Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

FEB 21 2007

10 CFR 50.55(a)

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

Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) SECTION XI INSERVICE INSPECTION (ISI) SUMMARY REPORT FOR THE SEVENTH CYCLE OF OPERATION

The purpose of this letter is to provide the ISI Summary Report within 90 days of completion of the inspections which occurred at the end of the refueling outage as required by ASME Section XI, IWA-6200 of the 1989 Edition of the ASME Section XI Code. The WBN Unit 1 Cycle 7 Refueling Outage is the last outage in the Third Period of the First Inservice Inspection Interval. The first interval has been extended in accordance with IWA-2430(d) to end on May 26, 2007.

This summary report documents the results of the ASME Section XI examinations, tests, repairs, and replacements performed during the seventh cycle of operations of TVA's WBN Unit 1. Included in the Cycle 7 Summary Report is the summary of ISI examinations and results; summary of steam generator tube eddy current examinations and results; summary of pressure tests and results; and, a summary of repairs and replacements as documented on ASME Forms, NIS-2.

A047

FEB 2 1 2007

There are no regulatory commitments associated with this submittal. If you have any questions concerning this matter, please call me at (423) 365-1824.

Sincerely,

J. D. Smith
Manager, Site Licensing
and Industry Affairs (Acting)

Enclosure
1. ASME Section XI Inservice Inspection Summary Report Seventh Refueling Cycle.

Enclosure
cc (w/o Enclosure):
NRC Resident Inspector
Watts Bar Nuclear Plant
1260 Nuclear Plant Road
Spring City, Tennessee 37381

U.S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, Georgia 30303

cc (Enclosure):

Mr. Brendan T. Moroney, Project Manager
U.S. Nuclear Regulatory Commission
MS 08G9a
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852-2738

JDS:BJT
Enclosure
cc (w/o Enclosure):
A. S. Bhatnagar, LP 6A-C
R. H. Bryan, BR 4X-C
J. E. Hinman, ADM 1B-WBN
A. M. Hinson, EQB 2A-WBN
M. J. Lorek, MOB 2R-WBN
M. T. McFadden, ADM 1Q-WBN
NSRB Support, LP 5M-C (including Advisors)
J. E. Semelsberger, EQB 2W-WBN
K. W. Singer, LP 6A-C
M. D. Skaggs, ADM 1V-WBN
E. J. Vigluicci, WT 6A-K
B. A. Wetzel, BR 4X-C
K. W. Whittenburg, SP2B-C
Sequoyah Licensing Files, OPS 4C-SQN

cc (Enclosure):
EDMS, WT 3B-K

M:\SUBMIT\THOMAS\U1C7 ISI 90-DAY REPORT.DOC

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1
AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) SECTION XI
INSERVICE INSPECTION SUMMARY REPORT
SEVENTH REFUELING CYCLE

TENNESSEE VALLEY AUTHORITY'S
WATTS BAR NUCLEAR PLANT
UNIT 1

ASME SECTION XI

INSERVICE INSPECTION

SUMMARY REPORT

SEVENTH REFUELING CYCLE

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1	Certificate of Authorization: N/A
Commercial Service Date: May 27, 1996	National Board Number for Unit: N/A

CONCURRENCE AND APPROVAL SHEET

Name	Title	Signature	Date
Prepared by:			
J. T. Lewis	ISI Program Engineer	John T. Lewis	1-25-07
Concurred by:			
J. M. Lockwood	ISO Site ISI/NDE Coordinator	James M Lockwood	1/31/07
T. F. McDermott	ISO NDE Level III	T. F. McDermott	1/31/07
S. T. Webster III	System Pressure Test Engineer		1-25-07
E. D. Camp	Steam Generator Specialist	Emmett D Camp	30Jan07
J. K. McClanahan	Corporate ISI Specialist	Jerry K. McClanahan	2/6/07
Approved by:			
K. A. Lovell	System Engineering Manager	Ray A Lovell	2/7/7

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

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Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

Cover Sheet

Owner:	Tennessee Valley Authority
Address of Corporate Office:	Chattanooga Office Complex 1101 Market Street Chattanooga, Tennessee 37402-2801
Name and Address of Nuclear Power Plant:	Watts Bar Nuclear Plant P.O. Box 2000 Spring City, Tennessee 37381-2000
Applicable Nuclear Power Units:	Watts Bar Nuclear Plant, Unit 1
Commercial Operation Date:	May 27, 1996
RFO 7 Completion Date:	November 28, 2006

FORM NIS-1 OWNERS' REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner Tennessee Valley Authority, 1101 Market St. Chattanooga, TN 37402-2801
(Name and Address of Owner)

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

3. Plant Unit One (1) 4. Owner Certificate of Authorization (if required) Not Required

5. Commercial Service Date May 27, 1996 6. National Board Number for Unit None Assigned

7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
See Appendix I, Examination Plan, for List of Components	Tennessee Valley Authority	N/A	N/A	N/A

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.

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1 Commercial Service Date: May 27, 1996	Certificate of Authorization: N/A National Board Number for Unit: N/A

FORM NIS-1 (Back)

8. Examination Dates: March 24, 2005 to November 28, 2006

9. Inspection Period Identification: Third

10. Inspection Interval Identification: First

11. Applicable Edition of Section XI: 1989 Addenda N/A

12. Date/Revision of Inspection Plan: Sept. 26, 2006 / 1-TRI-0-10, Revision 14

13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan. See Appendix I

14. Abstract of Results of Examinations and Tests. See Appendix I

15. Abstract of Corrective Measures. No corrective measures required this inspection.

We 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) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

Date January 25 20 07 Signed Tennessee Valley Authority By John T. Lewis
Owner

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 Owners' Data Report during the period 4/21/05 to 2/7/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by 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 tests, 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province and Endorsements

Date 2/7 20 07

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1	Certificate of Authorization: N/A
Commercial Service Date: May 27, 1996	National Board Number for Unit: N/A

FORM NIS-1 OWNERS' REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner Tennessee Valley Authority, 1101 Market St. Chattanooga, TN 37402-2801
(Name and Address of Owner)

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

3. Plant Unit One (1) 4. Owner Certificate of Authorization (if required) Not Required

5. Commercial Service Date May 27, 1996 6. National Board Number for Unit None Assigned

7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
See Appendix III, Steam Generator Tube Examination Summary	Tennessee Valley Authority	N/A	N/A	N/A
1-SGEN-068-SG1	Westinghouse Electric Corp	WB1-RSG-A	N/A	85
1-SGEN-068-SG2	Westinghouse Electric Corp	WB1-RSG-B	N/A	86
1-SGEN-068-SG3	Westinghouse Electric Corp	WB1-RSG-C	N/A	87
1-SGEN-068-SG4	Westinghouse Electric Corp	WB1-RSG-D	N/A	88

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.

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1 Commercial Service Date: May 27, 1996	Certificate of Authorization: N/A National Board Number for Unit: N/A

FORM NIS-1 (Back)

8. Examination Dates: March 24, 2005 to November 28, 2006

9. Inspection Period Identification: Third

10. Inspection Interval Identification: First

11. Applicable Edition of Section XI: 1989 Addenda N/A

12. Date/Revision of Inspection Plan: June 8, 2005 / 1-SI-68-907, Revision 15

13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan. See Appendix III

14. Abstract of Results of Examinations and Tests. See Appendix III

15. Abstract of Corrective Measures. See Appendix III

We 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) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

Date Feb 5, 2007 Signed Tennessee Valley Authority By [signature]
Owner

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 Owners' Data Report during the period 4/21/05 to 2/7/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by 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 tests, 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. Emigh Commissions TN 2534
Inspector's Signature National Board, State, Province and Endorsements

Date 2/7 2007

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1	Certificate of Authorization: N/A
Commercial Service Date: May 27, 1996	National Board Number for Unit: N/A

NIS-1 FOR PRESSURE TESTS

FORM NIS-1 OWNERS' REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner Tennessee Valley Authority, 1101 Market St. Chattanooga, TN 37402-2801
(Name and Address of Owner)

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

3. Plant Unit One (1) 4. Owner Certificate of Authorization (if required) Not Required

5. Commercial Service Date May 27, 1996 6. National Board Number for Unit None Assigned

7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
See Appendix IV, Pressure Test Summary	Tennessee Valley Authority	N/A	N/A	N/A

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.

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1 Commercial Service Date: May 27, 1996	Certificate of Authorization: N/A National Board Number for Unit: N/A

FORM NIS-1 (Back)

8. Examination Dates: March 28, 2005 to November 30, 2006

9. Inspection Period Identification: Third

10. Inspection Interval Identification: First

11. Applicable Edition of Section XI: 1989 Addenda N/A

12. Date/Revision of Inspection Plan: November 3, 2006 / TI-100.009, Revision 11

13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan. See Appendix IV

14. Abstract of Results of Examinations and Tests. See Appendix IV

15. Abstract of Corrective Measures. See Appendix IV

We 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) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

Date 1/25/ 20 07 Signed Tennessee Valley Authority By
Owner

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 Owners' Data Report during the period 4/21/05 to 2/7/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by 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 tests, 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. Eanigh Commissions TN 2534
Inspector's Signature National Board, State, Province and Endorsements

Date 2/7 20 07

INTRODUCTION AND SUMMARY

Introduction

As required by ASME Section XI, IWA-6200, this summary report documents the results of the ASME Section XI Class 1 and 2 examinations, tests, repairs and replacements performed during the seventh cycle of operation of TVA's Watts Bar Nuclear Plant's Unit 1. The cycle 7 refueling outage was the last outage in the Third Period of the First Inservice Inspection Interval. The first interval has been extended in accordance with IWA-2430(d) to end on May 26, 2007.

Included in this cycle 7 Summary Report is: the summary of ISI examinations and results; summary of steam generator tube eddy current examinations and results; summary of pressure tests and results; and, summary of repairs and replacements as documented on ASME Form NIS-2s.

Summary

ISI examinations were performed in accordance with Technical Requirement Instruction 1-TRI-0-10, "ASME Section XI ISI/NDE Program." Table 1 provides an overview of the ISI examinations that were performed during cycle 7. Preservice examinations performed this cycle included those associated with Steam Generator replacement. The results of all the examinations met the applicable acceptance standards. The examination results for the ISI components are summarized in Appendix I. Examination of the pressurizer surge line nozzle-to-vessel weld requires a request for relief be prepared as the required code coverage could not be obtained.

Included in 1-TRI-0-10 are augmented requirements to perform examination of the Reactor Coolant Pump Shaft; requirements to perform ultrasonic examinations on alloy 600 pressurizer nozzle safe-end weld components; visual examination of the reactor vessel bottom head; and examination of welds which received multiple repairs during fabrication. These examination results are summarized in Appendix II.

Eddy current testing of the replacement steam generator tubes was performed in accordance with Surveillance Instruction 1-SI-68-907, "Steam Generator Tubing Inservice Inspection and Augmented Inspection." The results are summarized in Appendix III.

Appendix IV provides a summary of the system pressure tests performed for code credit during cycle 7. System pressure tests are implemented as defined in Technical Instruction TI-100.009, "ASME Section XI System Pressure Testing Program Basis Document." Individual system pressure test procedures are listed in the summary.

Appendix V provides a summary of the repairs and replacements performed during cycle 7. Included are the ASME Form NIS-2s, "Owners Report for Repair and Replacements." Repairs and Replacements are documented in accordance with Standard Programs and Processes SPP-9.1, Part D, "Repair/Replacement of ASME Section XI Components."

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

TABLE 1
SUMMARY OF CYCLE 7 ISI EXAMINATIONS

Examination Category	Item Number	Component Description	Number Examined
Code Class 1 Components			
B-A	B1.21	RV Head Circ Weld	1
B-B	B2.11	PRZ Bottom Head to Shell Weld	1
	B2.12	PRZ Intersecting Longitudinal Weld	1
B-D	B3.110	PRZ Surge Line Nozzle Weld	1
	B3.120	PRZ Surge Line Nozzle Inner Radius	1
B-E	B4.11	RV Head Vent Penetration	1
	B4.12	RV Head CRD Penetrations	20
	B4.13	RV Bottom Head Instrument Penetrations	15
	B4.20	PRZ Heater Penetrations	78
B-G-1	B6.10	RV Nuts	18
	B6.30	RV Studs	18
	B6.40	RV Ligaments	18
	B6.50	RV Washers	18
	B6.180	RCP Bolting	24
B-G-2	B7.50	Piping Bolted Connection	4
	B7.60	Pump Bolted Connection	2 (20 bolts)
	B7.70	Valve Bolted Connection	4
B-K	B10.10	Piping Welded Attachment	1
B-L-1	B12.10	Pump Casing Welds	5
B-O	B14.10	CRD Housing Welds	2
F-A	F1.10(A, B, C & D)	Piping Supports	30
	F1.40	Equipment Supports	5
Code Class 2 Components			
C-A	C1.20	CSHX Head Circ. Weld	1
C-C	C3.10	Pressure Vessel Welded Attachment	1
	C3.20	Piping Welded Attachment	4
	C3.30	Pump Welded Attachment	1
F-A	F1.20(A, B, C & D)	Piping Supports	61
	F1.40	Equipment Supports	7
Code Class 1 and 2 Risk-Informed ISI Piping Welds			
R-A	R1.11	Elements Subject to Thermal Fatigue	23
	R1.18	Elements Subject to Flow Accelerated Corrosion	14

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

SUMMARY OF
REQUESTS FOR RELIEF (RFRs)

One RFR was required to be written for components examined during this inspection. Due to configuration of the pressurizer surge line nozzle-to-vessel weld, the required examination coverage could not be achieved. The pressurizer nozzle weld examinations were limited as noted in the summaries below. The RFR will be submitted under separate letter to the NRC.

Proposed RFR 1-ISI-20

ISI Component Number(s):	WP-10
Component Description:	Pressurizer Surge Line Nozzle-to-Vessel Weld
Examination Category/Item No.:	B-D / B3.110
Report Numbers:	R1178
Summary:	The design configuration of the pressurizer surge line nozzle precludes a volumetric examination of the required volume for the pressurizer surge line nozzle-to-vessel weld from either the pressurizer side or the nozzle side. An ultrasonic examination was performed on the accessible areas to the maximum extent practical and 55% coverage was achieved.

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

APPENDIX I
CYCLE 7 ISI EXAMINATION PLAN

The following examination plan provides the list and results of examinations both inservice and preservice which were performed during the seventh cycle. This plan is sorted by examination category and item number and system. The headings are defined below:

System — System Title Abbreviation

AFWS	Auxiliary Feedwater System	RCS	Reactor Coolant System
BDS	Steam Generator Blowdown System	RV	Reactor Vessel
FWS	Feedwater System	SIS	Safety Injection System
SG	Steam Generator	PRZ	Pressurizer
RCP	Reactor Coolant Pump	CVCS	Chemical Volume Control System
RHRS	Residual Heat Removal System	CSS	Core Spray System
RX	Reactor Coolant Main Loop	MSS	Main Steam System

Component Number — ISI Component Identifier

ISO Drawing — ISI Drawing Number

Category — Code Examination Category

Item Number — Code Item Number

Exam Requirement — Examination Requirement

89E-01	Code Class 1, 2 or 3 Item examined per the requirements of the 1989 Edition of ASME Section XI for first interval code credit
P89001	Item examined per the requirements of the 1989 Edition of ASME Section XI for preservice credit (i.e. repaired/replaced item)
SR1-01	Successive exam - supports on systems operating > 200F

Exam Scheduled — Required Examination Method

NDE Procedure — TVA NDE Procedure Number

Calibration Standard — Calibration Standard Identifier

Exam Date — Date Examination Performed

Exam Report — Examination Report Number

Exam Results — Results of the Examination

P = PASS, examination met the applicable acceptance standards
F = FAIL, examination did not meet the applicable acceptance standards and was repaired or replaced

Comments — Applicable Comments

Owner: TENNESSEE VALLEY AUTHORITY
Chattanooga Office Complex
1101 Market Street
Chattanooga, TN 37402

Plant: WATTS BAR NUCLEAR PLANT
P.O. Box 2000
Spring City, TN 37381-2000

Unit: 1
Commercial Service Date: May 27, 1996

Certificate of Authorization: N/A
National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
RV	W09-10	CHM-2549-C-01	B-A	B1.21	89E-01	UT	N-UT-78	WB-51		06.890	20060928	R1231	P	
PZR	WP-01	CHM-2570-C-01	B-B	B2.11	89E-01	UT	N-UT-19	WB-55	92	03.750	20060924	R1220	P	92.7% COVERAGE
PZR	WP-06	CHM-2570-C-01	B-B	B2.12	89E-01	UT	N-UT-19	WB-55	92	03.750	20060924	R1221	P	
SG	RSGW-AA	CHM-2660-C-04	B-B	B2.40	P89000	UT	N-UT-19	WB-86	138.12	06.190	20050722	R1006	P	
SG	RSGW-AB	CHM-2660-C-04	B-B	B2.40	P89000	UT	N-UT-19	WB-86	138.12	06.190	20050809	R1037	P	
SG	RSGW-AC	CHM-2660-C-04	B-B	B2.40	P89000	UT	N-UT-19	WB-86	138.12	06.190	20050729	R1023	P	
SG	RSGW-AD	CHM-2660-C-04	B-B	B2.40	P89000	UT	N-UT-19	WB-86	138.12	06.190	20050801	R1030	P	
PZR	WP-10	CHM-2570-C-01	B-D	B3.110	89E-01	UT	N-UT-19	WB-55	24.50	03.000	20060916	R1178	P	55.2% COVERAGE
PZR	WP-10-NIR	CHM-2570-C-01	B-D	B3.120	89E-01	UT	N-UT-55	SQ-77	24.50	02.850	20060916	R1177	P	
SG	RSG-A-C-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050724	R1009	P	
SG	RSG-A-H-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050724	R1010	P	
SG	RSG-B-C-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050807	R1032	P	
SG	RSG-B-H-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050808	R1033	P	
SG	RSG-C-C-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050727	R1017	P	
SG	RSG-C-H-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050727	R1018	P	
SG	RSG-D-C-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050730	R1024	P	
SG	RSG-D-H-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050730	R1025	P	
RV	VENT-1	CHM-2684-C-01	B-E	B4.11	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-21	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-24	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-27	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-30	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-33	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-36	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-39	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-42	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-45	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000 06-818055-000
RV	CRDN-48	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-51	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-54	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
RV	CRDN-57	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-60	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-63	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-66	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-69	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-72	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-75	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-78	CHM-2684-C-01	B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-01	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-05	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-09	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-13	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-17	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-21	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-25	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-29	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-33	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-37	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-41	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-45	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-49	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	INSTPEN-53	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000

Owner: TENNESSEE VALLEY AUTHORITY
Chattanooga Office Complex
1101 Market Street
Chattanooga, TN 37402

Plant: WATTS BAR NUCLEAR PLANT
P.O. Box 2000
Spring City, TN 37381-2000

Unit: 1

Certificate of Authorization: N/A

Commercial Service Date: May 27, 1996

National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
RV	INSTPEN-57	ISI-0427-C-02	B-E	B4.13	89E-01	VT-2	N-VT-4		01.50		20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
PZR	HP-01 thru HP-78	CHM-2570-C-02	B-E	B4.20	89E-01	VT-2	N-VT-4				20061129	R1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	RVNUT-37	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061010	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-38	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061010	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-39	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061014	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-40	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061014	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-41	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061014	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-42	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061014	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-43	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061014	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-44	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061014	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-45	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061016	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-46	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061016	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-47	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061016	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-48	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061016	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-49	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061016	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-50	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061016	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-51	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061009	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-52	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061009	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-53	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061009	R1291	P	VT-1 IAW CC N-627
RV	RVNUT-54	ISI-0427-C-03	B-G-1	B6.10	89E-01	VT-1	N-VT-1		07.00	07.09	20061009	R1291	P	VT-1 IAW CC N-627
RCP	RCP1MFBLT-01	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-02	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-03	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-04	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-05	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-06	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-07	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-08	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-09	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-10	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-11	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-12	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-13	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
RCP	RCP1MFBLT-14	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-15	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-16	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-17	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-18	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-19	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-20	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-21	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-22	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-23	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RCP	RCP1MFBLT-24	ISI-0447-C-01	B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	
RV	RVSTUD-37	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-38	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-39	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-40	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-41	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-42	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-43	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-44	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-45	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-46	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-47	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-48	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-49	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-50	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-51	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-52	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-53	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVSTUD-54	ISI-0427-C-03	B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016	R1246	P	
RV	RVLIG-37	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-38	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-39	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-40	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-41	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-42	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-43	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-44	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-45	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-46	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	

Owner: TENNESSEE VALLEY AUTHORITY
Chattanooga Office Complex
1101 Market Street
Chattanooga, TN 37402

Plant: WATTS BAR NUCLEAR PLANT
P.O. Box 2000
Spring City, TN 37381-2000

Unit: 1
Commercial Service Date: May 27, 1996

Certificate of Authorization: N/A
National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
RV	RVLIG-47	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-48	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-49	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-50	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-51	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-52	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-53	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-54	ISI-0427-C-03	B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVWASHER-37	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061010	R1290	P	
RV	RVWASHER-38	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061010	R1290	P	
RV	RVWASHER-39	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061014	R1290	P	
RV	RVWASHER-40	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061014	R1290	P	
RV	RVWASHER-41	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061014	R1290	P	
RV	RVWASHER-42	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061014	R1290	P	
RV	RVWASHER-43	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061014	R1290	P	
RV	RVWASHER-44	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061014	R1290	P	
RV	RVWASHER-45	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061016	R1290	P	
RV	RVWASHER-46	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061016	R1290	P	
RV	RVWASHER-47	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061016	R1290	P	
RV	RVWASHER-48	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061016	R1290	P	
RV	RVWASHER-49	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061016	R1290	P	
RV	RVWASHER-50	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061016	R1290	P	
RV	RVWASHER-51	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061009	R1290	P	
RV	RVWASHER-52	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061009	R1290	P	
RV	RVWASHER-53	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061009	R1290	P	
RV	RVWASHER-54	ISI-0427-C-03	B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061009	R1290	P	
SG	RSGMWCB-1-A-01-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-01-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-02-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-02-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-03-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-03-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-04-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-04-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	

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Unit: 1
Commercial Service Date: May 27, 1996

Certificate of Authorization: N/A
National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
SG	RSGMWCB-1-A-05-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-05-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-06-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-06-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-07-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-07-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-08-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-08-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-09-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-09-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-10-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-10-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-11-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-11-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-12-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-12-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-13-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-13-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-14-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-14-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-A-15-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-15-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	

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Unit: 1
Commercial Service Date: May 27, 1996

Certificate of Authorization: N/A
National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
SG	RSGMWCB-1-A-16-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1002	P	
SG	RSGMWCB-1-A-16-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1003	P	
SG	RSGMWCB-1-B-01-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-01-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-02-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-02-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-03-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-03-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-04-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-04-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-05-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-05-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-06-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-06-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-07-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-07-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-08-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-08-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-09-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-09-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-10-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-10-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-11-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-	20050731	R1026	P	

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System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
										8UNC-2A				
SG	RSGMWCB-1-B-11-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-12-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-12-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-13-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-13-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-14-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-14-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-15-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-15-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-B-16-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1026	P	
SG	RSGMWCB-1-B-16-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050731	R1027	P	
SG	RSGMWCB-1-C-01-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-01-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-02-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-02-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-03-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-03-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-04-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-04-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-05-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-05-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-06-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	

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System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
SG	RSGMWCB-1-C-06-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-07-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-07-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-08-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-08-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-09-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-09-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-10-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-10-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-11-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-11-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-12-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-12-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-13-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-13-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-14-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-14-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-15-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-15-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-C-16-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1004	P	
SG	RSGMWCB-1-C-16-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050721	R1005	P	
SG	RSGMWCB-1-D-01-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-01-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-	20050728	R1020	P	

