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
1-CKV-026-1296 DISK	BORG WARNER	28586	N/A	P/N 71648-13	N/A	INSTALLED	N/A
↓	↓	90865-1	N/A	Disc	2008	Installed	Y

QC 3/7/08

7. Description of Work:
REPLACED DISK ASSEMBLY ON CHECK VALVE BONNET, 1-CKV-26-1296

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Exempt
 Other Pressure _____ psi Test Temp. _____ °F
1-SI-26-701

Can't do N-Vt-4 inspection only see pressure if there is a fire. QC 3/19/08

NOTE: Supplemental Sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks TRACKING NO RR-08-108 W6# 07-817847-000
Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and this conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed J. Callan MSA GF Date 3/19 20 08
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Tennessee and employed by HSB-CT of Hartford Ct. have inspected the components described in this Owner's Report during the period 3/6/08 to 8/6/08, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Bruce M. Earnigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 8/6 20 08

ENCLOSURE 3

Commitment Summary

A relief request will be submitted by the end of the second interval for the limited coverage examination listed in Enclosure 1 of this letter. This relief request will be initiated in accordance with applicable ASME Code requirements.