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Spring City, TN 37381-2000

Unit: 1
Commercial Service Date: May 27, 1996

Certificate of Authorization: N/A
National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
										8UNC-2A				
SG	RSGMWCB-1-D-02-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-02-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-03-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-03-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-04-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-04-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-05-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-05-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-06-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-06-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-07-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-07-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-08-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-08-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-09-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-09-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-10-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-10-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-11-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-11-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-12-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-12-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	

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Unit: 1
Commercial Service Date: May 27, 1996

Certificate of Authorization: N/A
National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
SG	RSGMWCB-1-D-13-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-13-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-14-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-14-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-15-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-15-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
SG	RSGMWCB-1-D-16-C	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-16-H	CHM-2660-C-05	B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875-8UNC-2A	20050728	R1020	P	
CVCS	CVC-02-BC	ISI-0050-C-01	B-G-2	B7.50	89E-01	VT-1	N-VT-1		01.50	0.281	20061006	R1255	P	
CVCS	CVC-03-BC	ISI-0050-C-02	B-G-2	B7.50	89E-01	VT-1	N-VT-1		01.50	0.281	20061010	R1284	P	
SIS	SI-02-BC	CHM-2758-C-11	B-G-2	B7.50	89E-01	VT-1	N-VT-1		01.50		20061004	R1248	P	
SIS	SI-03-BC	CHM-2758-C-12	B-G-2	B7.50	89E-01	VT-1	N-VT-1		01.50		20061004	R1250	P	
RCP	RCP1CSABLT-01	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		01.50		20061101	R1320	P	Examine, Remove Bolts for ISI Credit
RCP	RCP1CSABLT-02	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		01.50		20061101	R1320	P	Examine, Remove Bolts for ISI Credit
RCP	RCP1CSABLT-03	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		01.50		20061101	R1320	P	Examine, Remove Bolts for ISI Credit
RCP	RCP1CSABLT-04	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		01.50		20061101	R1320	P	Examine, Remove Bolts for ISI Credit
RCP	RCP1CSABLT-05	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		01.50		20061101	R1320	P	Examine, Remove Bolts for ISI Credit
RCP	RCP1CSABLT-06	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		01.50		20061101	R1320	P	Examine, Remove Bolts for ISI Credit
RCP	RCP1CSABLT-07	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		01.50		20061101	R1320	P	Examine, Remove Bolts for ISI Credit
RCP	RCP1CSABLT-08	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		01.50		20061101	R1320	P	Examine, Remove Bolts for ISI Credit
RCP	RCP1SL1BLT-01	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM

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Unit: 1
Commercial Service Date: May 27, 1996

Certificate of Authorization: N/A
National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
RCP	RCP1SL1BLT-02	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-03	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-04	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-05	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-06	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-07	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-08	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-09	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-10	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-11	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCP	RCP1SL1BLT-12	ISI-0447-C-01	B-G-2	B7.60	89E-01	VT-1	N-VT-1		02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM
RCS	68-564-BC	ISI-0365-C-01	B-G-2	B7.70	89E-01	VT-1	N-VT-1		06.00		20060915	R1135	P	
RHRS	63-641-BC	CHM-2636-C-07	B-G-2	B7.70	89E-01	VT-1	N-VT-1		06.00	0.719	20060927	R1225	P	
RHRS	FCV-74-008-BC	CHM-2636-C-01	B-G-2	B7.70	89E-01	VT-1	N-VT-1		10.00	01.00	20060922	R1205	P	
SIS	FCV-63-067-BC	CHM-2758-C-10	B-G-2	B7.70	89E-01	VT-1	N-VT-1		10.00		20060922	R1206	P	
PZR	WP-17	CHM-2570-C-04	B-K	B10.10	89E-01	MT	N-MT-6	WB-58	92	01.500	20060924	R1216	P	Per CC N-323-1, a surface or volumetric exam may be performed from the accessible side of the weld
RCP	1-RCW-RCP-1	ISI-0447-C04	B-L-1	B12.10	89E-01	VT-1	N-VT-1				20060918	R1175	P	
RCP	1-RCW-RCP-1	ISI-0447-C04	B-L-1	B12.10	89E-01	VT-2	N-VT-4				20061129	R1384	P	CREDITED UNDER SYSTEM HYDRO TEST 1-TRI-68-901, WO 06-818055-000
RCP	1-RCW-RCP-2	ISI-0447-C04	B-L-1	B12.10	89E-01	VT-2	N-VT-4				20061129	R1384	P	CREDITED UNDER SYSTEM HYDRO TEST 1-TRI-68-901, WO 06-818055-000

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Unit: 1
Commercial Service Date: May 27, 1996

Certificate of Authorization: N/A
National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
RCP	1-RCW-RCP-3	ISI-0447-C04	B-L-1	B12.10	89E-01	VT-2	N-VT-4				20061129	R1384	P	CREDITED UNDER SYSTEM HYDRO TEST 1-TRI-68-901, WO 06-818055-000
RCP	1-RCW-RCP-4	ISI-0447-C04	B-L-1	B12.10	89E-01	VT-2	N-VT-4				20061129	R1384	P	CREDITED UNDER SYSTEM HYDRO TEST 1-TRI-68-901, WO 06-818055-000
RV	CRDW-67	CHM-2684-C-01	B-O	B14.10	89E-01	UT	N-UT-18	WB-52	04.00	0.663	20061002	R1252	P	
RV	CRDW-71	CHM-2684-C-01	B-O	B14.10	89E-01	UT	N-UT-18	WB-52	04.00		20061002	R1253	P	
CSS	CSHX-HD-SHL-1A	ISI-0371-C-01	C-A	C1.20	89E-01	UT	N-UT-18	SQ-104	60.00	0.675	20061014	R1298	P	
SG	RSGW-CA	CHM-2660-C-04	C-A	C1.20	P89000	UT	N-UT-19	WB-88	175.94	03.720	20050720	R1000	P	
SG	RSGW-BB	CHM-2660-C-04	C-A	C1.30	P89000	UT	N-UT-19	WB-87	138.12	04.120	20050810	R1038	P	
SG	RSGAFW-D	CHM-2660-C-04	C-B	C2.21	P89000	MT	N-MT-6		06.00	03.720	20050729	R1021	P	
SG	RSGAFW-D	CHM-2660-C-04	C-B	C2.21	P89000	UT	N-UT-19	WB-88	06.00	03.720	20050801	R1031	P	
SG	RSGFW-C	CHM-2660-C-04	C-B	C2.21	P89000	MT	N-MT-6		16.00	04.060	20050724	R1011	P	
SG	RSGFW-C	CHM-2660-C-04	C-B	C2.21	P89000	UT	N-UT-19	WB-87	16.00	04.060	20050725	R1015	P	
SG	RSGFW-C-IR	CHM-2660-C-04	C-B	C2.22	P89000	UT	N-UT-55	WB-91	16.00		20050726	R1016	P	
CSS	CSHXH-1-1A-IA	ISI-0371-C-02	C-C	C3.10	89E-01	PT	N-PT-9		60.00	0.625	20061011	R1302	P	
CSS	72-1CS-R033-IA	ISI-0423-C-04	C-C	C3.20	89E-01	PT	N-PT-9		10.00	0.365	20061012	R1305	P	
CVCS	47A060-62-017-IA	ISI-0424-C-21	C-C	C3.20	89E-01	PT	N-PT-9		02.00		20061008	R1273	P	
RHRS	1-63-349-IA	ISI-0020-C-08	C-C	C3.20	89E-01	PT	N-PT-9		08.00	0.906	20060921	R1219	P	
SIS	1-63-587-IA	ISI-0440-C-14	C-C	C3.20	89E-01	PT	N-PT-9		02.00		20061014	R1295	P	
RHRS	RHRPH-1A-A-IA	ISI-0117-A-01	C-C	C3.30	89E-01	PT	N-PT-9			0.750	20061024	R1317	P	
CVCS	1-62A-001	ISI-0063-C-01	F-A	F1.10A	89E-01	VT-3	N-VT-1		02.00		20060929	R1289	P	
CVCS	1-62A-304	ISI-0026-C-01	F-A	F1.10A	89E-01	VT-3	N-VT-1		03.00		20060929	R1233	P	Dual Credit Exam
CVCS	1-62A-304	ISI-0026-C-01	F-A	F1.10A	SR1-01	VT-3	N-VT-1		03.00		20060929	R1233	P	Dual Credit Exam, Successive Exam for R0825
RCS	1-68-018	ISI-0364-C-02	F-A	F1.10A	89E-01	VT-3	N-VT-1		06.00		20060914	R1133	P	
RCS	1-68-030	ISI-0364-C-02	F-A	F1.10A	89E-01	VT-3	N-VT-1		04.00		20060914	R1134	P	
SIS	1-63-088	ISI-0021-C-04	F-A	F1.10A	89E-01	VT-3	N-VT-1		10.00		20060921	R1203	P	
SIS	1-63-186	ISI-0021-C-11	F-A	F1.10A	89E-01	VT-3	N-VT-1		01.50		20060918	R1184	P	
SIS	1-63-524	ISI-0021-C-11	F-A	F1.10A	89E-01	VT-3	N-VT-1		01.50		20060928	R1227	P	
SIS	1-63-550	ISI-0021-C-12	F-A	F1.10A	89E-01	VT-3	N-VT-1		01.50		20060924	R1214	P	
SIS	47A435-08-073	ISI-0021-C-09	F-A	F1.10A	SR1-01	VT-3	N-VT-1		02.00		20061004	R1249	P	Successive Exam for R0697
CVCS	1-62A-038	ISI-0063-C-02	F-A	F1.10B	P89000	VT-3	N-VT-1		02.00		20061116	R1365	P	
CVCS	1-62A-298	ISI-0026-C-01	F-A	F1.10B	89E-01	VT-3	N-VT-1		03.00		20060929	R1232	P	
CVCS	1-62A-301	ISI-0026-C-01	F-A	F1.10B	89E-01	VT-3	N-VT-1		03.00		20060929	R1234	P	
RHRS	1-63-345	ISI-0020-C-08	F-A	F1.10B	89E-01	VT-3	N-VT-1		08.00		20060921	R1200	P	
RHRS	1-63-369	ISI-0020-C-07	F-A	F1.10B	89E-01	VT-3	N-VT-1		08.00		20060920	R1193	P	
SIS	1-63-115	ISI-0021-C-09	F-A	F1.10B	89E-01	VT-3	N-VT-1		02.00		20060921	R1204	P	
SIS	1-63-155	ISI-0021-C-08	F-A	F1.10B	89E-01	VT-3	N-VT-1		02.50		20060919	R1190	P	
SIS	1-63-176	ISI-0021-C-11	F-A	F1.10B	89E-01	VT-3	N-VT-1		01.50		20061010	R1283	P	
SIS	1-63-181	ISI-0021-C-11	F-A	F1.10B	89E-01	VT-3	N-VT-1		01.50		20061004	R1247	P	
SIS	1-63-221	ISI-0021-C-12	F-A	F1.10B	89E-01	VT-3	N-VT-1		01.50		20060927	R1222	P	
SIS	1-63-223	ISI-0021-C-12	F-A	F1.10B	89E-01	VT-3	N-VT-1		01.50		20060927	R1223	P	
CVCS	1-62A-290	ISI-0026-C-01	F-A	F1.10C	89E-01	VT-3	N-VT-1		03.00		20060917	R1167	P	
RCS	1-68-348	ISI-0364-C-03	F-A	F1.10C	89E-01	VT-3	N-VT-1		02.00		20060917	R1168	P	

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Plant: WATTS BAR NUCLEAR PLANT
P.O. Box 2000
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Unit: 1
Commercial Service Date: May 27, 1996

Certificate of Authorization: N/A
National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
RCS	1-68-364	ISI-0364-C-03	F-A	F1.10C	SR1-01	VT-3	N-VT-1		02.00		20061122	R1383	P	Successive Exam for R0843
RX	1-68-001	ISI-0124-C-01	F-A	F1.10C	89E-01	VT-3	N-VT-1		14.00		20060922	R1199	P	Setting Exam Perfomed 9/11/06
CVCS	1-62A-563	ISI-0026-C-01	F-A	F1.10D	89E-01	VT-3	N-VT-1		03.00		20060927	R1230	P	
RCS	1-68-031	ISI-0364-C-02	F-A	F1.10D	89E-01	VT-3	N-VT-1		04.00		20060916	R1137	P	
RCS	1-68-412	ISI-0364-C-01	F-A	F1.10D	89E-01	VT-3	N-VT-1		06.00		20061010	R1274	P	
RHRS	1-63-366	ISI-0020-C-07	F-A	F1.10D	89E-01	VT-3	N-VT-1		08.00		20060920	R1191	P	
RHRS	1-63-368	ISI-0020-C-07	F-A	F1.10D	89E-01	VT-3	N-VT-1		08.00		20060920	R1192	P	
SIS	1-63-081	ISI-0021-C-04	F-A	F1.10D	89E-01	VT-3	N-VT-1		06.00		20060921	R1202	P	
SIS	1-63-185	ISI-0021-C-11	F-A	F1.10D	89E-01	VT-3	N-VT-1		01.50		20060918	R1185	P	
SIS	1-63-523	ISI-0021-C-11	F-A	F1.10D	89E-01	VT-3	N-VT-1		01.50		20060928	R1226	P	
SIS	1-63-547	ISI-0021-C-12	F-A	F1.10D	89E-01	VT-3	N-VT-1		01.50		20060928	R1228	P	
SIS	1-68-415	ISI-0364-C-01	F-A	F1.10D	SR1-01	VT-3	N-VT-1		03.00		20061010	R1279	P	Successive Exam for R0506
CSS	63-1SIS-R244	ISI-0423-C-02	F-A	F1.20A	89E-01	VT-3	N-VT-1		12.00		20061006	R1256	P	
CSS	72-1CS-R033	ISI-0423-C-04	F-A	F1.20A	89E-01	VT-3	N-VT-1		10.00		20061012	R1303	P	
CSS	72-1CS-R041	ISI-0423-C-07	F-A	F1.20A	89E-01	VT-3	N-VT-1		06.00		20061009	R1275	P	
CSS	72-1CS-R051	ISI-0423-C-07	F-A	F1.20A	89E-01	VT-3	N-VT-1		10.00		20061009	R1276	P	
CVCS	1-62A-008	ISI-0424-C-17	F-A	F1.20A	89E-01	VT-3	N-VT-1		02.00		20060915	R1143	P	
CVCS	1-62A-049	ISI-0424-C-18	F-A	F1.20A	89E-01	VT-3	N-VT-1		02.00		20060915	R1140	P	
CVCS	1-62A-111	ISI-0424-C-16	F-A	F1.20A	89E-01	VT-3	N-VT-1		02.00		20060915	R1148	P	
CVCS	1-62A-122	ISI-0424-C-16	F-A	F1.20A	89E-01	VT-3	N-VT-1		02.00		20060915	R1149	P	
CVCS	1-62A-590	ISI-0424-C-19	F-A	F1.20A	89E-01	VT-3	N-VT-1		02.00		20060916	R1180	P	
CVCS	47A406-17-001	ISI-0424-C-21	F-A	F1.20A	89E-01	VT-3	N-VT-1		02.00		20061009	R1278	P	
FWS	1-03A-246	ISI-0062-C-02	F-A	F1.20A	89E-01	VT-3	N-VT-1		16.00		20060916	R1157	P	
FWS	1-03A-290	ISI-0062-C-03	F-A	F1.20A	89E-01	VT-3	N-VT-1		16.00		20060916	R1156	P	
FWS	1-03A-367	ISI-0062-C-05	F-A	F1.20A	P89000	VT-3	N-VT-1		06.00		20061114	R1361	P	
FWS	1-03A-403	ISI-0062-C-06	F-A	F1.20A	P89000	VT-3	N-VT-1		06.00		20061114	R1362	P	
FWS	1-03A-412	ISI-0062-C-06	F-A	F1.20A	P89000	VT-3	N-VT-1		06.00		20061113	R1360	P	
FWS	1-03A-424	ISI-0062-C-06	F-A	F1.20A	89E-01	VT-3	N-VT-1		06.00		20060916	R1154	P	
FWS	1-03A-456	ISI-0062-C-07	F-A	F1.20A	P89000	VT-3	N-VT-1		06.00		20061112	R1349	P	
FWS	1-03A-457	ISI-0062-C-07	F-A	F1.20A	P89000	VT-3	N-VT-1		06.00		20061112	R1350	P	WPIR# P-AFCS-091
FWS	1-03A-498	ISI-0062-C-08	F-A	F1.20A	SR1-01	VT-3	N-VT-1		06.00		20061002	R1241	P	Successive Exam for R0527
MSS	1-01A-304	ISI-0011-C-01	F-A	F1.20A	P89000	VT-3	N-VT-1		32.00		20061120	R1374	P	
MSS	1-01A-394	ISI-0011-C-03	F-A	F1.20A	89E-01	VT-3	N-VT-1		32.00		20061002	R1238	P	
RHRS	1-63-356	ISI-0020-C-08	F-A	F1.20A	89E-01	VT-3	N-VT-1		08.00		20060921	R1201	P	
RHRS	1-63-359	ISI-0020-C-08	F-A	F1.20A	89E-01	VT-3	N-VT-1		08.00		20060925	R1217	P	
RHRS	1-63-379	ISI-0020-C-07	F-A	F1.20A	89E-01	VT-3	N-VT-1		08.00		20060921	R1197	P	
RHRS	1-74-001	ISI-0020-C-01	F-A	F1.20A	89E-01	VT-3	N-VT-1		10.00		20060919	R1188	P	
RHRS	74-1RHR-R097	ISI-0020-C-04	F-A	F1.20A	89E-01	VT-3	N-VT-1		08.00		20061006	R1259	P	
SIS	1-63-230	ISI-0440-C-04	F-A	F1.20A	89E-01	VT-3	N-VT-1		04.00		20061010	R1282	P	
SIS	1-63-257	ISI-0440-C-07	F-A	F1.20A	89E-01	VT-3	N-VT-1		02.00		20060917	R1172	P	
SIS	1-63-314	ISI-0440-C-05	F-A	F1.20A	89E-01	VT-3	N-VT-1		04.00		20061010	R1280	P	
SIS	47A435-01-050	ISI-0021-C-02	F-A	F1.20A	89E-01	VT-3	N-VT-1		08.00		20061012	R1306	P	
SIS	72-1CS-R102	ISI-0440-C-20	F-A	F1.20A	89E-01	VT-3	N-VT-1		02.00		20061007	R1268	P	
SIS	72-1CS-R104	ISI-0440-C-20	F-A	F1.20A	89E-01	VT-3	N-VT-1		02.00		20061007	R1271	P	
SIS	74-1RHR-R124	ISI-0021-C-01	F-A	F1.20A	89E-01	VT-3	N-VT-1		08.00		20060808	R1266	P	

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Unit: 1

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Certificate of Authorization: N/A

National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
CSS	72-1CS-R146	ISI-0423-C-03	F-A	F1.20B	89E-01	VT-3	N-VT-1		10.00		20061006	R1257	P	
CVCS	1-62A-020	ISI-0424-C-16	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060915	R1141	P	
CVCS	1-62A-085	ISI-0424-C-20	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060915	R1138	P	
CVCS	1-62A-093	ISI-0424-C-19	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060915	R1136	P	
CVCS	1-62A-098	ISI-0424-C-20	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060915	R1142	P	
CVCS	1-62A-124	ISI-0424-C-17	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060917	R1171	P	
CVCS	1-62A-591	ISI-0424-C-18	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060916	R1179	P	
CVCS	47A060-62-017	ISI-0424-C-21	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20061008	R1272	P	
FWS	1-03A-364	ISI-0062-C-05	F-A	F1.20B	89E-01	VT-3	N-VT-1		06.00		20060917	R1170	P	
FWS	1-03A-421	ISI-0062-C-06	F-A	F1.20B	89E-01	VT-3	N-VT-1		06.00		20060916	R1155	P	
FWS	1-03A-428	ISI-0062-C-06	F-A	F1.20B	SR1-01	VT-3	N-VT-1		06.00		20061004	R1159	P	Successive Exam for R0990
FWS	1-03A-499	ISI-0062-C-08	F-A	F1.20B	SR1-01	VT-3	N-VT-1		06.00		20061002	R1242	P	Successive Exam for R0528
FWS	1-03A-500	ISI-0062-C-08	F-A	F1.20B	SR1-01	VT-3	N-VT-1		06.00		20061002	R1243	P	Successive Exam for R0529
RHRS	1-63-377	ISI-0020-C-07	F-A	F1.20B	89E-01	VT-3	N-VT-1		08.00		20060921	R1196	P	
SIS	1-63-122	ISI-0440-C-08	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060918	R1186	P	
SIS	1-63-126	ISI-0440-C-09	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060918	R1183	P	
SIS	1-63-234	ISI-0440-C-04	F-A	F1.20B	89E-01	VT-3	N-VT-1		04.00		20061010	R1281	P	
SIS	1-63-253	ISI-0440-C-06	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060916	R1181	P	
SIS	1-63-262	ISI-0440-C-07	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060917	R1173	P	
SIS	1-63-302	ISI-0440-C-16	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060916	R1182	P	
SIS	1-63-587	ISI-0440-C-14	F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20061013	R1304	P	
CSS	72-1CS-V148	ISI-0423-C-03	F-A	F1.20C	89E-01	VT-3	N-VT-1		10.00		20061006	R1258	P	
CVCS	62-1CVC-V192	ISI-0424-C-13	F-A	F1.20C	89E-01	VT-3	N-VT-1		02.00		20060721	R1130	P	
MSS	1-01A-389	ISI-0011-C-03	F-A	F1.20C	SR1-01	VT-3	N-VT-1		32.00		20060930	R1237	P	Successive Exam for R0526
MSS	1-01A-431	ISI-0011-C-04	F-A	F1.20C	89E-01	VT-3	N-VT-1		32.00		20060917	R1174	P	
RHRS	1-63-349	ISI-0020-C-08	F-A	F1.20C	89E-01	VT-3	N-VT-1		08.00		20060921	R1198	P	
RHRS	63-1SIS-V186	ISI-0107-C-02	F-A	F1.20C	89E-01	VT-3	N-VT-1		03.00		20061007	R1270	P	
SIS	63-1SIS-V044	ISI-0440-C-22	F-A	F1.20C	89E-01	VT-3	N-VT-1		08.00		20060822	R1111	P	
CSS	63-1SIS-R228	ISI-0423-C-02	F-A	F1.20D	89E-01	VT-3	N-VT-1		20.00		20061006	R1153	P	
CSS	63-1SIS-R242	ISI-0423-C-02	F-A	F1.20D	89E-01	VT-3	N-VT-1		12.00		20061006	R1160	P	
CVCS	1-62A-097	ISI-0424-C-20	F-A	F1.20D	89E-01	VT-3	N-VT-1		02.00		20060915	R1139	P	
FWS	1-03A-200	ISI-0062-C-01	F-A	F1.20D	89E-01	VT-3	N-VT-1		16.00		20060917	R1169	P	
FWS	1-03A-374	ISI-0062-C-05	F-A	F1.20D	SR1-01	VT-3	N-VT-1		06.00		20061002	R1240	P	Successive Exam for R0522
FWS	1-03A-409	ISI-0062-C-06	F-A	F1.20D	P89000	VT-3	N-VT-1		06.00		20061114	R1363	P	
FWS	1-03A-480	ISI-0062-C-08	F-A	F1.20D	SR1-01	VT-3	N-VT-1		06.00		20061003	R1245	P	Successive Exam for R0824
FWS	47A401-07-035	ISI-0062-C-08	F-A	F1.20D	89E-01	VT-3	N-VT-1		06.00		20060929	R1229	P	
MSS	1-01A-343	ISI-0011-C-02	F-A	F1.20D	89E-01	VT-3	N-VT-1		32.00		20061007	R1267	P	
MSS	1-01A-428	ISI-0011-C-04	F-A	F1.20D	89E-01	VT-3	N-VT-1		32.00		20060917	R1158	P	
RHRS	1-63-591	ISI-0020-C-08	F-A	F1.20D	89E-01	VT-3	N-VT-1		08.00		20060925	R1218	P	
RHRS	63-1SIS-R195	ISI-0107-C-02	F-A	F1.20D	89E-01	VT-3	N-VT-1		03.00		20061007	R1269	P	
SIS	1-63-494	ISI-0440-C-09	F-A	F1.20D	89E-01	VT-3	N-VT-1		02.00		20060928	R1224	P	
SIS	1-63-571	ISI-0440-C-17	F-A	F1.20D	89E-01	VT-3	N-VT-1		02.00		20061015	R1297	P	
PZR	PZRH-1	CHM-2570-C-04	F-A	F1.41B	89E-01	VT-3	N-VT-1				20060924	R1215	P	
RCP	RCPH-2	ISI-0446-C-01	F-A	F1.41B	SC1-01	VT-3	N-VT-1				20060920	R1194	P	
RV	RVSUPPORT	ISI-0427-C-07	F-A	F1.41B	89E-01	VT-3	N-VT-1				20061118	R1373	P	

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System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
SG	SGH-2-1	CHM-2660-C-03	F-A	F1.41B	P89000	VT-3	N-VT-1				20061113	R1355	P	
SG	SGH-2-2	CHM-2660-C-03	F-A	F1.41B	P89000	VT-3	N-VT-1				20061113	R1356	P	
SG	SGH-2-3	CHM-2660-C-03	F-A	F1.41B	P89000	VT-3	N-VT-1				20061113	R1357	P	
SG	SGH-2-4	CHM-2660-C-03	F-A	F1.41B	P89000	VT-3	N-VT-1				20061113	R1358	P	
CVCS	1-62A-318	ISI-0026-C-02	F-A	F1.41D	89E-01	VT-3	N-VT-1		03.00		20060919	R1189	P	
CVCS	1-62A-319	ISI-0026-C-02	F-A	F1.41D	89E-01	VT-3	N-VT-1		03.00		20060919	R1187	P	
RCS	1-68-033	ISI-0364-C-02	F-A	F1.41D	89E-01	VT-3	N-VT-1		04.00		20060916	R1144	P	
CSS	72-1CS-R126	ISI-0423-C-07	F-A	F1.42A	89E-01	VT-3	N-VT-1		10.00		20060719	R1046	P	
CSS	CSHXH-1-1A	ISI-0371-C-02	F-A	F1.42B	89E-01	VT-3	N-VT-1		60.00		20061011	R1285	P	
CSS	CSPH-1A-A	ISI-0483-C-01	F-A	F1.42B	89E-01	VT-3	N-VT-1		HX		20060828	R1129	P	
RHRS	RHRPH-1A-A	ISI-0117-C-01	F-A	F1.42B	89E-01	VT-3	N-VT-1		PMP		20061014	R1296	P	
SG	SGH-1-1	CHM-2660-C-03	F-A	F1.42B	P89000	VT-3	N-VT-1				20061116	R1369	P	Dual Credit Exam
SG	SGH-1-1	CHM-2660-C-03	F-A	F1.42B	SR1-01	VT-3	N-VT-1				20061116	R1369	P	Dual Credit Exam, Successive Exam for R0704
SG	SGH-1-2	CHM-2660-C-03	F-A	F1.42B	P89000	VT-3	N-VT-1				20061116	R1368	P	Dual Credit Exam
SG	SGH-1-2	CHM-2660-C-03	F-A	F1.42B	SR1-01	VT-3	N-VT-1				20061116	R1368	P	Dual Credit Exam, Successive exam for R0516
SG	SGH-1-3	CHM-2660-C-03	F-A	F1.42B	P89000	VT-3	N-VT-1				20061113	R1359	P	
SG	SGH-1-4	CHM-2660-C-03	F-A	F1.42B	P89000	VT-3	N-VT-1				20061116	R1370	P	Dual Credit Exam
SG	SGH-1-4	CHM-2660-C-03	F-A	F1.42B	SR1-01	VT-3	N-VT-1				20061116	R1370	P	Dual Credit Exam, Successive exam for R0517
CVCS	47A406-02-003	ISI-0424-C-21	F-A	F1.42D	89E-01	VT-3	N-VT-1		02.00		20061009	R1277	P	
FWS	47A401-07-032	ISI-0062-C-05	F-A	F1.42D	89E-01	VT-3	N-VT-1		03.00		20060916	R1152	P	
SIS	63-1SIS-R085	ISI-0440-C-19	F-A	F1.42D	89E-01	VT-3	N-VT-1		02.00		20060822	R1110	P	
AFWS	FWS-079	CHM-2671-C-08	R-A	R1.11	89E-01	UT	N-UT-76	ALT CS	06.00	0.432	20060921	R1211	P	
AFWS	FWS-084	CHM-2671-C-08	R-A	R1.11	89E-01	UT	N-UT-76	ALT CS	06.00	0.432	20060922	R1212	P	
BDS	1-015A-B001-02	ISI-0508-C-01	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80	20061111	R1346	P	
BDS	1-015A-B001-07	ISI-0508-C-01	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80	20060912	R1145	P	
BDS	1-015A-B001-10	ISI-0508-C-01	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80	20061111	R1347	P	
BDS	1-015A-B001-14	ISI-0508-C-01	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80	20060912	R1147	P	
BDS	1-015A-B003-01	ISI-0508-C-04	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80	20061106	R1332	P	
BDS	1-015A-B003-02	ISI-0508-C-04	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80	20061106	R1333	P	
BDS	1-015A-B003-07	ISI-0508-C-04	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80	20061110	R1338	P	
BDS	1-015A-B003-09	ISI-0508-C-04	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80	20060912	R1146	P	
BDS	1-015A-B008-02	ISI-0508-C-05	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80	20061106	R1334	P	
BDS	1-015A-B008-06	ISI-0508-C-05	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80	20060920	R1209	P	
BDS	1-015A-B008-10	ISI-0508-C-05	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80	20061109	R1339	P	
BDS	1-015A-B008-10A	ISI-0508-C-05	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80	20061109	R1340	P	
BDS	1-015A-B008-11	ISI-0508-C-05	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80	20060921	R1208	P	
BDS	1-015A-B014-02	ISI-0508-C-03	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80	20061105	R1335	P	
BDS	1-015A-B014-05	ISI-0508-C-03	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80	20061105	R1336	P	
BDS	1-015A-B014-08	ISI-0508-C-03	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80	20061111	R1348	P	
BDS	1-015A-B014-12	ISI-0508-C-03	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80	20060921	R1210	P	
BDS	1-015A-T002-18	ISI-0508-C-02	R-A	R1.11	89E-01	UT	N-UT-76	ALT CS	04.00	SCH 80	20061018	R1294	P	
BDS	1-015A-T013-30	ISI-0508-C-10	R-A	R1.11	89E-01	UT	N-UT-76	ALT CS	04.00	0.337	20060928	R1235	P	

Owner: TENNESSEE VALLEY AUTHORITY
Chattanooga Office Complex
1101 Market Street
Chattanooga, TN 37402

Plant: WATTS BAR NUCLEAR PLANT
P.O. Box 2000
Spring City, TN 37381-2000

Unit: 1

Certificate of Authorization: N/A

Commercial Service Date: May 27, 1996

National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
CSS	CSF-D066-11	ISI-0421-C-08	R-A	R1.11	89E-01	UT	N-UT-64	WB-83	06.00	0.280	20060908	R1151	P	
CVCS	CVCW-01A	ISI-0050-C-01	R-A	R1.11	89E-01	UT	N-UT-64	WB-20	01.50	0.200	20061006	R1265	P	
CVCS	CVCW-02A	ISI-0050-C-02	R-A	R1.11	89E-01	UT	N-UT-64	WB-20	01.50	0.200	20061010	R1286	P	
CVCS	CVCW-03A	ISI-0050-C-03	R-A	R1.11	89E-01	UT	N-UT-64	WB-20	01.50	0.200	20061001	R1239	P	
CVCS	CVCW-04A	ISI-0050-C-04	R-A	R1.11	89E-01	UT	N-UT-64	WB-20	01.50	0.200	20061003	R1244	P	
FWS	1-003B-B001-20	CHM-2671-C-01	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	16.00	0.843	20061105	R1331	P	
FWS	1-003B-B002-08A	CHM-2671-C-04	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	16.00	0.843	20061005	R1254	P	
FWS	1-003B-B002-08C	CHM-2671-C-04	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	16.00	0.843	20061108	R1337	P	
FWS	1-003B-B002-17A	CHM-2671-C-03	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	16.00	0.843	20061030	R1328	P	
FWS	1-003B-B003-09A	CHM-2671-C-02	R-A	R1.11	P89000	UT	N-UT-76	WB-81	16.00	0.843	20061116	R1354	P	
FWS	1-003B-B003-09D	CHM-2671-C-02	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	16.00	0.843	20061113	R1351	P	
FWS	1-003B-B369-34	CHM-2671-C-05	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	06.00	0.432	20061111	R1344	P	
FWS	1-003B-B370-16	CHM-2671-C-07	R-A	R1.11	P89000	UT	N-UT-76		06.00	0.432	20061114	R1364	P	
FWS	1-003B-B372-17	CHM-2671-C-06	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	06.00	0.432	20061113	R1353	P	
FWS	1-003B-B374-01	CHM-2671-C-07	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	06.00	0.432	20061113	R1352	P	
FWS	1-003B-B375-05A	CHM-2671-C-08	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	06.00	0.432	20061112	R1345	P	
FWS	FWF-D372-28	CHM-2671-C-06	R-A	R1.11	89E-01	UT	N-UT-76	ALT CS	06.00	0.432	20060915	R1176	P	
MSS	1-001A-B001-01	CHM-2669-C-01	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	32.00	01.175	20061115	R1367	P	
MSS	1-001A-B003-01	CHM-2669-C-03	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	32.00	01.175	20061112	R1342	P	
MSS	1-001A-B006-01	CHM-2669-C-04	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	32.00	01.175	20061112	R1343	P	
MSS	1-001A-B009-01	CHM-2669-C-02	R-A	R1.11	P89000	UT	N-UT-76	ALT CS	32.00	01.175	20061115	R1366	P	
RCS	RCS-112	ISI-0365-C-02	R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	04.00	0.531	20061029	R1318	P	
RHRS	RHRF-D053-02	CHM-2636-C-01	R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	14.00	01.250	20061005	R1260	P	
RHRS	RHRS-182	ISI-0421-C-02	R-A	R1.11	89E-01	UT	N-UT-64	WB-83	08.00	0.322	20061013	R1293	P	
RHRS	SIF-D081-01	CHM-2758-C-03	R-A	R1.11	89E-01	UT	N-UT-64	WB-83	08.00	0.322	20061021	R1315	P	96% COVERAGE
SG	1-068D-B001-02	CHM-2547-C-01	R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061104	R1330	P	
SG	1-068D-B002-02	CHM-2547-C-01	R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061102	R1322	P	
SG	1-068D-B004-02	CHM-2547-C-01	R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061101	R1323	P	
SG	1-068D-B005-02	CHM-2547-C-01	R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061104	R1324	P	
SG	1-068F-B001-01	CHM-2547-C-01	R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061105	R1329	P	
SG	1-068F-B002-01	CHM-2547-C-01	R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061102	R1325	P	
SG	1-068F-B003-01	CHM-2547-C-01	R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061101	R1326	P	
SG	1-068F-B004-01	CHM-2547-C-01	R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061104	R1327	P	
SG	RSG-A-C-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050724	R1001	P	
SG	RSG-A-H-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050724	R1007	P	
SG	RSG-B-C-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050809	R1035	P	
SG	RSG-B-H-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050808	R1036	P	
SG	RSG-C-C-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050726	R1012	P	

Owner: TENNESSEE VALLEY AUTHORITY
Chattanooga Office Complex
1101 Market Street
Chattanooga, TN 37402

Plant: WATTS BAR NUCLEAR PLANT
P.O. Box 2000
Spring City, TN 37381-2000

Unit: 1

Certificate of Authorization: N/A

Commercial Service Date: May 27, 1996

National Board Number for Unit: N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
SG	RSG-C-H-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050726	R1013	P	
SG	RSG-D-C-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050731	R1028	P	
SG	RSG-D-H-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050731	R1029	P	
SG	RSGFW-A-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-76	WB-92	16.00	0.923	20050723	R1008	P	
SG	RSGFW-B-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-76	WB-92	16.00	0.923	20050808	R1034	P	
SG	RSGFW-C-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-76	WB-92	16.00	0.923	20050726	R1014	P	
SG	RSGFW-D-SE	CHM-2660-C-04	R-A	R1.11	P89000	UT	N-UT-76	WB-92	16.00	0.923	20050729	R1022	P	
SIS	RHRF-D055-11	CHM-2636-C-08	R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	08.00	0.906	20061004	R1251	P	
SIS	SIF-B-T047-08	ISI-0375-C-19	R-A	R1.11	89E-01	UT	N-UT-64	WB-06	02.00	0.346	20061016	R1299	P	
SIS	SIF-B-T061-01	CHM-2758-C-13	R-A	R1.11	89E-01	UT	N-UT-64	WB-20	01.50	0.281	20061017	R1292	P	
SIS	SIF-D085-06	ISI-0375-C-05	R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	04.00	0.531	20061018	R1307	P	96% COVERAGE
SIS	SIS-107	CHM-2758-C-08	R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	06.00	0.718	20060929	R1236	P	94% COVERAGE
SIS	SIS-113	CHM-2758-C-09	R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	10.00	01.00	20061021	R1316	P	
SIS	SIS-126	CHM-2758-C-10	R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	10.00	01.00	20061006	R1262	P	
SIS	SIS-132	CHM-2758-C-10	R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	06.00	0.718	20061020	R1310	P	
SIS	SIS-242	ISI-0375-C-16	R-A	R1.11	89E-01	UT	N-UT-64	WB-83	03.00	0.438	20061016	R1301	P	
AFWS	103BE374	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1375	P	
AFWS	103BE375	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1375	P	
AFWS	103BE465	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1376	P	
AFWS	103BE466	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1376	E	
AFWS	103BE531	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1377	P	
AFWS	103BN376	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1375	P	
AFWS	103BN467	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1376	P	
BDS	115E141	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1378	P	
BDS	115E312	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1379	P	
BDS	115P042	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1381	P	
BDS	115P071	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1380	P	
BDS	115T041	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1381	P	
BDS	115X021	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1381	P	
BDS	115X040	FAC Program	R-A	R1.18	89E-01	UT	N-UT-26	FAC				R1381	P	

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

APPENDIX II
CYCLE 7 AUGMENTED EXAMINATION PLAN

The following examination plan provides the list and results of examinations performed during the seventh cycle. This plan is sorted by examination category and item number and system. The headings are defined below:

System	System Title Abbreviation

PRZ	Pressurizer	RV	Reactor Vessel
RCP	Reactor Coolant Pump	SIS	Safety Injection System

Component Number	ISI Component Identifier
ISO Drawing	ISI Drawing Number
Category	Code Examination Category
Item Number	Code Item Number
Exam Requirement	Examination Requirement

AUG-03	Welds with multiple repairs, reference SQ 961154 PER
AUG-04	Item examined due to Reactor Vessel and Pressurizer Alloy 600 Issues
AUG-05	Reactor Coolant Pump Shaft

Exam Scheduled	Required Examination Method
NDE Procedure	TVA NDE Procedure Number
Calibration Standard	Calibration Standard Identifier
Exam Date	Date Examination Performed
Exam Report	Examination Report Number
Exam Results	Results of the Examination

P = PASS, examination met the applicable acceptance standards
F = FAIL, examination did not meet the applicable acceptance standards and was repaired or replaced

Comments	Applicable Comments

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

System	Component Number	ISO Drawing	Category	Item Number	Exam Requirement	Exam Scheduled	NDE Procedure	Calibration Standard			Exam Date	Exam Report	Exam Results	Comments
SIS	SIF-D078-03	ISI-0375-C-13	1.0	N/A	AUG-03	UT	N-UT-64	WB-83	24.00	0.375	20060917	R1150	P	
SIS	SIF-D079-11A	ISI-0375-C-12	1.0	N/A	AUG-03	UT	N-UT-64	WB-83	16.00	0.375	20061014	R1300	P	
SIS	SIF-D087-11	CHM-2758-C-05	1.0	N/A	AUG-03	UT	N-UT-64	ALT SS	08.00	0.906	20061019	R1308	P	
SIS	SIF-D092-15	CHM-2758-C-10	1.0	N/A	AUG-03	UT	N-UT-64	ALT SS	06.00	0.719	20061020	R1309	P	
PZR	WP-10-SE	CHM-2570-C-01	1.0	N/A	AUG-04	UT	N-UT-82	WB-10	15	01.500	20060915	R1161	P	Examined prior to performing weld overlay
PZR	WP-11-SE	CHM-2570-C-01	1.0	N/A	AUG-04	UT	N-UT-82	WB-01	06.00	0.790	20060916	R1162	P	Examined prior to performing weld overlay
PZR	WP-12-SE	CHM-2570-C-01	1.0	N/A	AUG-04	UT	N-UT-82	WB-02	08.00	0.840	20060916	R1163	P	Examined prior to performing weld overlay
PZR	WP-13-SE	CHM-2570-C-01	1.0	N/A	AUG-04	UT	N-UT-82	WB-02	08.00	01.00	20060916	R1164	P	Examined prior to performing weld overlay
PZR	WP-14-SE	CHM-2570-C-01	1.0	N/A	AUG-04	UT	N-UT-82	WB-02	08.00	01.00	20060916	R1165	P	Examined prior to performing weld overlay
PZR	WP-15-SE	CHM-2570-C-01	1.0	N/A	AUG-04	UT	N-UT-82	WB-02	08.00	01.00	20060916	R1166	P	Examined prior to performing weld overlay
RV	RVBTMHEAD	ISI-0427-C-08	1.0	N/A	AUG-04	VT-2	N-VT-17				20060922	R1213	P	
RV	RVCLHEAD	CHM-2684-C-01	1.0	N/A	AUG-04	VT-2	N-VT-17				20060922	R1213	P	
RCP	RCP-1-SHAFT	ISI-0447-C03	1.0	N/A	AUG-05	UT	N-UT-80	SHAFT			20061031	R1319	P	No apparent significant changes

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1 Commercial Service Date: May 27, 1996	Certificate of Authorization: N/A National Board Number for Unit: N/A

APPENDIX III

SUMMARY OF WATTS BAR UNIT 1 CYCLE 7
SG EDDY CURRENT INSPECTION/TUBE PLUGGING RESULTS

EDDY CURRENT EXAM TYPE	**RSG 1**	**RSG 2**	**RSG 3**	**RSG 4**	**Totals**
Full Length Bobbin Coil	5128	5127	5128	5128	20511
U-Bend Plus Point	254	254	254	254	1016
Hot Leg Top of Tubesht + Point	5128	5127	5128	5128	20511
Hot Leg Special Int. + Point	433	32	17	36	518
Cold Leg Special Int. + Point	12	19	4	8	43
U-Bend Special Int. + Point	2	0	7	5	14
LLMC Bobbin	57	79	78	79	293
PID + Point	0	0	0	1	1
Total Exams Completed	11014	10638	10616	10639	42907
Total Tubes Examined	5128	5127	5128	5128	20511

INDICATIONS (Tubes)	**RSG 1**	**RSG 2**	**RSG 3**	**RSG 4**	**Totals**
AVB Wear	0	0	0	0	0
Cold Leg Thinning	0	0	0	0	0
ODSCC HTS Axial	0	0	0	0	0
ODSCC HTS Circ	0	0	0	0	0
ODSCC TSP Axial	0	0	0	0	0
ODSCC Freespan Dent	0	0	0	0	0
PWSCC HTS Axial	0	0	0	0	0
PWSCC HTS Circ	0	0	0	0	0
PWSCC TSP Axial	0	0	0	0	0
PWSCC U-bend Axial	0	0	0	0	0
PWSCC U-bend Circ	0	0	0	0	0
Volumetric Indications	0	0	0	1	1
TOTAL	0	0	0	1	1

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

PLUGGING STATUS	RSG 1	RSG 2	RSG 3	RSG 4	Totals
Previously Plugged Tubes (fabrication)	0	1	0	0	1
Damage Mechanism					
AVB Wear	0	0	0	0	0
Cold Leg Thinning	0	0	0	0	0
ODSCC HTS Axial	0	0	0	0	0
ODSCC HTS Circ	0	0	0	0	0
ODSCC TSP Axial	0	0	0	0	0
ODSCC Freespan Dent	0	0	0	0	0
Preventive/Other	0	0	0	1	0
PWSCC HTS Axial	0	0	0	0	0
PWSCC HTS Circ	0	0	0	0	0
PWSCC TSP Axial	0	0	0	0	0
PWSCC U-bend Axial	0	0	0	0	0
PWSCC U-bend Circ	0	0	0	0	0
Loose Parts Wear	0	0	0	0	0
Tubes Plugged Cycle 7	0	0	0	1	1
Total Tubes Plugged	0	1	0	1	2

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

APPENDIX IV
PRESSURE TEST SUMMARY

The following table summarizes the tests and results of the system pressure tests performed during the seventh cycle.

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

WBN Unit 1 Cycle 7 RFO Pressure Test Report
[First Inspection Interval, third period]

System	Procedure No.	Test Type	Exam	Performance Date	Test Results
System Inservice Pressure Test Steam Generator Blowdown System	1-TRI-1-902	System Inservice	VT-2	12/04/2006	Satisfactory
Functional System Pressure Test Motor Driven Auxiliary Feedwater System Train-A - Recirculation	1-TRI-3-901-A	System Functional	VT-2	09/18/2006	Satisfactory
System Inservice Pressure Test Main Feedwater System (Inside Containment)	1-TRI-3-903	System Inservice	VT-2	11/29/2006	Satisfactory
System Inservice Pressure Test Main Feedwater System (Outside Containment)	1-TRI-3-905	System Inservice	VT-2	07/18/2006	Satisfactory
Functional System Pressure Test Motor Driven Auxiliary Feedwater System Train A - Forward Flow Boundary	1-TRI-3-906-A	System Functional	VT-2	09/18/2006	Satisfactory
System Inservice Pressure Test - CVCS Inside Containment	1-TRI-62-901	System Inservice	VT-2	11/29/2006	Satisfactory
System Inservice Pressure Test - CVCS Outside Containment (Operating)	1-TRI-62-902	System Inservice	VT-2	08/18/2006	Satisfactory
System Inservice Pressure Test - CVCS Outside Containment (Shutdown)	1-TRI-62-903	System Inservice	VT-2	09/14/2006	Satisfactory
Functional System Pressure Test - Safety Injection Outside Containment (Train A)	1-TRI-63-901-A	System Functional	VT-2	09/08/2006	Satisfactory
Functional System Pressure Test - Safety Injection Outside Containment (Train B)	1-TRI-63-901-B	System Functional	VT-2	12/06/2006	Satisfactory
Functional System Pressure Test - Safety Injection System Inside Containment (SIP, RHRP, and CLA Injection)	1-TRI-63-902	System Functional	VT-2	12/06/2006	Satisfactory
Safety Injection System boron injection piping and components inside containment (Risk Informed ISI)	1-TRI-63-903	System Functional	VT-2	11/14/2006	Satisfactory
System Functional Test - Safety Injection System Relief Valve Header Piping	1-TRI-63-904	System Functional	VT-2	11/24/2006	Satisfactory
Reactor Coolant System Leakage Test in Lieu of Hydrostatic Testing	1-TRI-68-901	System Inservice	VT-2	11/29/2006	Satisfactory
System Pressure Test Component Cooling System (Train A - Inside Containment)	1-TRI-70-901-A	System Inservice	VT-2	11/29/2006	Satisfactory

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1 Commercial Service Date: May 27, 1996	Certificate of Authorization: N/A National Board Number for Unit: N/A

WBN Unit 1 Cycle 7 RFO Pressure Test Report
[First Inspection Interval, third period]

System	Procedure No.	Test Type	Exam	Performance Date	Test Results
System Functional Pressure Test - Containment Spray System (Train A)	1-TRI-72-901-A	System Functional	VT-2	11/14/2006	Satisfactory
System Functional Pressure Test - Containment Spray System (Train B)	1-TRI-72-901-B	System Functional	VT-2	12/06/2006	Satisfactory
System Functional Pressure Test - RHR System Train A	1-TRI-74-901-A	System Functional	VT-2	09/18/2006	Satisfactory
System Functional Pressure Test - RHR System Train B	1-TRI-74-901-B	System Functional	VT-2	09/18/2006	Satisfactory
Functional System Pressure Test RHR System Sampling Lines	1-TRI-74-902	System Functional	VT-2	09/18/2006	Satisfactory

Owner:	TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant:	WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1		Certificate of Authorization:	N/A
Commercial Service Date: May 27, 1996		National Board Number for Unit:	N/A

APPENDIX V
REPORT FOR REPAIRS AND REPLACEMENTS
ASME FORM NIS-2

Attached are the ASME Form NIS-2s, Report for Repairs and Replacements, for the period from April 2, 2005 to completion of the seventh cycle refueling outage, November 30, 2006.

The following table lists by tracking number the NIS-2s included in this report. The Steam Generators were replaced during this outage, which resulted in the large number of NIS-2 packages. Tracking numbers not listed are either for Code Class 3 or MC components or they were deleted from the Cycle 7 work scope.

TRACKING NUMBER	CODE CLASS	WORK ORDER NUMBER	BRIEF DESCRIPTION
RR-07-022	2	03-004783-001	Add weld to valve 1-RTV-68-454A
RR-07-023	2	03-008794-000	Add weld to valves 1-INJ-62-556, -557, -558, & -559
RR-07-032	1	05-822251-000	Replace RCP No. 1 seal assembly cartridge
RR-07-034	1	05-817979-001	Swap pressurizer relief valve 1-RFV-068-0564
RR-07-052	2	06-813430-000	Replace safety valve 1-SFV-001-526
RR-07-053	2	05-821540-000	Replace relief valve 1-RFV-062-0662-S
RR-07-054	2	05-816597-004	Remove pipe/valves and cap (1-ISV-41-586 & -588)
RR-07-055	2	05-816597-003	Remove Feedwater piping, supports and drain valves
RR-07-056	2	05-816597-000	Remove Feedwater piping, supports and drain valves
RR-07-057	2	05-816597-001	Remove Feedwater piping, supports and drain valves
RR-07-058	2	05-816597-002	Remove Feedwater piping, supports and drain valves
RR-07-059	2	05-816597-006	Remove pipe/valves and cap (1-ISV-41-592 & -594)
RR-07-060	2	05-816597-007	Remove pipe/valves and cap (1-ISV-41-595 & -597)
RR-07-061	2	05-816597-022	Modify support per DCN 51724
RR-07-062	2	05-816597-005	Remove pipe/valves and cap (1-ISV-41-589 & -591)
RR-07-071	1	06-817678-000	Repair weld 1-063B-T058-44
RR-07-072	2	05-817773-001	Remove/re-install SG blowdown piping
RR-07-073	2	05-817773-002	Remove/re-install SG blowdown piping
RR-07-074	2	05-817773-003	Remove/re-install SG blowdown piping
RR-07-075	2	05-817773-004	Remove/re-install SG blowdown piping
RR-07-076	2	05-819015-001	Remove/re-install AFW piping SG #1
RR-07-077	2	05-819015-002	Remove/re-install AFW piping SG #2
RR-07-078	2	05-819015-003	Remove/re-install AFW piping SG #3

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1 Commercial Service Date: May 27, 1996	Certificate of Authorization: N/A National Board Number for Unit: N/A

TRACKING NUMBER	CODE CLASS	WORK ORDER NUMBER	BRIEF DESCRIPTION
RR-07-079	2	05-819015-004	Remove/re-install AFW piping SG #4
RR-07-080	2	05-818887-001	Remove/re-install FW piping SG #1
RR-07-081	2	05-818887-002	Remove/re-install FW piping SG #2
RR-07-082	2	05-819015-005	Remove/re-install AFW support SG #1
RR-07-083	2	05-819015-006	Remove/re-install AFW supports SG #2
RR-07-084	2	05-819015-007	Remove/re-install AFW supports SG #3
RR-07-086	2	05-823976-000	Replace valve disc 1-ISV-062-0547-S
RR-07-087	2	06-810069-000	Replace cent.charging pump seal housing & plate.
RR-07-091	2	05-818916-001	Remove/re-install MS piping SG #1
RR-07-092	2	05-818916-002	Remove/re-install MS piping SG #2
RR-07-093	2	05-818916-003	Remove/re-install MS piping SG #3
RR-07-094	2	05-818916-004	Remove/re-install MS piping SG #4
RR-07-095	2	05-818916-005	Remove/re-install MS support
RR-07-099	1	05-816062-001	Remove/re-install RCS piping SG #1
RR-07-100	1	05-816062-002	Remove/re-install RCS piping SG #2
RR-07-101	1	05-816062-003	Remove/re-install RCS piping SG #3
RR-07-102	1	05-816062-004	Remove/re-install RCS piping SG #4
RR-07-103	2	05-818887-004	Remove/re-install FW piping SG #4
RR-07-104	1	05-816062-018	SG vertical column support mod (SG # 1, 2, 3, & 4)
RR-07-109	2	05-820128-000	Remove/re-install RHR spray piping
RR-07-110	2	05-820128-001	Remove/re-install RHR spray piping
RR-07-111	2	05-818887-003	Remove/re-install FW piping SG #3
RR-07-116	2	05-817773-034	Remove/re-install shell drain piping (SG # 1thru 4)
RR-07-117	2	05-816062-015	Remove/re-install SG upper lateral support
RR-07-118	2	05-816062-017	Remove/re-install SG upper lateral support
RR-07-119	1	05-816062-010	Remove/re-install SG lower lateral support
RR-07-120	1	05-816062-011	Remove/re-install SG lower lateral support
RR-07-121	1	05-816062-012	Remove/re-install SG lower lateral support
RR-07-122	1	05-816062-013	Remove/re-install SG lower lateral support
RR-07-125	2	05-816062-014	Remove/re-install SG upper lateral support
RR-07-129	2	06-815666-000	Replace orifice plate
RR-07-130	2	05-816062-016	Remove/re-install SG upper lateral support
RR-07-136	2	05-820788-005	Replace snubber 1-SNUB-015-4006199
RR-07-139	2	01-015463-000	Replace valve bonnet 1-FCV-062-0128

Owner: TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402	Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000 Spring City, TN 37381-2000
Unit: 1 Commercial Service Date: May 27, 1996	Certificate of Authorization: N/A National Board Number for Unit: N/A

TRACKING NUMBER	CODE CLASS	WORK ORDER NUMBER	BRIEF DESCRIPTION
RR-07-140	2	05-815568-000	Replace valve disc 1-FCV-62-72-A
RR-07-141	2	05-815565-000	Replace valve disc 1-FCV-62-73-A
RR-07-142	2	05-815567-000	Replace valve disc 1-FCV-62-76-A
RR-07-145	1	06-811039-000	Modify support 1-062A-038
RR-07-151	2	05-823405-000	Repair weld 1-TUBE-043-B
RR-07-019	2	04-820384-000	Replace disc 1-ISV-062-0550-S
RR-06-005	2	03-015765-000	Replace flange bolting

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 10/26/2006
1101 Market St., Chattanooga , TN 37402 (Address) — Sheet 1 of 2

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) — Work Order 03-004783-000 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name) — Type Code Symbol Stamp N/A
Watts Bar Nuclear Plant (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system 068 Reactor Coolant

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-RTV-68-454A	Flowserve	14AYE	N/A	N/A	2004	Repaired	Yes

7. Description of Work Add weld metal to existing vendor weld on the above valve.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ REF WO 05-820567-000
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

NIS-2 FORM SHEET 2 OF 2

9-T-10-2006 FORM NIS-2 (Back)

9. Remarks Code Case N-416-2 3 Tracking No. RR-07-022
Applicable Manufacturer's Data Reports to be Attached

Work Order 03-004783-001

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Mike Dodd, Const. Engr. Date 10/26/2006
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 11/16/05 to 10/28/06 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. Eaming Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 10/28 2006

App. V
Pg 5 of 196

FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code , Section III, Div. 1

1. Manufactured by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(Name and Address of N Certificate Holder)

2. Manufactured for Tennessee Valley Authority, PO Box 15500 Knoxville, TN 37901
(Name and Address of Purchaser or Owner)

3. Location of Installation Watts Bar Nuclear Plant, Highway 68, Power Stores Rd. Spring City, TN 37381
(Name and Address)

4. Pump or Valve Valve Nominal Inlet Size ¾" (inch) Outlet Size ¾" (inch)

	(a) Model No. Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	1878#	14AYE	N/A	03-26145-02 Rev. B	2	N/A	2004
(2)							
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. 1878 3/4" 1878 T-GBI BELLOWS
(Brief description of service for which equipment was designed)

26145

6. Design Conditions 2485 (Pressure) psi 650 (Temperature) °F or Valve Pressure Class 1878 (1)

7. Cold Working Pressure 4507 psi at 100 °F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
(b) Forgings			
55715	SA479 type 316	Flowserve	BODY
150617	SA479 type 316	Dubose	BODY EXTENSION
71934-1	SA479 type 316	Colonial	BONNET
E593	A564-630-1075	Flowserve	DISC

(1) For manually operated valves only

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

APP. V 4
PG 6 OF 196

Valve S/N 14AYE through *****

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
(d) Other Parts			
440715	SA376 T304	CONSOLIDATED POWER SUPPLY	PIPE

9. Hydrostatic test 6775 psi. Disk Differential test pressure 4958 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. 1., Edition 1986 Addenda No, Code Case No. N/A, Date 4/8/04

Signed Flowserve (N Certificate Holder) by

Our ASME Certificate of Authorization No. N-1562 to use the N (N) symbol expires 11-26-06 (Date)

CERTIFICATION OF DESIGN

Design information on file at Flowserve Corporation Raleigh, NC

Stress analysis report (Class 1 only) on file at Flowserve Corporation Raleigh, NC

Design specifications certified by (1) Floyd Bensinger

PE State PA Reg. No. PE-31002-E

Stress analysis certified by (1) Ron S. Farrell

PE State NC Reg. No. 028656

(1) Signature not required. List name only.

CERTIFICATE OF SHOP 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 North Carolina and employed by HSB CT of Hartford Connecticut have inspected the pump, or valve, described in this Data Report on 4 1 8 104, and state that, to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with ASME Code, Section III.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this s Data 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.

Date 4 1 8 104

Signed (Inspector) Commissions NC1421 (Nat'l Bd., State, Prov. and No.)

APP. V 5

PG 7 OF 196

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga , TN 37402 (Address)

Date 10/22/2006
Sheet 1 of 6

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

Unit Unit 1
Work Order 03-008794-000 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name)
Watts Bar Nuclear Plant (Address)

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

4. Identification of system 062 Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-INJ-62-556	Flowserve	09AXM	N/A	N/A	2003	Repaired	Yes
1-INJ-62-557	Flowserve	08AXM	N/A	N/A	2003	Repaired	Yes
1-INJ-62-558	Flowserve	06AXM	N/A	N/A	2003	Repaired	Yes
1-INJ-62-559	Flowserve	07AXM	N/A	N/A	2003	Repaired	Yes

7. Description of Work Add weld metal to existing vendor weld on the above valves.

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure X ISLT PER WO 03-008794-001
Other Pressure _____ psi Test Temp _____ °F

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.

NIS-2 FORM SHEET 2 OF 6 10/22/2006

FORM NIS-2 (Back)

9. Remarks Code Case N-416-2 3 Tracking No. RR-07-023
Applicable Manufacturer's Data Reports to be Attached

Work Order 03-008794-000 10/21/2006

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Mike Dodd CONST. ENGR. Date 10/22/2006
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 11/16/05 to 10/26/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 10/26 20 06

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FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code, Section III, Div. 1

1. Manufactured by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(Name and Address of N Certificate Holder)

2. Manufactured for TVA P.O. BOX 15500 KNOXVILLE TN 37901-5500
(Name and Address of Purchaser or Owner)

3. Location of Installation TVA- WATTS BAR NUCLEAR PLANT, CHICHAMAUGA TN
(Name and Address)

4. Pump or Valve Valve Nominal Inlet Size 1" (inch) Outlet Size 1" (inch)

	(a) Model No. Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	1878-YGB	06AXM	N/A	03-25196-01 / A	2	N/A	2003
(2)		07AXM					
(3)		08AXM					
(4)	1878-YGB	09AXM	N/A	03-25196-01 / A	2	N/A	2003
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. 1" Y GLOBE VALVE / N-2 DATA REPORT FOR 1" PIPE STUBS ATTACHED
(Brief description of service for which equipment was designed)

25196

6. Design Conditions 2735 (Pressure) psi 200 (Temperature) °F or Valve Pressure Class 1878 (1)

7. Cold Working Pressure 4507 psi at 100 °F.

8. *Pressure Retaining Pieces*

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
M5597	SA351 GR CF8M	FLOWSERVE	BODY
(b) Forgings			
724910	SA479 T316	FLOWSERVE	BONNET
H586	SA564 GR630 H1075	NOVA	DISC
A14291	SA564 GR630 H1075	ASKEW	GASKET RETAINER

(1) For manually operated valves only

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM NPV-1 (Back)

Valve S/N _06AXM_ through _09AXM_

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
(d) Other Parts			

9. Hydrostatic test 6775 psi. Disk Differential test pressure 4958 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. 1., Edition 1986 Addenda NO, Code Case No. N/A, Date

Signed Flowserve Corporation (N Certificate Holder) by

Our ASME Certificate of Authorization No. N-1562 to use the N (N) symbol expires 11-26-03 (Date)

CERTIFICATION OF DESIGN

Design information on file at FLOWSERVE CORPORATION

Stress analysis report (Class 1 only) on file at

Design specifications certified by (1) LEO F LANE

PE State TN Reg. No. 15195

Stress analysis certified by (1)

PE State Reg. No.

(1) Signature not required. List name only.

CERTIFICATE OF SHOP 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 North Carolina and employed by HSB CT of Hartford Connecticut have inspected the pump, or valve, described in this Data Report on 10/7/03, and state that, to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with ASME Code, Section III.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this s Data 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.

Date 10/7/03

Signed J. M. Tull (Inspector) Commissions NC1421 (Nat'l Bd., State, Prov. and No.)

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III

Not to Exceed One Day's Production

1. Manufactured and certified by FLOWSERVE CORPORATION, 1900 S. SAUNDERS ST. RALEIGH, NC 27603
(name and address of NPT Certificate Holder)

2. Manufactured for TVA P.O. BOX 15500, KNOXVILLE TN 37901-5500
(name and address of Purchaser)

3. Location of installation TVA WATTS BAR NUCLEAR PLANT CHICHAMAUGA TN
(name and address)

4. Type: 03-25196-01/A (drawing no.) | SA376-304 (mat'l. spec. no.) | N/A (tensile strength) | N/A (CRN) | 2003 (year built)

5. ASME Code, Section III, Division 1: 1986 (edition) | NO (addenda date) | 2 (class) | N/A (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks: 1"1878 PIPE STUBS WELDED TO : VALVE 06AXM S/N 142, 07AXM S/N 344, 08AXM S/N 546, 09AXM S/N 748

8. Nom. thickness (in.) N/A Min. design thickness (in.) PER #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	B3TB 142	N/A
(2)	B3TB 344	N/A
(3)	B3TB 546	N/A
(4)	B3TB 748	N/A
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)	MIF #	52932
(47)		
(48)	Page 15	of 48
(49)		
(50)		

10. Design pressure 2235 psi. Temp. 200 °F. Hydro. test pressure 3425 (when applicable) at temp. °F

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* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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(12/88) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. B3TB-1 through B3TB-8

CERTIFICATION OF DESIGN

Design specifications certified by LEO F LANE (when applicable) P.E. State TN Reg. no. 15195

Design report* certified by _____ (when applicable) P.E. State _____ Reg. no. _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PARTS conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N 1563 Expires 11/26/03

Date 10/7/03 Name FLOWSERVE CORPORATION (NPT Certificate Holder) Signed _____ (authorized representative)

CERTIFICATE OF 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 NORTH CAROLINA and employed by HSB CT of HARTFORD CT have inspected these items described in this Data Report on 10/7/03, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 10/7/03 Signed _____ (Authorized Inspector) Commissions NC1421 [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

MIF # 52932

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY — Date 1-12-06
Name
1101 Market St., Chattanooga, TN 37402 — Sheet 1 of 2
Address
2. Plant Watts Bar Nuclear Plant — Unit Unit 1
Name
P. O. Box 2000, Spring City, TN 37381 — W/O 05-822251-000
Address — Repair Organization P.O. No., Job No., etc.
3. Work Performed by MECHANICAL MAINTENANCE — Type Code Symbol Stamp N/A
Name
P.O. BOX 2000 SPRING CITY,TN 37381 — Authorization No N/A
Address
Expiration Date N/A

4. Identification of system 068, Reactor Coolant System

5. (a) Applicable Construction Code SECTION III 19 74 Edition, S74 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RCP CARTRIDGE SEAL Assembly	Westinghouse	2181	NA	2074203-601		Replacement	NO

7. Description of Work Replace No# 1 cartridge Seal Assembly per TRI-68-901 AND 1-TRI-68-6 TEV 1-18-06

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

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FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-032
Applicable Manufacturer's Data Reports to be Attached

WO 05-822251-000

The Cartridge seal being Installed (S/N 2181) WAS Removed From RCP-4 By WO 02-012528-000 And Refurbished By WO 03-009361-001

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the repair or replacement rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Callen Maint Specialist Date 11/29 20 06
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 11/23/06 to 12/19/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/19 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date 11/22/06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet 1 of 1
2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**
P. O. Box 2000, Spring City, TN 37381 (Address) **W/O 05-817979-001** (Repair Organization P.O. No., Job No., etc.)
3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**
P.O. BOX 2000 SPRING CITY,TN 37381 (Address) Authorization No **N/A**
Expiration Date **N/A**
4. Identification of system **068 – REACTOR COOLANT**
5. (a) Applicable Construction Code **SECTION III** 19 **71** Edition, **w72** Addenda, **N/A** Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-RFV-068-0564	CROSBY	N56964-10-0033	906	N/A	83	REPLACED	Y
1-RFV-068-0564	CROSBY	N56964-10-0096	850	N/A	N/A	REPLACEMENT	Y
RJ 9-20-06 RI SUPER NUT FASTENER 1 3/16" & 1"	NOVA	HT # 49419	N/A	~~N/A~~	1998	REPLACEMENT	N
	QC 1/5/07 Pid not replace.						

7. Description of Work **DROP AND SWAP OF PZR RELIEF VALVE 1-RFV-068-0564**
RJ 9-20-06 RI ~~REPLACE SUPER NUT ASSY~~ QC 1/5/07 Transferred to 06-818055-000 (1-TRI-68-901)
8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ☑ Other Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-034 CODE CASE N/A WO 05-817979-001
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Callin Maint Specialist Date 11/22 20 06
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 1/31/06 to 1/9/07 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 1/9 20 07

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date 12-7-06

1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**

P. O. Box 2000, Spring City, TN 37381 (Address) **W/O 06-813430-000** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**

P.O. BOX 2000 SPRING CITY,TN 37381 (Address) Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system **001 – MAIN STEAM**

5. (a) Applicable Construction Code **SECTION III** 19 **74** Edition, **W74** Addenda, **N/A** Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-SFV-001-0526 RELIEF VALVE	**DRESSER CONSOLIDATED**	**BS06215**	**N/A**	**N/A**	77	REPLACED	**Y**
1-SFV-001-0526 RELIEF VALVE	**DRESSER CONSOLIDATED**	BS06218 QC 11/29/06	N/A	N/A	N/A Refurbished & tested	REPLACEMENT	Y

7. Description of Work **REMOVE/REPLACED COMPLETE SAFETY VALVE**

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ☑
Other Pressure ____ psi Test Temp ____ °F

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.

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FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-052 CODE CASE N/A WO 06-813430-000
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Replacement conforms to the repair or replacement rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Calli Maint Specialist Date 11/29 20 06
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 5/15/06 to 12/7/06 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. Eanigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/7 20 06

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** Name
1101 Market St., Chattanooga, TN 37402 Address

Date 11/30/06

Sheet 1 of X2 12-7-06

2. Plant **Watts Bar Nuclear Plant** Name
P. O. Box 2000, Spring City, TN 37381 Address

Unit **Unit 1**

W/O 05-821540-000 Repair Organization P.O. No., Job No., etc.

3. Work Performed by **MECHANICAL MAINTENANCE** Name
P.O. BOX 2000 SPRING CITY,TN 37381 Address

Type Code Symbol Stamp **N/A**

Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system **062 – CVCS**

5. (a) Applicable Construction Code **SECTION III** 19 **71** Edition, **S72** Addenda, **N/A** Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-RFV-062-0662-S RELIEF VALVE	**CROSBY**	**N56903-00-0006**	**N/A**	**N/A**	71	REPLACED	**Y**
1-RFV-062-0662-S RELIEF VALVE	**CROSBY**	**N56903-00-0010**	N/A	N/A	71	REPLACEMENT	Y

7. Description of Work **REMOVE/REPLACED COMPLETE SAFETY VALVE**

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ☒ LLRT per 06-822409-000 & 1-TRI-68-901
Other Pressure _____ psi Test Temp _____ °F

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.

WO 06-818055-000

FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-053 CODE CASE N/A WO 05-821540-000
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Maint Specialist Date 11/30 20 06
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 5/16/06 to 12/7/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/7 20 06

HARD COPY RETAINED

S.O. 220

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

(4)

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES — G.C.-44B
As required by the Provisions of the ASME Code Rules

DATA REPORT
Safety and Safety Relief Valves — NB-164

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick Street, Wrentham, Ma 02093
Name and Address

Model No. 3-35-TD-bR Order No. N-302949 Contract Date 3-30-73
Westinghouse Electric Corp., Nuclear

2. Manufactured For Energy Systems, Pittsburgh, Pa 15230 Order No. 546-CCK-183-21-3N
Name and Address

Owner Tennessee Valley Authority, Watts Bar Nuclear Power Station, Unit #2
Name and Address

Location of Plant Near Spring City, Tennessee 37381

3. Valve Identification RV-2-9117 WBT Serial No. N56903-00-0010 Drawing No. DS-C-A-56903 Rev. A

Type Relief — Orifice Size J inch — Type — inch — Inlet 2 inch — Outlet 3 inch
Safety Safety Relief Pilot Power Actuated

4. Set Pressure (PSIG) 500 — 400° F
Rated Temperature

Rated Capacity 500 GPM Water @ 10 % Overpressure — Blowdown (MAX) 10% of S.P.

Hydrostatic Test (PSIG) Inlet 950 — Outlet 425

5. The material, design, construction and workmanship comply with ASME Code Section III

Class 2 Edition 1971 Addenda Date Summer 1972

6. Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body	N90450-35-0002	ASTM-A351-72 Gr. CF8M ASME-SA351 Gr. CF8M
Bonnet	N90452-35-0010	ASTM-A216-70 Gr. WCB ASME-SA216 Gr. WCB
b. Bar Stock and Forgings		
Support Rods		
Nozzle	N90137-42-0055	ASME-SA-79 Type 316 ASTM-A479-71 Type 316
Disc Insert	N90448-35-0042	ASME-SA479 Type 316 ASTM-A193-70 Gr. B8
Spring Washers Top / Bottom	N86340-43-0[illegible]	ASME-SA193 Gr. B8 ASTM-A193-70 Gr. B8
Adjusting Bolt	N88635-41-0157	ASME-SA193 Gr. B8 ASTM-A193-73 Gr. B8
Spindle	N88674-39-0037	ASME-SA193 Gr. B8

SO 220

REG. NO. 54114-1
ITEM NO. 5A
209 NO. 79-5693-A

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S-2-220

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	Serial No. or Identification	Material Specification Including Type & Grade
c. Spring	MX-2600-0044	ASTM-A638 Gr. 660
d. Bolting		
e. Other Parts such as Pilot Components		
Bonnet Stud	89289	ASTM-A453 Gr. 660 ASME-SA453 Gr. 660 ASTM-A193 Gr. B8 ASME-SA193 Gr. B8
Bonnet Stud Nut	89293	

We certify that the statements made in this report are correct.

Date 10-6 19 75 Signed Crosby Valve & Gage Co. By [signature] Manufacturer (or) Manager

Certificate of Authorization No. 926 expires October 28, 1977

CERTIFICATE OF SHOP 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 Mass. and employed by Factory Mutual Systems*, Norwood, Mass. have inspected the equipment described in this Data Report on ____ 19__ and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data 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.

Date [illegible] Commissions National Board, State, Province and No.

Inspector

*Arkwright-Boston Manufacturers Mutual Insurance Company - Mutual Boiler & Machinery Division.

REC. NO. 54[illegible]-1
ITEM NO. 54
209 NO. 76-593-A

9-29-

DATE

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY — Date Nov. 3, 2006
Name
1101 Market St., Chattanooga , TN 37402 — Sheet 1 of 2
Address
2. Plant Watts Bar Nuclear Plant — Unit Unit 1
Name
P. O. Box 2000, Spring City, TN, 37381 — Work Order 05-816597-004
Address — Repair Organization P.O. No., Job No., etc.
3. Work Performed by TVA Modifications — Type Code Symbol Stamp N/A
Name
Watts Bar Nuclear Plant — Authorization No N/A
Address
Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	NA	Replacement	No
1-ISV-41-588	N/A	N/A	N/A	N/A	NA	Deleted	No
1-ISV-41-586	N/A	N/A	N/A	N/A	NA	Deleted	No

7. Description of Work Remove piping, valves and add caps per DCN 51724

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ■ (See WO 05-816597-009)
Other Pressure _____ psi Test Temp _____ °F 9/7-19-06

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.

NIS-2 FORM SHEET 2 OF 2

FORM NIS-2 (Back)

9. Remarks **CODE CASE: N-416-3** Tracking No. RR-07-054
Applicable Manufacturer's Data Reports to be Attached

WO 05-816597-004

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROGRAMS ENGR. Date Nov. 4 20 06
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 7/20/06 to 11/4/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/4 20 06

App. V

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga , TN 37402 (Address)
Date 11/9/06
Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name)
P. O. Box 2000, Spring City, TN, 37381 (Address)
Unit Unit 1
Work Order : 05-816597-003 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name)
Watts Bar Nuclear Plant (Address)
Type Code Symbol Stamp N/A
Authorization No N/A
Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	NA	Replaced	No
1-03A-581	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-582	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-583	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-584	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-585	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-586	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-589	N/A	N/A	N/A	N/A	NA	DELETED	NO

7. Description of Work Remove piping, valves and supports and add caps per DCN 51724

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ■ (See WO 05-816597-008)
Other Pressure _____ psi Test Temp _____ °F 9-12 9-19-06

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.

FORM NIS-2 OWNERS REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 11/9/06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____
2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) — **WORK ORDER : 05-816597-003** (Repair Organization P.O. No., Job No., etc.)
3. Work Performed by TVA MODIFICATIONS (Name) — Type Code Symbol Stamp N/A
WATTS BAR NUCLEAR PLANT (Address) — Authorization No N/A
Expiration Date N/A
4. Identification of system 003 FEEDWATER
5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-DRV-3-524	NA	NA	NA	NA	NA	DELETED	NO
1-DRV-3-525	NA	NA	NA	NA	NA	DELETED	NO
1-TW-3-180	NA	NA	NA	NA	NA	DELETED	NO
1-FCV-3-188	NA	NA	NA	NA	NA	DELETED	NO

NIS-2 FORM SHEET 2 OF 2

FORM NIS-2 (Back)

9. Remarks **CODE CASE: N-416-3** Tracking No. RR-07-055
Applicable Manufacturer's Data Reports to be Attached

WO 05-816597-003

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed BOP System Engs. Date 11/9/06 20 06
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 7/19/06 to 11/10/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/10 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 11/9/2006
1101 Market St., Chattanooga , TN 37402 (Address) — Sheet 1 of 3

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) — Work Order 05-816597-000 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name) — Type Code Symbol Stamp N/A
Watts Bar Nuclear Plant (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	NA	Replacement	No
1-03A-521	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-522	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-523	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-524	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-525	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-526	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-527	N/A	N/A	N/A	N/A	NA	DELETED	NO

7. Description of Work Remove piping, valves and supports and add caps per DCN 51724

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ■ (See WO 05-816597-008) 7-19-06
Other Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 11/9/2006
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet 2 of 3
2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) — WORK ORDER 05-816597-000 (Repair Organization P.O. No., Job No., etc.)
3. Work Performed by TVA MODIFICATIONS (Name) — Type Code Symbol Stamp N/A
WATTS BAR NUCLEAR PLANT (Address) — Authorization No N/A
Expiration Date N/A
4. Identification of system 003 FEEDWATER
5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-03A-528	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-530	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-531	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-532	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-533	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-534	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-FCV-3-185	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-DRV-3-520	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-DRV-3-521	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-TW-3-176	N/A	N/A	N/A	N/A	NA	DELETED	NO
47A401-2-12	N/A	N/A	N/A	N/A	NA	DELETED	NO

NIS-2 FORM SHEET 2 OF 3 wmd 11/9/2006

FORM NIS-2 (Back)

9. Remarks **CODE CASE: N-416-3** Tracking No. QR-07-056
Applicable Manufacturer's Data Reports to be Attached

WO 05-816597-000

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Mike Todd, Const. ENGR. Date 11/9 20 06
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 7/20/06 to 11/10/06 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. Ewing Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/10 20 06

APP. V
PG 31 OF 196

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 11-8-06
1101 Market St., Chattanooga , TN 37402 (Address) — Sheet 1 of 3

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) — Work Order 05-816597-001 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name) — Type Code Symbol Stamp N/A
Watts Bar Nuclear Plant (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	NA	Replaced	No
1-03A-540	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-543	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-544	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-546	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-547	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-548	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-FCV-3-186	N/A	N/A	N/A	N/A	NA	DELETED	NO

7. Description of Work Remove piping, valves and supports and add caps per DCN 51724

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ■ (See WO 05-816597-008)
Other Pressure _____ psi Test Temp _____ °F 7-19-06

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.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga, TN 37402 (Address)
Date 11-8-06
Sheet 2 of 3

2. Plant Watts Bar Nuclear Plant (Name)
P. O. Box 2000, Spring City, TN, 37381 (Address)
Unit Unit 1
WORK ORDER :05-816597-001 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA MODIFICATIONS (Name)
WATTS BAR NUCLEAR PLANT (Address)
Type Code Symbol Stamp N/A
Authorization No N/A
Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-DRV-3-516	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-DRV-3-517	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-TW-3-177	N/A	N/A	N/A	N/A	NA	DELETED	NO

App. V
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NIS-2 FORM SHEET 2 OF 3 (3 3) 11-8-06

FORM NIS-2 (Back)

9. Remarks **CODE CASE: N-416-3** Tracking No. RR-07-057
Applicable Manufacturer's Data Reports to be Attached

WO 05-816597-001

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROGRAMS ENGR. Date NOV. 8 20 06
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 7/20/06 to 11/8/06 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 11/8 20 06

App. V

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 11/9/2006

1101 Market St., Chattanooga , TN 37402 (Address) Sheet 1 of 3

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1

P. O. Box 2000, Spring City, TN, 37381 (Address) **Work Order : 05-816597-002**

3. Work Performed by TVA Modifications (Name) Type Code Symbol Stamp N/A

Watts Bar Nuclear Plant (Address) Authorization No N/A

Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	NA	Replaced	No
1-03A-560	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-563	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-564	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-566	N/A	N/A	N/A	N/A	NA	DELETED	NO
1-03A-567	N/A	N/A	N/A	N/A	NA	DELETED	NO
~~1-03A-569~~	~~N/A~~	~~N/A~~	~~N/A~~	~~N/A~~	~~NA~~	~~DELETED~~	~~NO~~
1-FCV-3-187	N/A	N/A	N/A	N/A	NA	DELETED	NO

cmo 11/9/06

7. Description of Work Remove piping, valves and supports and add caps per DCN 51724

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ■ (See WO 05 ~~50~~-816597-008)
Other Pressure _____ psi Test Temp _____ °F 7-19-06

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.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 11/9/2006
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet 2 of 3

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) — **WORK ORDER : 05-816597-002** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA MODIFICATIONS (Name) — Type Code Symbol Stamp N/A
WATTS BAR NUCLEAR PLANT (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-DRV-3-512	NA	NA	NA	NA	NA	DELETED	NO
1-DRV-3-513	NA	NA	NA	NA	NA	DELETED	NO
1-TW-3-178	NA	NA	NA	NA	NA	DELETED	NO

App. V
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NIS-2 FORM SHEET 2 OF 3 (3 3) WMO 11/9/2006

FORM NIS-2 (Back)

9. Remarks **CODE CASE: N-416-3** Tracking No. RR-07-058
Applicable Manufacturer's Data Reports to be Attached

WO 05-816597-002

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Mike Codd, Const. Engr. Date 11/9 20 06
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 7/20/06 to 11/10/06 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. Eanigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/10 20 06

APP. V

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 11/4/06
1101 Market St., Chattanooga , TN 37402 (Address) — Sheet 1 of 2

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) — Work Order 05-816597-006 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name) — Type Code Symbol Stamp N/A
Watts Bar Nuclear Plant (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	NA	Replacement	No
1-ISV-41-592	N/A	N/A	N/A	N/A	NA	Deleted	No
1-ISV-41-594	N/A	N/A	N/A	N/A	NA	Deleted	No

7. Description of Work Remove piping, valves and add caps per DCN 51724

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ■ (See WO 05-816597-009)
Other Pressure _____ psi Test Temp _____ °F 7-20-06

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.

FORM NIS-2 (Back)

9. Remarks **CODE CASE: N-416-3** Tracking No. RR-07-059
Applicable Manufacturer's Data Reports to be Attached

WO 05-816597-006

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROGRAMS ENGR. Date Nov. 4 20 06
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 7/20/06 to 11/4/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/4 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga , TN 37402 (Address)

Date 11/10/06

Sheet ____ of ____

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

Unit Unit 1

Work Order 05-816597-007 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name)
Watts Bar Nuclear Plant (Address)

Type Code Symbol Stamp N/A

Authorization No N/A

Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	NA	Replacement	No
1-ISV-41-595	N/A	N/A	N/A	N/A	NA	Deleted	No
1-ISV-41-597	N/A	N/A	N/A	N/A	NA	Deleted	No

7. Description of Work Remove piping, valves and add caps per DCN 51724

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ■ (See WO 05-816597-009)
Other Pressure ____ psi Test Temp ____ °F 7-20-06

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.

FORM NIS-2 (Back)

9. Remarks **CODE CASE: N-416-3** Tracking No. RR-07-060
Applicable Manufacturer's Data Reports to be Attached

WO 05-816597-007

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed [signature] Bob Sam Eng Date 11/10/06 20 06
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 7/20/06 to 11/10/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/10 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga , TN 37402 (Address)

Date 11/8/06

Sheet 1 of 2

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

Unit Unit 1

Work Order 05-816597-022
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA Modifications (Name)
Watts Bar Nuclear Plant (Address)

Type Code Symbol Stamp N/A

Authorization No N/A

Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
03B-1AFW-R221	N/A	N/A	N/A	N/A	NA	Replacement	No

7. Description of Work Rework support 03B-1AFW-R221 per DCN 51724

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure
Other Pressure _____ psi Test Temp _____ °F

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.

NIS-2 FORM SHEET 2 OF 2

FORM NIS-2 (Back)

9. Remarks Tracking No. RR-07-061
Applicable Manufacturer's Data Reports to be Attached

WO 05-816597-022

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis ISI PROGRAMS ENGR Date Nov. 8 20 06
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 7/20/06 to 11/8/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/8 20 06

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 11/8/2006
1101 Market St., Chattanooga , TN 37402 (Address) — Sheet 1 of 2

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) — Work Order 05-816597-005 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name) — Type Code Symbol Stamp N/A
Watts Bar Nuclear Plant (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system 003 FEEDWATER

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	NA	Replacement	No
1-ISV-41-591	N/A	N/A	N/A	N/A	NA	Deleted	No
1-ISV-41-589	N/A	N/A	N/A	N/A	NA	Deleted	No
1-TTV-41-590	N/A	N/A	N/A	N/A		DELETED	NO

7. Description of Work Remove piping, valves and add caps per DCN 51724

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ■ (See WO 05-816597-009)
Other Pressure _____ psi Test Temp _____ °F

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.

GTZ 7-20-06

GTZ 1-25-07

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NIS-2 FORM SHEET 2 OF 2

FORM NIS-2 (Back)

9. Remarks **CODE CASE: N-416-3** Tracking No. RR-07-062
Applicable Manufacturer's Data Reports to be Attached

WO 05-816597-005

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Mk Todd, CONST. ENGR. Date 11/8 20 06
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 7/20/06 to 11/10/06 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 11/10 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date **08-01-2006**

1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**

P. O. Box 2000, Spring City, TN 37381 (Address) **W/O 06-817678-000** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**

P.O. BOX 2000 SPRING CITY,TN 37381 (Address) Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system **063- S.I.S**

5. (a) Applicable Construction Code SECTION III 19 **71** Edition, S71 Addenda, **N/A** Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-063B-T058-44	TVA	N/A		SIF-B-T058-44 N/A	N/A	**repaired**	N
1-063B-T058-02	TVA	N/A		N/A 8-16-06	N/A	**Replacement**	N
1-063B-T058-04	TVA	N/A		N/A	N/A	**Replacement**	N
1-063B-T058-43	TVA	N/A		N/A	N/A	**Replacement**	N
1-063B-T058-44A	TVA	N/A		N/A	N/A	**Replacement**	N

7. Description of Work **REPAIR WELD 44 AND IF NEEDED REPLACE WELDS 02, 04, 43, & 44A**

8-16-06 1-063B-T058-

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure

Other Pressure ____ psi Test Temp ____ °F

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.

FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-071 CODE CASE N-416-2 ~~N-416~~ 8-3-06
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the repair or replacement rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Calli Maint Coordinator Date 8/4 20 06
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 8/1/06 to 8/16/06 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. Carrigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 8/16 20 06

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 12-12-06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) WO #: 05-817773-001

3. Work Performed by Bechtel Construction Company (Name) Repair Organization P.O. No., Job No., etc. Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) Authorization No N/A
Expiration Date N/A

4. Identification of system HOT/COLD BLOWDOWN PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-015	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL AND RESINTALLATION OF HOT/COLD BLOWDOWN PIPING

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-1-902
Other ☐ Pressure _____ psi Test Temp _____ °F (WO# 05-820759-000)

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-072 WO Number: 05-817773-001
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed [signature] Field Engineer Date 12-5 20 06
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 8/4/06 to 12/12/06 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. Emrich Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12-12-06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-817773-002

3. Work Performed by Bechtel Construction Company (Name) — Repair Organization P.O. No., Job No., etc. — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system HOT/COLD BLOWDOWN PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-015	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL AND RESINTALLATION OF HOT/COLD BLOWDOWN PIPING

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-902 (WO# 05-820759-000)
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-073 WO Number: 05-817773-002
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed [signature] Field Engineer Date 12-5 20 06
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 8/4/06 to 12/12/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date December 1, 2006
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-817773-003
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system HOT/COLD BLOWDOWN PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-015	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL AND RESINTALLATION OF HOT/COLD BLOWDOWN PIPING

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-1-90.2
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-074 WO Number: 05-817773-003
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis Field Engineer Date December 1, 20 06
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 8/4/06 to 12/12/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12-12-06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-817773-004

3. Work Performed by Bechtel Construction Company (Name) — Repair Organization P.O. No., Job No., etc. — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system HOT/COLD BLOWDOWN PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-015	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL AND RESINTALLATION OF HOT/COLD BLOWDOWN PIPING SG#4

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-1-902
Other ☐ Pressure _____ psi Test Temp _____ °F (WO# 05-820759-000)

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-075 WO Number: 05-817773-004
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed [signature] Field Engineer Date 12-5 20 06
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 8/4/06 to 12/12/06 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. Eanigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

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DUPLICATE
ORIGINAL

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12-8-06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-819015-001 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system AUX FEEDWATER PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-PIPE-003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work Removal & Reinstallation of Aux Feedwater Piping STM. GEN #1
RE-INSTALL EXISTING PIPING. KKe 11/30/06

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-3-903
Other ☐ Pressure ____ psi Test Temp ____ °F WO#05-820596-000
* Visual leak check of all welds at fill of secondary side to an indicated narrow range of 30%.

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-076 WO Number: 05-819015-001
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer Date December 5, 20 06
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 8/8/06 to 12/8/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

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DUPLICATE
ORIGINAL

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY — Date 12/5/06
Name
1101 Market St., Chattanooga, TN 37402 — Sheet ____ of ____
Address

2. Plant Watts Bar Nuclear Plant — Unit Unit 1
Name
P. O. Box 2000, Spring City, TN 37381 — WO #: 05-819015-002
Address — Repair Organization P.O. No., Job No., etc.

3. Work Performed by Bechtel Construction Company — Type Code Symbol Stamp N/A
Name
P. O. Box 549, Soddy-Daisy, TN 37384 — Authorization No N/A
Address
Expiration Date N/A

4. Identification of system AUX FEEDWATER PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-PIPE-003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work Removal & Reinstallation of Aux Feedwater Piping STM. GEN #2
RE-INSTALL EXISTING PIPING

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ✓ 1-TRI-3-903
Other ☐ Pressure ____ psi Test Temp ____ °F (Work 05-820596-000)

* Visual leak check of welds at fill of secondary side to an indicated narrow range level of at least 30%

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.

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DUPLICATE
ORIGINAL

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-077 WO Number: 05-819015-002
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer Date December 5, 20 06
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 8/8/06 to 12/12/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

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DUPLICATE
ORIGINAL

OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12/6/06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-819015-003

3. Work Performed by Bechtel Construction Company (Name) — Repair Organization P.O. No., Job No., etc. — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system AUX FEEDWATER PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-PIPE-003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work Removal & Reinstallation of Aux Feedwater Piping STM. GEN #3
RE-INSTALL EXISTING PIPING

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-3-903
Other ☐ Pressure ____ psi Test Temp ____ °F WO# 05-820596-000)

* Visual leak check of all welds at fill of secondary side to and indicated narrow range level of at least 30%.

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-078 WO Number: 05-819015-003
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer (Owner or Owner's Designee, Title) Date December 6, 20 06

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 8/8/06 to 12/8/06 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 (Inspector's Signature) Commissions TN2534 (National Board, State, Province, and Endorsements)

Date 12/8 20 06

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DUPLICATE
ORIGINAL

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12-8-06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-819015-004 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system AUX FEEDWATER PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-PIPE-003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work Removal & Reinstallation of Aux Feedwater Piping STM GEN #4
RE-INSTALL EXISTING PIPING Rev 11/29/06

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-3-903
Other ☐ Pressure _____ psi Test Temp _____ °F WO# 05-820596-000

* Visual leak check of all welds at fill of secondary side to an indicated narrow range of at least 30%.

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-079 WO Number: 05-819015-004
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer Date December 5, 20 06
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 8/8/06 to 12/8/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 12/1/06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) WO #: 05-818887-001

3. Work Performed by Bechtel Construction Company (Name) Type Code Symbol Stamp N/A (Repair Organization P.O. No., Job No., etc.)
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) Authorization No N/A
Expiration Date N/A

4. Identification of system FEEDWATER PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-PIPE-003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF FEEDWATER PIPING FOR STM. GEN. #1

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-3-903
Other ☐ Pressure _____ psi Test Temp _____ °F (WO#05-820596-000)

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-080 WO Number: 05-818887-001
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, SGR FIELD ENGR Date December 1, 20 06
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 8/13/06 to 12/12/06 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. Emigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 12/1/06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) WO #: 05-818887-002 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) Authorization No N/A
Expiration Date N/A

4. Identification of system FEEDWATER PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-PIPE-003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF FEEDWATER PIPING STM GEN #2

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-3-903
Other ☐ Pressure _____ psi Test Temp _____ °F (WO#05-820596-000)

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-81 WO Number: 05-818887-002
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, SGR FIELD ENGR Date December 1, 20 06
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 8/15/06 to 12/12/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY — Name
1101 Market St., Chattanooga, TN 37402 — Address
Date 12-8-06
Sheet 1 of 2

2. Plant Watts Bar Nuclear Plant — Name
P. O. Box 2000, Spring City, TN 37381 — Address
Unit Unit 1
WO #: 05-819015-005 — Repair Organization P.O. No., Job No., etc.

3. Work Performed by Bechtel Construction Company — Name
P. O. Box 549, Soddy-Daisy, TN 37384 — Address
Type Code Symbol Stamp N/A
Authorization No N/A
Expiration Date N/A

4. Identification of system AUX FEEDWATER PIPING SUPPORTS
(SUPPORTS) DESIGN CRITERIA WB-DC-40-31.9 & AISC, 7th EDITION

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-03A-367	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A368	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-370	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-363	N/A	N/A	N/A	N/A	N/A	Replacement	NO
47A401-7-38	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-369	N/A	N/A	N/A	N/A	N/A	Replacement	NO
47A401-7-31	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-378	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-366	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-365	N/A	N/A	N/A	N/A	N/A	Replacement	NO

12-8-06

12-8-06

7. Description of Work REMOVAL & REINSTALLATION OF AUX FEEDWATER SUPPORTS STM GEN #1

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

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FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-082 WO Number: 05-819015-005
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~ JTL 8-17-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis ISI PROG. ENGR. Date Dec. 8 20 06
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 8/16/06 to 12/8/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date DEC. 8, 2006
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet 1 of 2

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-819015-006

3. Work Performed by Bechtel Construction Company (Name) — Repair Organization P.O. No., Job No., etc.; Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system AUX FEEDWATER PIPING SUPPORTS

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case (SUPPORTS) DESIGN CRITERIA WB-DC-40-31.9 & AISC 7TH EDITION

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-03A-403	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-409	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-402	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-407	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-411	N/A	N/A	N/A	N/A	N/A	Replacement	NO
47A401-8-1	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-412	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-416	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-406	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-405	N/A	N/A	N/A	N/A	N/A	Replacement	NO
47A427-6-1	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-403	N/A	N/A	N/A	N/A	N/A	Replacement	NO
47A427-5-3	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-402	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF AUX FEEDWATER SUPPORTS STM GEN #2

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-083 WO Number: 05-819015-006
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~ JTL 8-17-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis ISI PROG ENGR Date Dec. 8 20 06
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 8/16/06 to 12/8/06 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. Eanigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY — Date 12-8-06
Name
1101 Market St., Chattanooga, TN 37402 — Sheet ____ of ____
Address

2. Plant Watts Bar Nuclear Plant — Unit Unit 1
Name
P. O. Box 2000, Spring City, TN 37381 — WO #: 05-819015-007
Address — Repair Organization P.O. No., Job No., etc.

3. Work Performed by Bechtel Construction Company — Type Code Symbol Stamp N/A
Name
P. O. Box 549, Soddy-Daisy, TN 37384 — Authorization No N/A
Address
Expiration Date N/A

4. Identification of system AUX FEEDWATER PIPING SUPPORTS

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case (SUPPORTS) DESIGN CRITERIA WB-DC-40-31.9 & AISC 7th EDITION

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
~~1-03A-458~~ 47	~~N/A~~	~~N/A~~	~~N/A~~	~~N/A~~	~~N/A~~	~~Replacement~~	~~NO~~
1-03A-457	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-456	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-454	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-455	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-453	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-452	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-447	N/A	N/A	N/A	N/A	N/A	Replacement	NO
47A427-5-23	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-449	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-03A-450	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF AUX FEEDWATER SUPPORTS STM GEN #3

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-084 WO Number: 05-819015-007
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~ 12-8-17-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROG. ENGR Date Dec 8 20 06
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 9/1/06 to 12/8/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date 12-1-06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**
P. O. Box 2000, Spring City, TN 37381 (Address) **W/O 05-823976-000** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**
P.O. BOX 2000 SPRING CITY,TN 37381 (Address) Authorization No **N/A**
Expiration Date **N/A**

4. Identification of system **062 – CVCS**

5. (a) Applicable Construction Code **SECTION III** 19 ~~71~~ 74 S/Pe Edition, ~~S72~~ W74 Addenda, **N/A** Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-ISV-062-0547-S MANUAL VALVE	**KEROTEST**	Valve S/N HX3-7	**N/A**	**N/A**	71	REPLACED	**Y**
PE 8/22/06 1-~~RFV~~ISV-062-~~0662-S~~0547-S ~~RELIEF~~ VALVE DISC	**KEROTEST**	S/N 8	N/A	N/A	1994	REPLACEMENT	Y

7. Description of Work **REPLACED VALVE DISC**

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure D
Other Pressure ____ psi Test Temp ____ °F

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.

FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-086 CODE CASE N/A WO 05-823976-000
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Collier Maint Specialist Date 11/29 20 06
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 8/22/06 to 12/1/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/1 20 06

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date 11/14/06

1101 Market St., Chattanooga, TN 37402 (Address) Sheet 1 of 1

2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**

P. O. Box 2000, Spring City, TN 37381 (Address) **MSA/WO# 06-810069-000** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**

WATTS BAR NUCLEAR PLANT,PO BOX 2000
SPRING CITY, TN 37381 (Address) Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system **062, Chemical Volume Control System (CVCS)**

5. (a) Applicable Construction Code **SECT III** 19 **71** Edition, **S73** Addenda, **N/A** Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-PMP-62-104 -B Inboard Mechanical Seal Housing	Pacific Pump	N/A	N/A	HT# 59525-38-AA	74	Replaced	Yes
WBN-1-PMP-62-104 -B Inboard Seal Plate	Pacific Pump	N/A	N/A	HT# 818398-73-AE	74	Replaced	Yes
WBN-1-PMP-62-104 -B Inboard Mechanical Seal Housing	Pacific Pump	N/A	N/A	HT# 63893-26-AB	74	Replacement	Yes
WBN-1-PMP-62-104 -B Inboard Seal Plate	Pacific Pump	N/A	N/A	HT# 59785-6-AF	74	Replacement	Yes

7. Description of Work **Replaced Inboard mechanical Seal Housing and Seal Plate for Centrifugal Charging Pump, Pacific Pump, SN 48590, WBN-1-PMP-062-0104 -B**

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure [V]
Other Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking # RR-07-087 Code Case: N/A WO# 06-810069-000 ISE 6/27/06
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Replacement conforms to the repair or replacement rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Callis Maint Specialist Date 11/14 20 06
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 8/24/06 to 11/29/06 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 11/29 20 06

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1A, 1-PMP-62-103A

30205 CSAPCA

Contract No. 64444-1
R.D. or S.T. No. CSAPCA
209 No. 82-1576

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES

As Required by the Provisions of the ASME Code Rules

1. Manufactured by PACIFIC PUMPS DIVISION
HUNTINGTON PARK, CAL. 90255 (Name & Address of Manufacturer) Order No. S.O. B40-532

2. Manufactured for WESTINGHOUSE ELECTRIC CORP.
NUCLEAR ENERGY SYSTEMS (Name & Address) P.O. 46-CAL 169456
PITTSBURGH, PA.

3. Owner TENNESSEE VALLEY AUTHORITY (2)

4. Location of Plant TENNESSEE - WATTS BAR #2 W860724K0964

5. Pump or Valve Identification PUMP S/N 48591 / NAT'L. BD. NO. 15

CHARGING SAFETY INJECTION PUMP
(Brief description of service for which equipment was designed)

6(a) Drawing No. FC 48590 REV. 1 Prepared by PACIFIC PUMPS DIVISION

6. Design Conditions 2840 (Pressure) psi 300 (Temperature) °F

7. The material, design, construction, and workmanship complies with ASME Code Section III, Class 2

Edition 1971 Addenda Date WINTER '71 Code No. NONE

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
(b) Forgings (PUMP S/N 48591)			
PUMP CASE 55373-13AG	SA182F304	CAMERON IRON WORKS	
DISC. HEAD 63988-B1-AC	"	JORGENSEN	
DISC. NOZZLE 63893-10-AA	"	AIRCO VIKING	
SUCTION NOZZLE 64668-27-AA	"	"	
SEAL HSG. RAD. 63893-26-AB	"	"	
SEAL HSG. THRUST 63893-21-AC	"	"	
SEAL PLATES 59785-21-AB 6-AE	"	"	

FILMED FROM BEST AVAILABLE COPY

C. Stuart R. S22276 DATE INITIALS

App. V

1A, 1-PMP-62-108 A

S.O. 205
CSAPCH

FORM NPV-1 — (back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting (PUMP S/N 48591)			
CASE STUDS - 6069444	SA-193 B7	PACIFIC PUMPS	
CASE NUTS - 93366	SA-194	(GIANT IND.	
(d) Other Parts			

8. Hydrostatic test 4960 HPE / 375 LPE psi.

CERTIFICATION OF DESIGN

Design information on file at PACIFIC PUMPS DIVISION

Stress analysis report on file at PACIFIC PUMPS DIVISION

Design specifications certified by A. J. WETTLAUFER (1) First Eng. State PA Reg. No. 13335-E

Stress analysis report certified by W. O. SHEPHERD (1) First Eng. State CA Reg. No. 11036

(1) Signature not required. List name only.

We certify that the statements made in this report are correct.

Date JUNE 24, 19 74 Signed PACIFIC PUMPS DIV. (Manufacturer) Russell G. Mayes Q.A. MANAGER

Certificate of Authorization No. 493 expires AUGUST 7, 1975

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of CALIFORNIA and employed by DIVISION OF INDUSTRIAL SAFETY of CALIFORNIA have inspected the equipment described in this Data Report on [illegible] 19 [illegible], and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data 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.

Date 6-27-74 19

[illegible] Commissions N. B. 3656
(Inspector) (National Board, State, Province and No.)

G. Cole 8-27-76

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12/1/06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-818916-001 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system MAIN STEAM PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 CODE CASE N-416-3

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO

7. Description of Work Reinstall Piping for replacement Steam Generator #1.
68 AZ 12-14-06

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-X-901
Other ☐ Pressure _____ psi Test Temp _____ °F WO# 06-818055-000

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-091 WO Number: 05-818916-001
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis SGR FIELD ENGR. Date December 1, 20 06
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 8/24/06 to 12/14/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/14 20 06

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga, TN 37402 (Address)
Date 12/1/06
Sheet 1 of

2. Plant Watts Bar Nuclear Plant (Name)
P. O. Box 2000, Spring City, TN 37381 (Address)
Unit Unit 1
WO #: 05-818916-002 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name)
P. O. Box 549, Soddy-Daisy, TN 37384 (Address)
Type Code Symbol Stamp N/A
Authorization No N/A
Expiration Date N/A

4. Identification of system MAIN STEAM PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 CODE CASE N-416-3

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO

7. Description of Work Replaced Steam Generator No. 2.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-X-901
Other ☐ Pressure _____ psi Test Temp _____ °F

68 NZ 12-4-06
w/att 06-818055-000

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.

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FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-092 WO Number: 05-818916-002
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, SGR FIELD ENGR Date December 1, 20 06
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 8/24/06 to 12/14/06 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 12/14 20 06

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1-2507

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 12/1/06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) WO #: 05-818916-003

3. Work Performed by Bechtel Construction Company (Name) Repair Organization P.O. No., Job No., etc. Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) Authorization No N/A
Expiration Date N/A

4. Identification of system MAIN STEAM PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 CODE CASE N-416-3

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO

7. Description of Work Reinstall piping for replacement Steam Generator #3.
68 9TZ 12-14-06

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-X-901
Other ☐ Pressure ____ psi Test Temp ____ °F WO#06-818055-000

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-093 WO Number: 05-818916-003
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Lardis, SGR FIELD ENGR. Date December 1, 20 06
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 8/24/06 to 12/14/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/14 20 06

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 12/1/06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) WO #: 05-818916-004

3. Work Performed by Bechtel Construction Company (Name) Repair Organization P.O. No., Job No., etc. Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) Authorization No N/A
Expiration Date N/A

4. Identification of system MAIN STEAM PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 CODE CASE N-416-3

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO

7. Description of Work Reinstall piping for replacement Steam Generator #4.
68 SFZ 12-14-06

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-X-901
Other ☐ Pressure _____ psi Test Temp _____ °F WO# 06-818053-000

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-094 WO Number: 05-818916-004
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, SGR FIELD ENGR. Date December 1, 20 06
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 8/24/06 to 12/14/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/14 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga, TN 37402 (Address)
Date 6/12/06
Sheet 1 of 2

2. Plant Watts Bar Nuclear Plant (Name)
P. O. Box 2000, Spring City, TN 37381 (Address)
Unit Unit 1
WO #: 05-818916-005

3. Work Performed by Bechtel Construction Company (Name)
P. O. Box 549, Soddy-Daisy, TN 37384 (Address)
Repair Organization P.O. No., Job No., etc.
Type Code Symbol Stamp N/A
Authorization No N/A
Expiration Date N/A

4. Identification of system MAIN STEAM PIPING SUPPORTS

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case (SUPPORTS) DESIGN CRITERIA WB-DC-40-31.9 & AISC 7th EDITION

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-01A-302	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-01A-303	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-01A-304	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-01A-305	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-01A-306	N/A	N/A	N/A	N/A	N/A	Replacement	NO
1-01A-319	N/A	N/A	N/A	N/A	N/A	Replacement	NO

NO R&R ACTIVITY 6-12-06

7. Description of Work REMOVAL & REINSTALLATION OF MAIN STEAM PIPING SUPPORTS

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-095 WO Number: 05-818916-005
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~ JTL 9-6-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROG. ENGR. Date Dec 8 20 06
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 9/5/06 to 12/8/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

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DUPLICATE
ORIGINAL

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 12-7-06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ___ of ___
2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) WO #: 05-816062-001
3. Work Performed by Bechtel Construction Company (Name) Repair Organization P.O. No., Job No., etc. Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) Authorization No N/A
Expiration Date N/A
4. Identification of system RCS
5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(31" ID) WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF RCS PIPING STM GEN #1 CROSSOVER AND HOT LEG MAIN LOOP WELDS
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-68-901
Other ☐ Pressure ___ psi Test Temp ___ °F WO# 06-818055-000

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.

DUPLICATE
ORIGINAL

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-099 WO Number: 05-816062-001
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed [signature] Field Engineer Date 12-5 20 06
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 9/6/06 to 12/8/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by: Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146 (name and address of N Certificate Holder)
2. Manufactured for: Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381 (name and address of Purchaser)
3. Location of installation: Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381 (name and address)
4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-A	N/A	10010E01, Rev. 3	85	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Natl. Bd. no.)	(year built)

5. ASME Code, Section III, Division 1:

1989	No Addenda	Class 1	N-20-3
(edition)	(addenda date)	(class)	(Code Case no.)

Items 6 - 10 inclusive to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

6. Shell:

SA-508 Class 3a	90 Ksi	See Page 3, Sect 6	See Page 3, Sect 6	See Page 3, Sect 6	54 ft. - 6.75 in
(matl spec. no.)	D(tensile strength)	[nom. thickness (in.)]	[min. design thickness (in.)]	[dia. ID (ft. & in.)]	[length (overall) (ft & in.)]

7. Seams:

Seamless	N/A	N/A	100	Double butt weld	Yes	Full	5
(long.)	(HT[1])	(RT)	(eff. %)	(girth)	(HT[1])	(RT)	(no. of courses)

8. Heads:

SA-508 Class 3a	90 Ksi	N/A	N/A
[(a) matl spec no.]	(tensile strength)	[(b) matl spec no.]	(tensile strength)

	Location (top, bottom, ends)	Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)	Top	3.72"	0.0625"	12'- 3.06"	28.0"	N/A	N/A	N/A	14'- 0.50"	Concave
(b)	Bottom	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used: N/A (matl. spec. no., size, quantity) Other fastening: N/A (describe or attach sketch)

9. Jacket closure: N/A (Describe as ogee & weld, bar, etc. If bar, give dimensions, describe or sketch)

10. Design Pressure[2] 1185 (psi) at max. temp. 600° (°F). Min. pressure-test temp. 70° (°F). Pneu., (hydro.) or comb. test pressure 1481 (psi)

Items 11 and 12 to be completed for tube sections.

11. Tubesheets:

SA-508 Class 3a	129.88 in. (S side) / 125.62 in. (P side)	22.00 in.	Welded
(stationary, matl spec. no.)	[dia. in. (subject to press.)]	[thickness (in.)]	[attachment (welded, bolted)]
N/A	N/A	N/A	N/A
(floating, matl spec. no.)	[dia. (in.)]	[thickness (in.)]	(attachment)

12. Tubes:

SB-163 UNS N06690	0.750 in.	0.043 in.	5128	U-Bend Tubes
(matl. spec. no.)	[OD (in.)]	[thickness (inches or gage)]	(no.)	[type (straight or U)]

Items 13 to 16 inclusive to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

13. Shell:

N/A	N/A	N/A	N/A	N/A	N/A
(matl. spec. no.)	(tensile strength)	[nom. thickness (in.)]	[min. design thickness (in.)]	[dia. ID (ft & in.)]	[length (overall) (ft & in.)]

14. Seams:

N/A	N/A	N/A	N/A	Double butt weld	Yes	Full	N/A
[long. (welded, dbl., single)]	[HT[1] (yes or no)]	(RT)	(eff. %)	(girth)	(HT[1])	(RT)	(no. of courses)

15. Heads:

SA-508 Class 3a	90 Ksi	N/A	N/A	N/A	N/A
[(a) matl spec. no.]	(tensile strength)	[(b) matl spec. no.]	(tensile strength)	[(c) matl spec. no.]	(tensile strength)

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a) Top, bottom, ends	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(b) Channel	6.19 in.	N/A	N/A	N/A	N/A	62.81 in. (ID)	N/A	Concave
(c) Floating	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used: N/A (matl spec. no., size, quantity) Other fastening: N/A (describe or attach sketch)

16. Design pressure[2] 2485 (psi) at 650° (°F). Min. pressure-test temp. 70° (°F). Pneu., (hydro), or comb. test pressure 3107 (psi)

[1] If postweld heat treated. [2] List other internal or external pressure with coincident temperature when applicable.

* Supplemental Information in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of this form.

(7/98)

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DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 (Back - Pg. 2 of 4)

Certificate Holder's Serial No. **WB1-RSG-A**

17. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	Quantity	Dia. or Size	Type	How Attached	Mat'l	Thickness	Reinforcement Material	Location
(See pages 3 and 4 of this Data Report for complete table of nozzle, inspection and safety valve openings)								

18. Supports: Skirt **No** (yes or no) Lugs **N/A** (quantity) Legs **N/A** (quantity) Other **4 Support Pads** (describe) Attached **Channel head / Integral forged** (where and how)

19. Remarks: **1.) This assembly manufactured, inspected and tested by Doosan Heavy Industries & Construction Co. Ltd. under NPT Certificate of Authorization N-2767, which expires January 8, 2006. See the attached N-2 Certificate Holders' Data Report for S/N –N02018M01-01**

2.) Unit received full PWHT and RT examination with full MT/PT after hydrostatic test.

3.) The Primary Side of the tube plate and channel head interior, including nozzles and manways overlaid with weld-deposited Ni-Cr-Fe alloy.

4.) Line 10 - Max. Pressure Differential across tubes = 670 PSID at 650° F; Line 16 - Max. Pressure Differential across tubes = 1600 PSID at 650° F

CERTIFICATION OF DESIGN

Design specification certified by **Bruce A. Bell** P.E. State **TN** Reg. no. **102034**

Design report certified by **James R. Schwall** P.E. State **TN** Reg. no. **10121**

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this nuclear vessel conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. **N-1149** Expires **November 24, 2007**

Date **August 17, 2005** Name **Westinghouse Electric Company LLC** (N Certificate Holder) Signed **Terry L. Casteel** (authorized representative)

CERTIFICATE OF SHOP 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 **The Hartford Steam Boiler Inspection and Insurance Company of Connecticut** of **Hartford, Connecticut** have Inspected the component described in this Data Report on **8-17-05**, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this component in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data 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.

Date **August 17, 2005** Signed **James R. Myhan** (Authorized Nuclear Inspector) Commissions **NB 10822 N TENN 2693** [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this nuclear vessel conforms to the rules of construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. **N/A** Expires **N/A**

Date **N/A** Name **N/A** (N Certificate Holder) Signed **N/A** (authorized representative)

CERTIFICATE OF FIELD ASSEMBLY 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 **N/A** and employed by **N/A** of **N/A** have compared the statements in this Data Report with the described component and state that parts referred to as data items **N/A**, not included in the certificate of shop inspection, have been inspected by me on **N/A** and that to the best of my knowledge and belief the Certificate Holder has constructed and assembled this component in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data 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.

Date **N/A** Signed **N/A** (Authorized Nuclear Inspector) Commissions **N/A** [Nat'l Bd. (incl endorsements) and state or prov. and no.]

App. V

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by **Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146**
(name and address of N Certificate Holder)

2. Manufactured for **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address of Purchaser)

3. Location of installation **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-A	N/A	10010E01, Rev. 3	85	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

6. Shell:

(Additional shell course data table)

Shell Course Component	Material Specification No.	Tensile Strength	Nominal Thickness (inches)	Minimum Design Thickness (inches)	Inside Diameter (Ft. and In.)	Overall Length (Ft. and In.)
Upper Shell -2 Barrel	SA-508 Class 3a	90 Ksi	3.72 in.	3.72 in.	14 ft. - 0.50 in.	13 ft. - 5.09 in.
Upper Shell -1 Barrel	SA-508 Class 3a	90 Ksi	3.72 in.	3.72 in.	14 ft. - 0.50 in.	5 ft. - 2.41 in.
Conical Shell Transition	SA-508 Class 3a	90 Ksi	3.72 in. and 3.73 in. and 3.11 in.	3.72 in. and 3.73 in. and 3.11 in.	14 ft. - 0.50 in. (top) and 10 ft. - 9.88 in. (bottom)	7 ft. - 8.09 in.
Lower Shell -2 Barrel	SA-508 Class 3a	90 Ksi	3.11 in.	3.11 in.	10 ft. - 9.88 in.	14 ft. - 1.58 in.
Lower Shell -1 Barrel	SA-508 Class 3a	90 Ksi	3.11 and 4.06 in.	3.11 and 4.06 in.	10 ft. - 9.88 in.	14 ft. - 1.58 in.

17. Nozzles, inspection and safety valve openings:

(Continuation - Shell openings data table)

Purpose (inlet, outlet, drain, etc.)	Qty.	Dia. or Size	Type	How Attached	Material	Thickness	Reinforcement Material	Location
Primary Side Nozzle (Inlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	Integral	Primary Head
Primary Side Nozzle (Outlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	Integral	Primary Head
Primary Manway	2	16.0 In. ID	Forging	Integrally	SA-508 Class 3a	5.98"	Integral	Primary Head
Steam Outlet Nozzle	1	32.0 in. OD	Forging	Integrally	SA-508 Class 3a	6.42/1.307"	Integral	Top Head
Level Tap Nozzle	5	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Upper Shell
Pressure Tap Nozzle	3	1.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.617/0.42"	Weld build-up	Upper Shell
Secondary Manway	2	16.0 in. ID	Forging	Welded	SA-508 Class 3a	5.565"	Integral	Upper Shell
Recirculation Nozzle	1	3.0 in. NPS	Forging	Welded	SA-508 Class 3a	3.317"	Integral	Upper Shell
Auxiliary Feedwater Nozzle	1	6.0 in. OD	Forging	Welded	SA-508 Class 3a	3.767/0.595"	Integral	Upper Shell
Level Tap Nozzle	3	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Cone Shell
Sampling Nozzle	1	2.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.75/0.507"	Weld build-up	Lower Shell
Feedwater Nozzle	1	16.0 in. OD	Forging	Welded	SA-508 Class 3a	4.033/0.903"	Integral	Lower Shell
6" Hand hole	2	6.0 in. ID	Forging	Welded	SA-508 Class 3a	3.69"	Integral	Lower Shell
8" Hand hole	2	8.0 in. ID	Forging	Welded	SA-508 Class 3a	3.44"	Integral	Lower Shell
Level Tap Nozzle	1	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Lower Shell
Inspection Port	3	2.0" NPS	Forging	Welded	SA-508 Class 3a	2.876"	Integral	Lower Shell
Drain Nozzle	1	1.0" NPS	Forging	Welded	SA-508 Class 1a	0.420"	Weld build-up	Tubesheet
Cold Leg Blowdown Nozzle	1	2.5" NPS	Forging	Welded	SA-182 Grade F11	0.276"	Weld build-up	Tubesheet
Hot Leg Blowdown Nozzle	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Weld build-up	Tubesheet

Section 17, Table Notes:
Primary Side Nozzles supplied with welding safe end of SA-336, Class F316N forged material
Feedwater Nozzle supplied with welding safe end of SA-182 F11a forged material
Pressure Tap Nozzles are permanently plugged with SA-508 Class 1a material by socket welding at the nozzle end
Closure hardware for nozzles, inspection and safety valve openings listed in closure hardware table on page 4 of 4 of this data report

N Certificate Holder:	Westinghouse Electric Company LLC	N Certificate of Authorization No.:	N-1149	Expires:	November 24, 2007
Authorized Representative	Terry L. Casteel			Date	August 17, 2005

Authorized Nuclear Inspector	James R. Myhan	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

DOOSAN
TVA Watts Bar Unit-1 RSG
ontract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by **Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146**
(name and address of N Certificate Holder)

2. Manufactured for **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address of Purchaser)

3. Location of installation **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-A	N/A	10010E01, Rev. 3	85	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

17. Nozzles, inspection and safety valve openings:

(Continuation - Closure hardware table)

Purpose (inlet, outlet, drain, etc.)	Qty.	Dia. or Size	Type	How Attached	Material	Thickness	Reinforcement Material	Location
Recirculation Nozzle Cover	1	9.625"	Forged	Bolted	SA-508 Class 3a	1.778"	N/A	Upper Shell
Recirculation Nozzle Studs	8	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Upper Shell
Recirculation Nozzle Nuts	8	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Upper Shell
Primary Manway Cover	2	26.75"	Forged	Bolted	SA-508 Class 3a	4.230"	N/A	Primary Head
Primary Manway Studs	32	1.875	1.875-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Primary Head
Primary Manway Nuts	32	1.875	1.875-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Primary Head
Secondary Manway Cover	2	23"	Forged	Bolted	SA-508 Class 3a	3.158	N/A	Upper Shell
Secondary Manway Studs	40	1.25"	1.25-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Upper Shell
Secondary Manway Nuts	40	1.25"	1.25-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Upper Shell
6" Secondary Handhole Cover	2	11.62"	Forged	Bolted	SA-508 Class 3a	1.778"	N/A	Lower Shell
6" Secondary Handhole Studs	16	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Lower Shell
6" Secondary Handhole Nuts	16	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Lower Shell
8" Secondary Handhole Cover	2	11.62"	Forged	Bolted	SA-508 Class 3a	1.87"	N/A	Lower Shell
8" Secondary Handhole Studs	24	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Lower Shell
8" Secondary Handhole Nuts	24	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Lower Shell

N Certificate Holder: Westinghouse Electric Company LLC	N Certificate of Authorization No.: N-1149		Expires: November 24, 2007
Authorized Representative	Terry L. Casteel	Date	August 17, 2005

Authorized Nuclear Inspector	James R. Myhan	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

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05-0004

DOOSAN
TVA Watts Bar Unit-1 RSG
F-8.4-2 Rev. 0 Contract # 16346

Westinghouse

CODE SYMBOL STAMPING REVIEW LIST

Customer: Tennessee Valley Authorit | Westinghouse PO No.: 4500103901

Item: Replacement Steam Generator | Mfr. Ser. No.: N02018M01-01

Supplier: Doosan Heavy Ind. & Const. Co. Ltd. | Natl. Board No.: 85

Code Section: III - Div. 1 Class: 1 | Edition: 1989 Addenda: None

		OK	N/A
1.	Design Specification	☒	☐
2.	Design Report	☒	☐
3.	Supplier Traveler:		
	a. All operations have been completed and accepted by Quality and ANI.	☒	☐
4.	Hydrostatic, pneumatic or structural integrity test:		
	a. Proper procedure available and in use;	☒	☐
	b. Pressure gage properly calibrated;	☒	☐
	c. Pressure, holding time;	☒	☐
	d. Fluid quality, temperature.	☒	☐
5.	Completion of Data Report Form for fabrication.	☒	☐
6.	Code Symbol stamping by supplier for fabrication.	☒	☐
7.	Completion of Data Report form by Westinghouse and ANI.	☒	☐
8.	ANI authorization for Westinghouse to apply Code Symbol stamp.	☒	☐

Comments:

Terry L. Casteel — Quality — August 17, 2005 — Date

James Myhan — Authorized Nuclear Inspector — August 17, 2005 — Date

Forms\Code Symbol Stamping Review List-f8-4-2.doc

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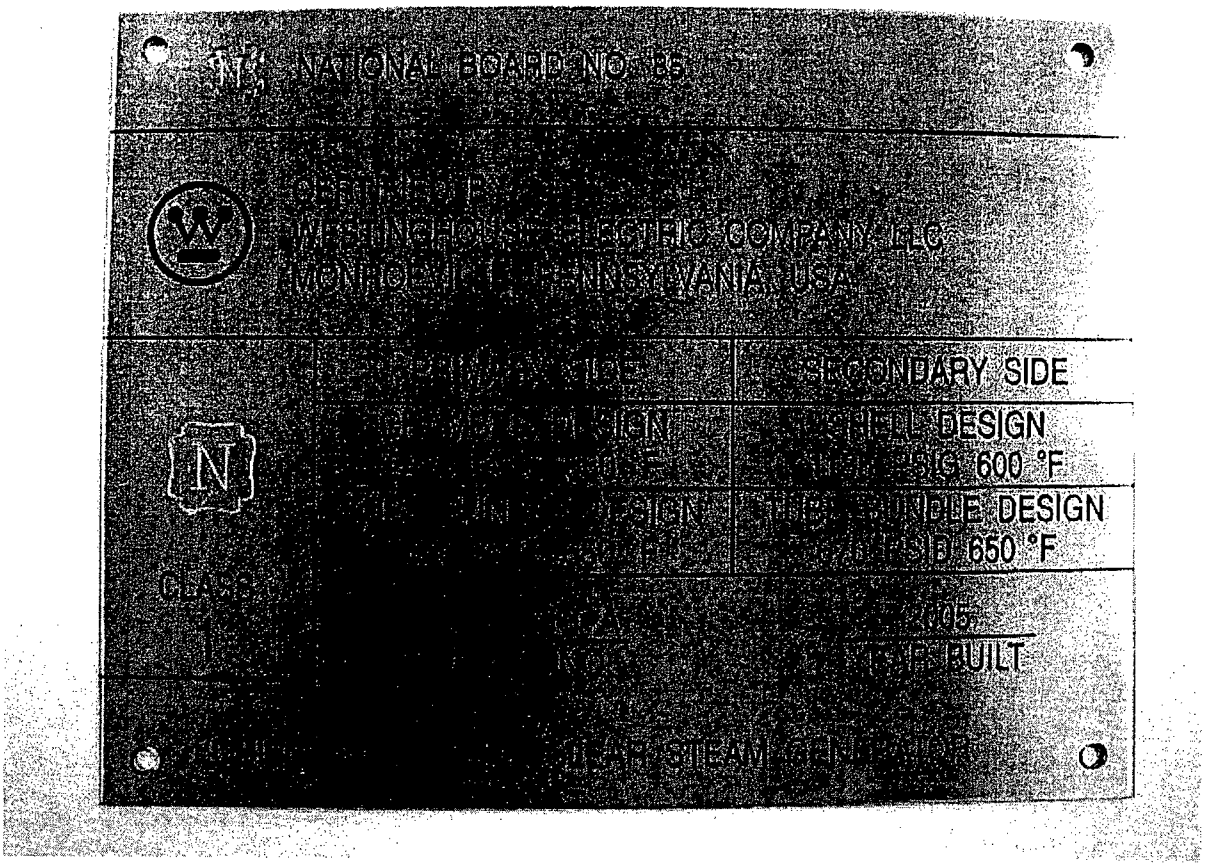
DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346



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DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Doosan Heavy Industries & Construction Co.,Ltd. 555,Guygok-Dong, Chang-Won, Kyung-Nam, Korea.
(name and address of NPT Certificate Holder)

2. Manufactured for Westinghouse Electric Company LLC Energy Center Site 4350 Northern Pike Monroeville, PA 15146, USA
(name and address of purchaser)

3. Location of installation Tennessee Valley Authority Watts Bar Nuclear Power Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City, TN 37381 USA.
(name and address)

4. Type: 10010E01 Rev.3 (drawing no.) | SA508 CL.3a (mat'l. spec. no.) | 90 ksi (tensile strength) | N/A (CRN) | 2005 (year built)

5.ASME Code,Section III,Division 1 : 1989 (edition) | No Addenda (addenda data) | 1 (class) | N-20-3 (Code Case no.)

6.Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7.Remarks : 1. Item Name : Watts Bar Unit 1 Replacement Steam Generator "1A" set
2. ( )* : DOOSAN No.

8.Nom. thickness (in.) See Page 3 Min. design thickness (in.) See Page 3 Dia. ID (ft & in.) See Page 3 Length overall (ft & in.) 54 ft. - 6.75 in.

9.When applicable, Certificate Holder' Data Reports are attached for each item of this report :

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	N02018M01-01	N/A(DN-1304)*
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10.Design pressure 1185 (S side)/2485 (P side) psi. Temp. 600 / 650 °F. Hydro. test pressure 1481(S side)psi/3107(P side)psi at temp. 70 °F/ 70 °F

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

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DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 (Back - Pg. 2 of 3)

Certificate Holder's Serial Nos. N02018M01-01 through N/A

CERTIFICATION OF DESIGN

Design specifications certified by BRUCE A. BELL (when applicable) P.E.State TN Reg.no. 102034

Design report* certified by JAMES R. SCHWALL (when applicable) P.E.State TN Reg.no. 10121

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PART conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2767 Expires JANUARY. 8. 2006

Date 8/12/05 Name Doosan Heavy Industries & Construction Co. Ltd. (NPT Certificate Holder) Signed J. S. Gong (authorized representative)

CERTIFICATE OF SHOP 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 OHIO and employed by The Hartford Steam Boiler Inspection and Insurance Co. of CT. have inspected these items described in this Data Report on 8/12/05, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data 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.

Date 8/12/05 Signed C. R. Isaacson (Authorized Inspector) Commissions OHIO 169 [Nat'l.Bd.(incl.endorsements) and state or prov.and no.]

APP V

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Doosan Heavy Industries & Construction Co.,Ltd. 555,Guygok-Dong, Chang-Won, Kyung-Nam, Korea.
(name and address of NPT Certificate Holder)

2. Manufactured for Westinghouse Electric Company LLC Energy Center Site 4350 Northern Pike Monroeville, PA 15146, USA
(name and address of purchaser)

3. Location of installation Tennessee Valley Authority Watts Bar Nuclear Power Plant, Unit 1, 1260 nuclear Plant Road, Hgwy 68, Spring City, TN 37381 USA.
(name and address)

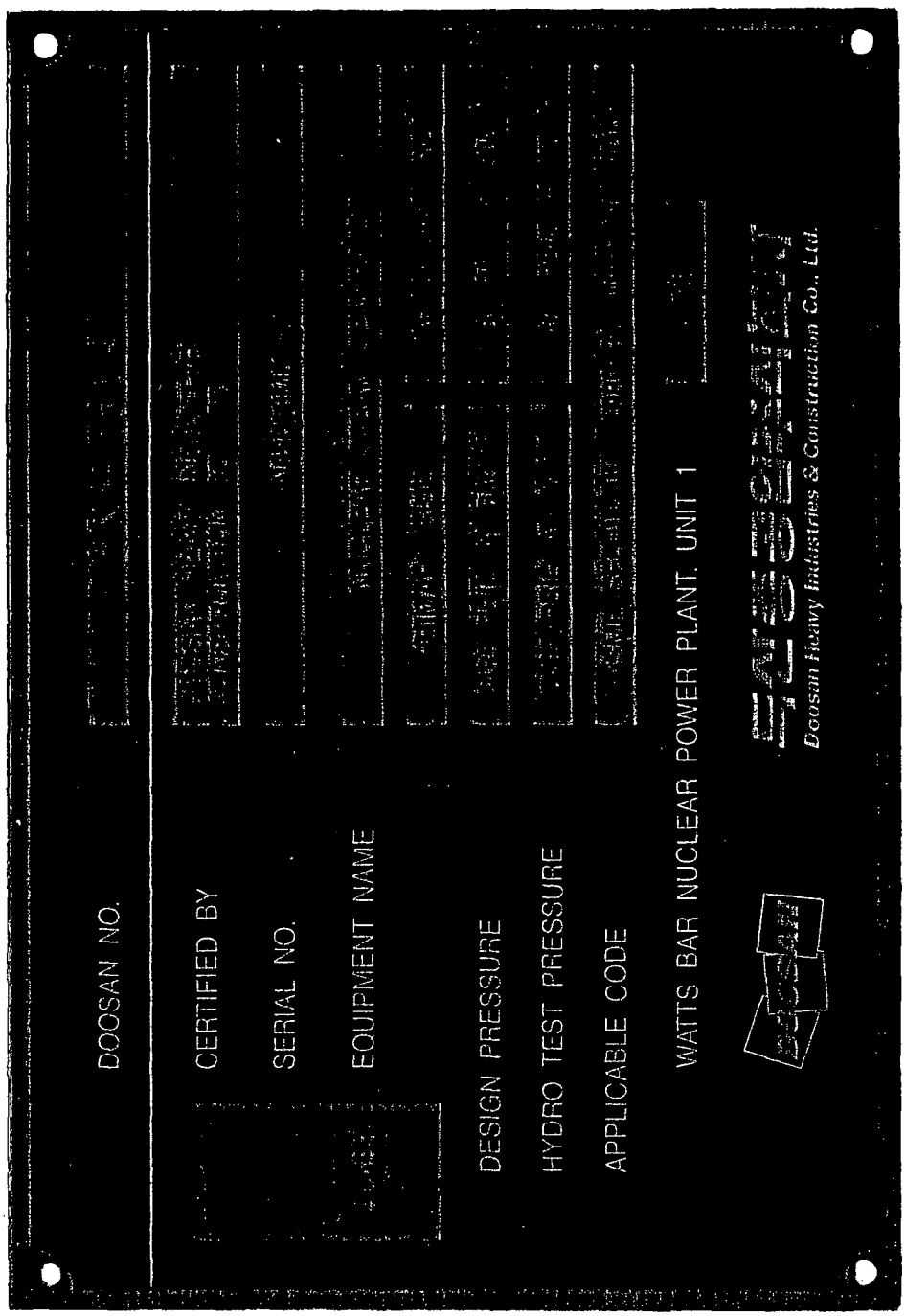
4. Type: 10010E01 Rev.3 (drawing no.) | SA508 CL.3a (mat'l. spec. no.) | 90 ksi (tensile strength) | N/A (CRN) | 2005 (year built)

8.Nom. thickness (in.) See Below Min. design thickness (in.) See Below Dia. ID (ft & in.) See Below Length overall (ft & in.) 54 ft. - 6.75 in.

Part Description	Material Specification	Tensile Strength	Nom. Thickness (in.)	Min. design thickness (in.)	Dia. ID (ft & in.)	Length overall (ft & in.)
2:1 Torispherical Top Head	SA508 CL3a	90 Ksi	3.92"	3.72	SR147.06" / R28.0"	5'-5.25"
Tubesheet	SA508 CL3a	90 Ksi	22.00"	22.00	Φ 125.62"(S side) Φ 129.88"(P side)	2'-4.60"
Primary Head	SA508 CL3a	90 Ksi	6.21"	6.19	SR62.81"	N/A
Upper Shell #1	SA508 CL3a	90 Ksi	3.92"	3.72	Φ 168.50"	5'-2.41"
Upper Shell #2	SA508 CL3a	90 Ksi	3.92"	3.72	Φ 168.50"	13'-5.09"
Shell Cone	SA508 CL3a	90 Ksi	3.92"/ 3.90"/ 3.19"	3.72"/ 3.73"/ 3.11"	Φ 129.88"/Φ 168.50"	7'-8.09"
Lower Shell #1	SA508 CL3a	90 Ksi	4.13"/ 3.19"	4.06"/ 3.11"	Φ 129.88"	14'-1.58"
Lower Shell #2	SA508 CL3a	90 Ksi	3.19"	3.11"	Φ 129.88"	14'-1.58"

Purpose	Q'ty	Dia.or Size	Type	How Attached	Material Specification	Thickness	Reinforcement Material	Location
Primary Side Nozzle (Inlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	integral	Primary Head
Primary Side Nozzle (Outlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	integral	Primary Head
Primary Manway	2	16.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.98"	integral	Primary Head
Steam Outlet Nozzle	1	32.0 in. OD	Forging	Integrally	SA-508 Class 3a	1.3075"	integral	Top Head
Level Tap Nozzle	5	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.428"	Build-up	Upper Shell-2
Pressure Tap Nozzle	3	1.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.42"	Build-up	Upper Shell-2
Secondary Manway	2	16.0 in. ID	Forging	Welded	SA-508 Class 3a	5.565"	integral	Upper Shell-2
Recirculation Nozzle	1	3.0 in. NPS	Forging	Welded	SA-508 Class 3a	3.3175"	integral	Upper Shell-1
Auxiliary Feedwater Nozzle	1	6.0 in. OD	Forging	Welded	SA-508 Class 3a	0.595"	integral	Upper Shell-1
Level Tap Nozzle	3	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.4275"	Build-up	Cone Shell
Sampling Nozzle	1	2.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.507"	Build-up	Lower Shell-1
Feedwater Nozzle	1	16.0 in. OD	Forging	Welded	SA-508 Class 3a	0.903"	integral	Lower Shell-1
6" Hand hole	2	6.0 in. ID	Forging	Welded	SA-508 Class 3a	3.69"	integral	Lower Shell-1
8" Hand hole	2	8.0 in. ID	Forging	Welded	SA-508 Class 3a	3.44"	integral	Lower Shell-1
Level Tap Nozzle	1	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.4275"	Build-up	Lower Shell-1
Inspection Port	3	2.0" NPS	Forging	Welded	SA-508 Class 3a	2.876"	integral	Lower Shell-1
Drain Nozzle	1	1.0" NPS	Forging	Welded	SA-508 Class 1a	0.420"	Build-up	Tubesheet
Cold Leg Blowdown Nozzle	1	2.5" NPS	Forging	Welded	SA-182 Grade F11	0.276"	Build-up	Tubesheet
Hot Leg Blowdown Nozzle	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Build-up	Tubesheet

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346



APP. V
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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 12-8-06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) WO #: 05-816062-002 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) Authorization No N/A
Expiration Date N/A

4. Identification of system RCS

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF RCS PIPING

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-68-901
Other ☐ Pressure _____ psi Test Temp _____ °F WO#06-818055-000

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.

DUPLICATE
ORIGINAL

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-100 WO Number: 05-816062-002
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed [signature] Field Engineer Date 12-5 20 06
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 9/6/06 to 12/8/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by: Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146 (name and address of N Certificate Holder)

2. Manufactured for: Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381 (name and address of Purchaser)

3. Location of installation: Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381 (name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-B	N/A	10010E01, Rev. 3	86	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

5. ASME Code, Section III, Division 1:

1989	No Addenda	Class 1	N-20-3
(edition)	(addenda date)	(class)	(Code Case no.)

Items 6 - 10 inclusive to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

6. Shell:

SA-508 Class 3a	90 Ksi	See Page 3, Sect 6	See Page 3, Sect 6	See Page 3, Sect 6	54 ft. - 6.75 in
(mat'l spec. no.)	D(tensile strength)	[nom. thickness (in.)]	[min. design thickness (in.)]	[dia. ID (ft. & in.)]	[length (overall) (ft & in.)]

7. Seams:

Seamless	N/A	N/A	100	Double butt weld	Yes	Full	5
(long.)	(HT[1])	(RT)	(eff. %)	(girth)	(HT[1])	(RT)	(no. of courses)

8. Heads:

SA-508 Class 3a	90 Ksi	N/A	N/A
[(a) mat'l spec no.]	(tensile strength)	[(b) mat'l spec no.]	(tensile strength)

	Location (top, bottom, ends)	Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)	Top	3.72"	0.0625"	12'- 3.06"	28.0"	N/A	N/A	N/A	14'- 0.50"	Concave
(b)	Bottom	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used: N/A (mat'l. spec. no., size, quantity) Other fastening: N/A (describe or attach sketch)

9. Jacket closure: N/A (Describe as ogee & weld, bar, etc. if bar, give dimensions, describe or sketch)

10. Design Pressure[2]: 1185 (psi) at max. temp. 600 (°F). Min. pressure-test temp. 70 (°F). Pneu., (hydro.) or comb. test pressure 1481 (psi)

Items 11 and 12 to be completed for tube sections.

11. Tubesheets:

SA-508 Class 3a	129.88 in. (S side) / 125.62 in. (P side)	22.00 in.	Welded
(stationary, mat'l spec. no.)	[dia. in. (subject to press.)]	[thickness (in.)]	[attachment (welded, bolted)]
N/A	N/A	N/A	N/A
(floating, mat'l spec. no.)	[dia. (in.)]	[thickness (in.)]	(attachment)

12. Tubes:

SB-163 UNS N06690	0.750 in.	0.043 in.	5128	U-Bend Tubes
(mat'l. spec. no.)	[OD (in.)]	[thickness (inches or gage)]	(no.)	[type (straight or U)]

Items 13 to 16 inclusive to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

13. Shell:

N/A	N/A	N/A	N/A	N/A	N/A
(mat'l. spec. no.)	(tensile strength)	[nom. thickness (in.)]	[min. design thickness (in.)]	[dia. ID (ft & in.)]	[length (overall) (ft & in.)]

14. Seams:

N/A	N/A	N/A	N/A	Double butt weld	Yes	Full	N/A
[long. (welded, dbl., single)]	[HT[1] (yes or no)]	(RT)	(eff. %)	(girth)	(HT[1])	(RT)	(no. of courses)

15. Heads:

SA-508 Class 3a	90 Ksi	N/A	N/A	N/A	N/A
[(a) mat'l spec. no.]	(tensile strength)	[(b) mat'l spec. no.]	(tensile strength)	[(c) mat'l spec. no.]	(tensile strength)

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a) Top, bottom, ends	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(b) Channel	6.19 in.	N/A	N/A	N/A	N/A	62.81 in. (ID)	N/A	Concave
(c) Floating	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used: N/A (mat'l spec. no., size, quantity) Other fastening: N/A (describe or attach sketch)

16. Design pressure[2]: 2485 (psi) at 650 (°F). Min. pressure-test temp. 70 (°F). Pneu., (hydro), or comb. test pressure 3107 (psi)

[1] If postweld heat treated. [2] List other internal or external pressure with coincident temperature when applicable.

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of this form.

(7/98)

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05-0001

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 (Back - Pg. 2 of 4)

Certificate Holder's Serial No. **WB1-RSG-B**

17. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	Quantity	Dia. or Size	Type	How Attached	Matl	Thickness	Reinforcement Material	Location
(See pages 3 and 4 of this Data Report for complete table of nozzle, inspection and safety valve openings)								

18. Supports: Skirt **No** (yes or no) Lugs **N/A** (quantity) Legs **N/A** (quantity) Other **4 Support Pads** (describe) Attached **Channel head / Integral forged** (where and how)

19. Remarks: **1.) This assembly manufactured, inspected and tested by Doosan Heavy Industries & Construction Co. Ltd. under NPT Certificate of Authorization N-2767, which expires January 8, 2006. See the attached N-2 Certificate Holders' Data Report for S/N –N02018M01-02**

2.) Unit received full PWHT and RT examination with full MT/PT after hydrostatic test.

3.) The Primary Side of the tube plate and channel head interior, including nozzles and manways overlaid with weld-deposited Ni-Cr-Fe alloy.

4.) One (1) tube weld plugged at location R58/C53, both ends with plug material of SB-168 Alloy 690T HT# NX3895HK (UNS N06690).

5.) Line 10 - Max. Pressure Differential across tubes = 670 PSID at 650° F; Line 16 - Max. Pressure Differential across tubes = 1600 PSID at 650° F

CERTIFICATION OF DESIGN

Design specification certified by **Bruce A. Bell** P.E. State **TN** Reg. no. **102034**

Design report certified by **James R. Schwall** P.E. State **TN** Reg. no. **10121**

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this nuclear vessel conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. **N-1149** Expires **November 24, 2007**

Date **August 17, 2005** Name **Westinghouse Electric Company LLC** (N Certificate Holder) Signed **Terry L. Casteel** (authorized representative)

CERTIFICATE OF SHOP 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 **The Hartford Steam Boiler Inspection and Insurance Company of Connecticut** of **Hartford, Connecticut** have inspected the component described in this Data Report on **8-17-05**, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this component in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data 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.

Date **August 17, 2005** Signed **James R. Myhan** (Authorized Nuclear Inspector) Commissions **NB 10822 N TENN 2693** (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this nuclear vessel conforms to the rules of construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. **N/A** Expires **N/A**

Date **N/A** Name **N/A** (N Certificate Holder) Signed **N/A** (authorized representative)

CERTIFICATE OF FIELD ASSEMBLY 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 **N/A** and employed by **N/A** of **N/A** have compared the statements in this Data Report with the described component and state that parts referred to as data items **N/A**, not included in the certificate of shop inspection, have been inspected by me on **N/A** and that to the best of my knowledge and belief the Certificate Holder has constructed and assembled this component in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data 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.

Date **N/A** Signed **N/A** (Authorized Nuclear Inspector) Commissions **N/A** (Nat'l Bd. (incl endorsements) and state or prov. and no.)

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DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by **Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146**
(name and address of N Certificate Holder)

2. Manufactured for **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address of Purchaser)

3. Location of installation **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-B	N/A	10010E01, Rev. 3	86	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

6. Shell:

(Additional shell course data table)

Shell Course Component	Material Specification No.	Tensile Strength	Nominal Thickness (inches)	Minimum Design Thickness (inches)	Inside Diameter (Ft. and in.)	Overall Length (Ft. and in.)
Upper Shell -2 Barrel	SA-508 Class 3a	90 Ksi	3.72 in.	3.72 in.	14 ft. - 0.50 in.	13 ft. - 5.09 in.
Upper Shell -1 Barrel	SA-508 Class 3a	90 Ksi	3.72 in.	3.72 in.	14 ft. - 0.50 in.	5 ft. - 2.41 in.
Conical Shell Transition	SA-508 Class 3a	90 Ksi	3.72 in. and 3.73 in. and 3.11 in.	3.72 in. and 3.73 in. and 3.11 in.	14 ft. - 0.50 in. (top) and 10 ft. - 9.88 in. (bottom)	7 ft. - 8.09 in.
Lower Shell -2 Barrel	SA-508 Class 3a	90 Ksi	3.11 in.	3.11 in.	10 ft. - 9.88 in.	14 ft. - 1.58 in.
Lower Shell -1 Barrel	SA-508 Class 3a	90 Ksi	3.11 and 4.06 in.	3.11 and 4.06 in.	10 ft. - 9.88 in.	14 ft. - 1.58 in.

17. Nozzles, inspection and safety valve openings:

(Continuation - Shell openings data table)

Purpose (inlet, outlet, drain, etc.)	Qty.	Dia. or Size	Type	How Attached	Material	Thickness	Reinforcement Material	Location
Primary Side Nozzle (Inlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	Integral	Primary Head
Primary Side Nozzle (Outlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	Integral	Primary Head
Primary Manway	2	16.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.98"	Integral	Primary Head
Steam Outlet Nozzle	1	32.0 in. OD	Forging	Integrally	SA-508 Class 3a	6.42/1.307"	Integral	Top Head
Level Tap Nozzle	5	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Upper Shell
Pressure Tap Nozzle	3	1.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.617/0.42"	Weld build-up	Upper Shell
Secondary Manway	2	16.0 in. ID	Forging	Welded	SA-508 Class 3a	5.565"	Integral	Upper Shell
Recirculation Nozzle	1	3.0 in. NPS	Forging	Welded	SA-508 Class 3a	3.317"	Integral	Upper Shell
Auxiliary Feedwater Nozzle	1	6.0 in. OD	Forging	Welded	SA-508 Class 3a	3.767/0.595"	Integral	Upper Shell
Level Tap Nozzle	3	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Cone Shell
Sampling Nozzle	1	2.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.75/0.507"	Weld build-up	Lower Shell
Feedwater Nozzle	1	16.0 in. OD	Forging	Welded	SA-508 Class 3a	4.033/0.903"	Integral	Lower Shell
6" Hand hole	2	6.0 in. ID	Forging	Welded	SA-508 Class 3a	3.69"	Integral	Lower Shell
8" Hand hole	2	8.0 in. ID	Forging	Welded	SA-508 Class 3a	3.44"	Integral	Lower Shell
Level Tap Nozzle	1	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Lower Shell
Inspection Port	3	2.0" NPS	Forging	Welded	SA-508 Class 3a	2.876"	Integral	Lower Shell
Drain Nozzle	1	1.0" NPS	Forging	Welded	SA-508 Class 1a	0.420"	Weld build-up	Tubesheet
Cold Leg Blowdown Nozzle	1	2.5" NPS	Forging	Welded	SA-182 Grade F11	0.276"	Weld build-up	Tubesheet
Hot Leg Blowdown Nozzle	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Weld build-up	Tubesheet

Section 17. Table Notes:
Primary Side Nozzles supplied with welding safe end of SA-336, Class F316N forged material
Feedwater Nozzle supplied with welding safe end of SA-182 F11a forged material
Pressure Tap Nozzles are permanently plugged with SA-508 Class 1a material by socket welding at the nozzle end
Closure hardware for nozzles, inspection and safety valve openings listed in closure hardware table on page 4 of 4 of this data report

N Certificate Holder:	Westinghouse Electric Company LLC	N Certificate of Authorization No.:	N-1149	Expires:	November 24, 2007
Authorized Representative	Terry L. Casteel			Date	August 17, 2005

Authorized Nuclear Inspector	James R. Myhan	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

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05-0003

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by **Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146**
(name and address of N Certificate Holder)

2. Manufactured for **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address of Purchaser)

3. Location of installation **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-B	N/A	10010E01, Rev. 3	86	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

17. Nozzles, Inspection and safety valve openings:

(Continuation - Closure hardware table)

Purpose (inlet, outlet, drain, etc.)	Qty.	Dia. or Size	Type	How Attached	Material	Thickness	Reinforcement Material	Location
Recirculation Nozzle Cover	1	9.625"	Forged	Bolted	SA-508 Class 3a	1.778"	N/A	Upper Shell
Recirculation Nozzle Studs	8	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Upper Shell
Recirculation Nozzle Nuts	8	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Upper Shell
Primary Manway Cover	2	26.75"	Forged	Bolted	SA-508 Class 3a	4.230"	N/A	Primary Head
Primary Manway Studs	32	1.875	1.875-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Primary Head
Primary Manway Nuts	32	1.875	1.875-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Primary Head
Secondary Manway Cover	2	23"	Forged	Bolted	SA-508 Class 3a	3.158	N/A	Upper Shell
Secondary Manway Studs	40	1.25"	1.25-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Upper Shell
Secondary Manway Nuts	40	1.25"	1.25-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Upper Shell
6" Secondary Handhole Cover	2	11.62"	Forged	Bolted	SA-508 Class 3a	1.778"	N/A	Lower Shell
6" Secondary Handhole Studs	16	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Lower Shell
6" Secondary Handhole Nuts	16	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Lower Shell
8" Secondary Handhole Cover	2	11.62"	Forged	Bolted	SA-508 Class 3a	1.87"	N/A	Lower Shell
8" Secondary Handhole Studs	24	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Lower Shell
8" Secondary Handhole Nuts	24	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Lower Shell

N Certificate Holder: Westinghouse Electric Company LLC		N Certificate of Authorization No.: N-1149		Expires: November 24, 2007	
Authorized Representative	Terry L. Casteel			Date	August 17, 2005
Authorized Nuclear Inspector	James R. Myhan		Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

Westinghouse

CODE SYMBOL STAMPING REVIEW LIST

Customer: Tennessee Valley Authorit | Westinghouse PO No.: 4500103901

Item: Replacement Steam Generator | Mfr. Ser. No.: N02018M01-02

Supplier: Doosan Heavy Ind. & Const. Co. Ltd. | Natl. Board No.: 86

Code Section: III - Div. 1 Class: 1 | Edition: 1989 Addenda: None

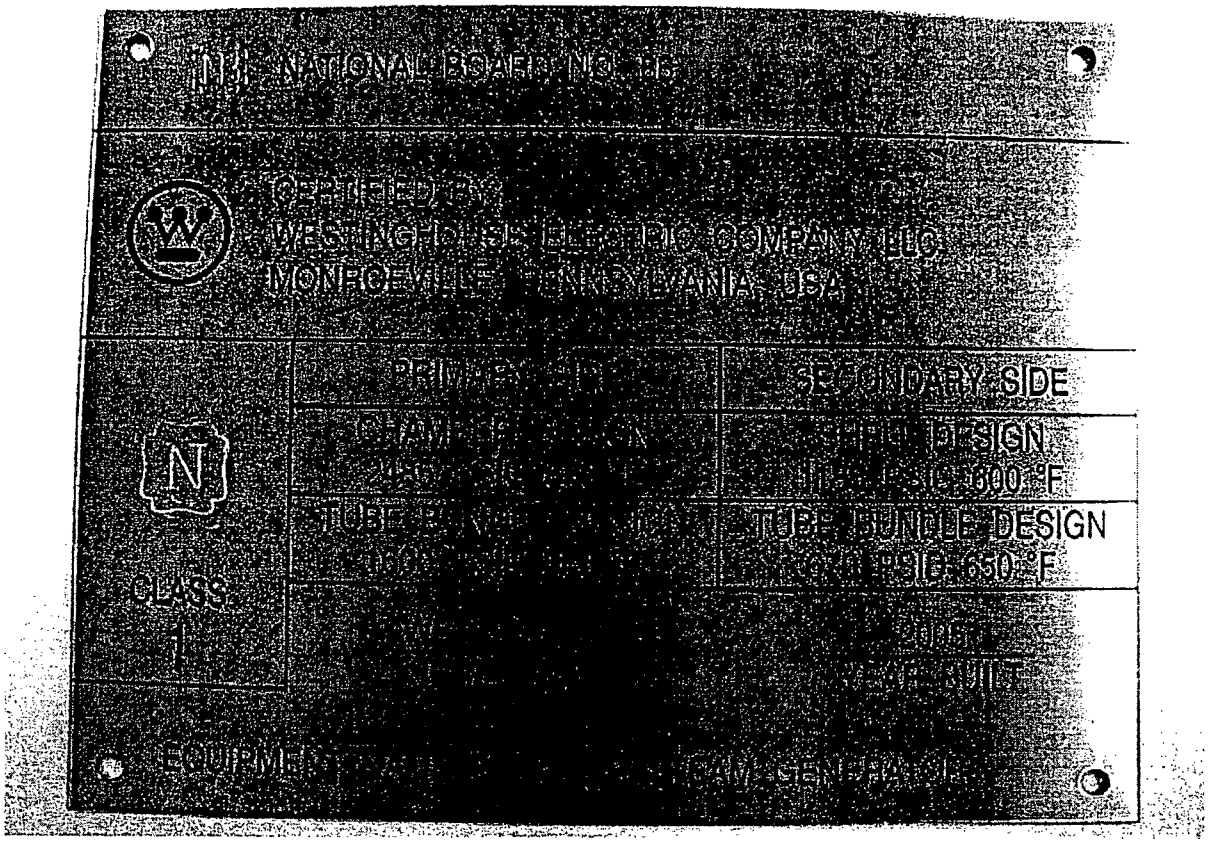
		OK	N/A
1.	Design Specification	☒	☐
2.	Design Report	☒	☐
3.	Supplier Traveler:		
	a. All operations have been completed and accepted by Quality and ANI.	☒	☐
4.	Hydrostatic, pneumatic or structural integrity test:		
	a. Proper procedure available and in use;	☒	☐
	b. Pressure gage properly calibrated;	☒	☐
	c. Pressure, holding time;	☒	☐
	d. Fluid quality, temperature.	☒	☐
5.	Completion of Data Report Form for fabrication.	☒	☐
6.	Code Symbol stamping by supplier for fabrication.	☒	☐
7.	Completion of Data Report form by Westinghouse and ANI.	☒	☐
8.	ANI authorization for Westinghouse to apply Code Symbol stamp.	☒	☐

Comments:

Terry L. Casteel — Quality — August 17, 2005 — Date

James Myhan — Authorized Nuclear Inspector — August 17, 2005 — Date

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346



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Pg 109 of 198

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Doosan Heavy Industries & Construction Co.,Ltd. 555,Guygok-Dong, Chang-Won, Kyung-Nam, Korea.
(name and address of NPT Certificate Holder)

2. Manufactured for Westinghouse Electric Company LLC Energy Center Site 4350 Northern Pike Monroeville, PA 15146, USA
(name and address of purchaser)

3. Location of installation Tennessee Valley Authority Watts Bar Nuclear Power Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City, TN 37381 USA.
(name and address)

4. Type: 10010E01 Rev.3 (drawing no.) | SA508 CL.3a (mat'l. spec. no.) | 90 ksi (tensile strength) | N/A (CRN) | 2005 (year built)

5.ASME Code,Section III,Division 1 : 1989 (edition) | No Addenda (addenda data) | 1 (class) | N-20-3 (Code Case no.)

6.Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7.Remarks : 1. Item Name : Watts Bar Unit 1 Replacement Steam Generator "1B" set
2. ( )* : DOOSAN No.

8.Nom. thickness (in.) See Page 3 Min. design thickness (in.) See Page 3 Dia. ID (ft & in.) See Page 3 Length overall (ft & in.) 54 ft. - 6.75 in.

9.When applicable, Certificate Holder' Data Reports are attached for each item of this report :

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	N02018M01-02	N/A(DN-1305)*
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10.Design pressure 1185 (S side)/2485 (P side) psi. Temp. 600 / 650 °F. Hydro. test pressure 1481(S side)psi/3107(P side)psi at temp. °F
70 °F/ 70 °F

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

App. V

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 (Back - Pg. 2 of 3)

Certificate Holder's Serial Nos. N02018M01-02 through N/A

CERTIFICATION OF DESIGN

Design specifications certified by BRUCE A. BELL (when applicable) P.E.State TN Reg.no. 102034

Design report* certified by JAMES R. SCHWALL (when applicable) P.E.State TN Reg.no. 10121

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PART conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2767 Expires JANUARY. 8. 2006

Date 8/12/05 Name Doosan Heavy Industries & Construction Co. Ltd. (NPT Certificate Holder) Signed J. S. Gong (authorized representative)

CERTIFICATE OF SHOP 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 OHIO and employed by The Hartford Steam Boiler Inspection and Insurance Co. of CT. have inspected these items described in this Data Report on 8/12/05, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data 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.

Date 8-12-05 Signed C R Thomas (Authorized Inspector) Commissions OHIO 169 (Nat'l.Bd.(incl.endorsements) and state or prov.and no.)

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Doosan Heavy Industries & Construction Co.,Ltd. 555,Guygok-Dong, Chang-Won, Kyung-Nam, Korea.
(name and address of NPT Certificate Holder)

2. Manufactured for Westinghouse Electric Company LLC Energy Center Site 4350 Northern Pike Monroeville, PA 15146, USA
(name and address of purchaser)

3. Location of installation Tennessee Valley Authority Watts Bar Nuclear Power Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City, TN 37381 USA.
(name and address)

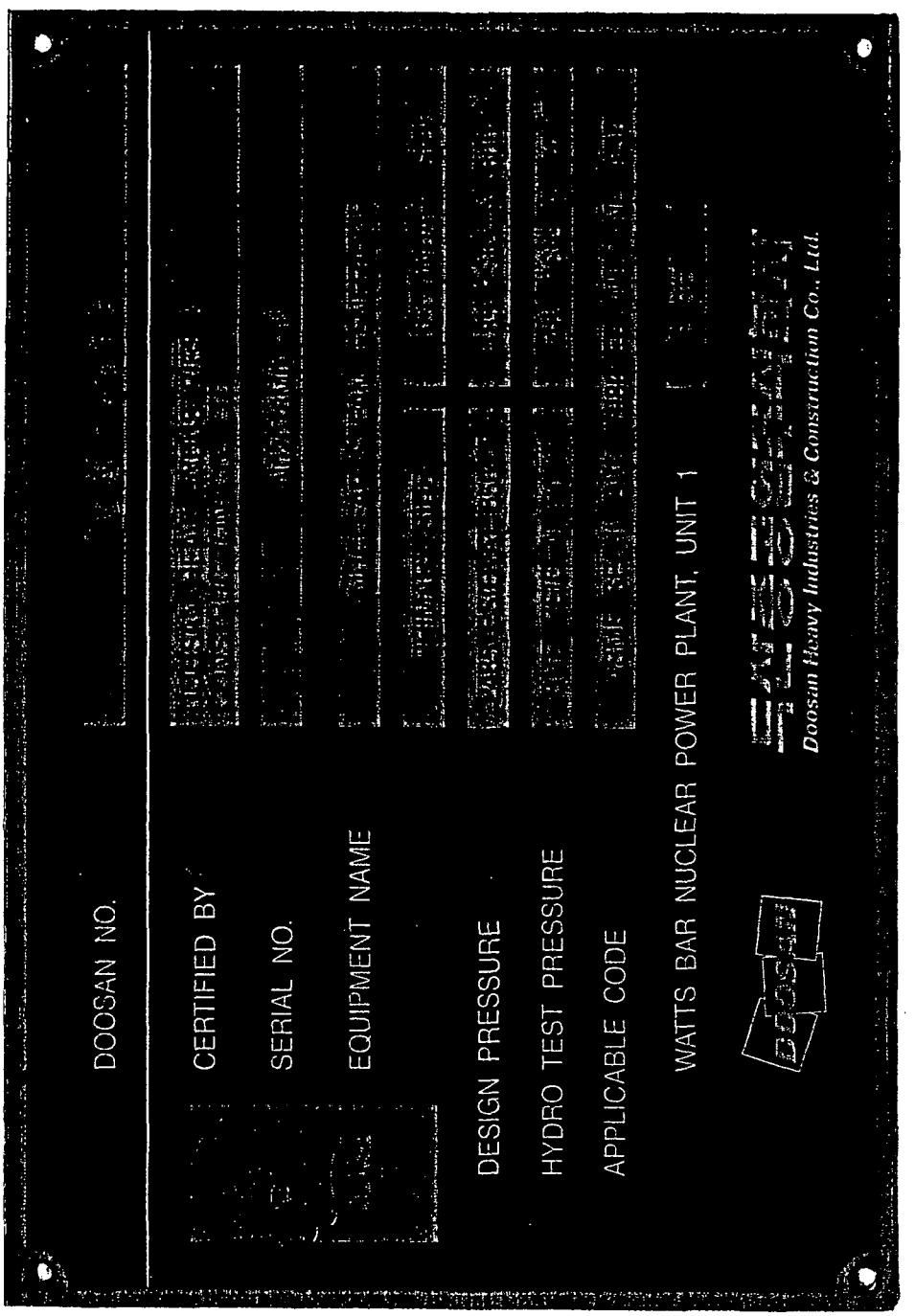
4. Type: 10010E01 Rev.3 (drawing no.) | SA508 CL.3a (matl. spec. no.) | 90 ksi (tensile strength) | N/A (CRN) | 2005 (year built)

8.Nom. thickness (in.) See Below Min. design thickness (in.) See Below Dia. ID (ft & in.) See Below Length overall (ft & in.) 54 ft. - 6.75 in.

Part Description	Material Specification	Tensile Strength	Nom. Thickness (in.)	Min. design thickness (in.)	Dia. ID (ft & in.)	Length overall (ft & in.)
2:1 Torispherical Top Head	SA508 CL3a	90 Ksi	3.92"	3.72	SR147.06" / R28.0"	5'-5.25"
Tubesheet	SA508 CL3a	90 Ksi	22.00"	22.00	Φ 125.62"(S side) Φ 129.88"(P side)	2'-4.60"
Primary Head	SA508 CL3a	90 Ksi	6.21"	6.19	SR62.81"	N/A
Upper Shell #1	SA508 CL3a	90 Ksi	3.92"	3.72	Φ 168.50"	5'-2.41"
Upper Shell #2	SA508 CL3a	90 Ksi	3.92"	3.72	Φ 168.50"	13'-5.09"
Shell Cone	SA508 CL3a	90 Ksi	3.92"/ 3.90"/ 3.19"	3.72"/ 3.73"/ 3.11"	Φ 129.88"/Φ 168.50"	7'-8.09"
Lower Shell #1	SA508 CL3a	90 Ksi	4.13"/ 3.19"	4.06"/ 3.11"	Φ 129.88"	14'-1.58"
Lower Shell #2	SA508 CL3a	90 Ksi	3.19"	3.11"	Φ 129.88"	14'-1.58"

Purpose	Q'ty	Dia.or Size	Type	How Attached	Material Specification	Thickness	Reinforcement Material	Location
Primary Side Nozzle (Inlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	integral	Primary Head
Primary Side Nozzle (Outlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	integral	Primary Head
Primary Manway	2	16.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.98"	integral	Primary Head
Steam Outlet Nozzle	1	32.0 in. OD	Forging	Integrally	SA-508 Class 3a	1.3075"	integral	Top Head
Level Tap Nozzle	5	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.428"	Build-up	Upper Shell-2
Pressure Tap Nozzle	3	1.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.42"	Build-up	Upper Shell-2
Secondary Manway	2	16.0 in. ID	Forging	Welded	SA-508 Class 3a	5.565"	integral	Upper Shell-2
Recirculation Nozzle	1	3.0 in. NPS	Forging	Welded	SA-508 Class 3a	3.3175"	integral	Upper Shell-1
Auxiliary Feedwater Nozzle	1	6.0 in. OD	Forging	Welded	SA-508 Class 3a	0.595"	integral	Upper Shell-1
Level Tap Nozzle	3	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.4275"	Build-up	Cone Shell
Sampling Nozzle	1	2.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.507"	Build-up	Lower Shell-1
Feedwater Nozzle	1	16.0 in. OD	Forging	Welded	SA-508 Class 3a	0.903"	integral	Lower Shell-1
6" Hand hole	2	6.0 in. ID	Forging	Welded	SA-508 Class 3a	3.69"	integral	Lower Shell-1
8" Hand hole	2	8.0 in. ID	Forging	Welded	SA-508 Class 3a	3.44"	integral	Lower Shell-1
Level Tap Nozzle	1	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.4275"	Build-up	Lower Shell-1
Inspection Port	3	2.0" NPS	Forging	Welded	SA-508 Class 3a	2.876"	integral	Lower Shell-1
Drain Nozzle	1	1.0" NPS	Forging	Welded	SA-508 Class 1a	0.420"	Build-up	Tubesheet
Cold Leg Blowdown Nozzle	1	2.5" NPS	Forging	Welded	SA-182 Grade F11	0.276"	Build-up	Tubesheet
Hot Leg Blowdown Nozzle	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Build-up	Tubesheet

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12/8/06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-816062-003 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system RCS

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(31" ID) WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF RCS PIPING STM. GEN #3 CROSSOVER AND HOT LEG MAIN LOOP PIPING

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-68-901 WO# 06-819055-000
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-101 WO Number: 05-816062-003
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Kenneth C. Lane Field Engineer Date 12-5 20 06
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 9/6/06 to 12/8/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by: Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146 (name and address of N Certificate Holder)

2. Manufactured for: Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381 (name and address of Purchaser)

3. Location of installation: Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381 (name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-C	N/A	10010E01, Rev. 3	87	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

5. ASME Code, Section III, Division 1:

1989	No Addenda	Class 1	N-20-3
(edition)	(addenda date)	(class)	(Code Case no.)

Items 6 - 10 inclusive to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

6. Shell:

SA-508 Class 3a	90 Ksi	See Page 3, Sect 6	See Page 3, Sect 6	See Page 3, Sect 6	54 ft. - 6.75 in
(mat'l spec. no.)	(tensile strength)	(nom. thickness (in.))	(min. design thickness (in.))	(dia. ID (ft. & in.))	(length (overall) (ft & in.))

7. Seams:

Seamless	N/A	N/A	100	Double butt weld	Yes	Full	5
(long.)	(HT[1])	(RT)	(eff. %)	(girth)	(HT[1])	(RT)	(no. of courses)

8. Heads:

SA-508 Class 3a	90 Ksi	N/A	N/A
((a) mat'l spec no.)	(tensile strength)	((b) mat'l spec no.)	(tensile strength)

	Location (top, bottom, ends)	Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)	Top	3.72"	0.0625"	12'- 3.06"	28.0"	N/A	N/A	N/A	14'- 0.50"	Concave
(b)	Bottom	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used: N/A (mat'l. spec. no., size, quantity) Other fastening: N/A (describe or attach sketch)

9. Jacket closure: N/A (Describe as ogee & weld, bar, etc. If bar, give dimensions, describe or sketch)

10. Design Pressure[2] 1185 (psi) at max. temp. 600 (°F). Min. pressure-test temp. 70 (°F). Pneu., (hydro.) or comb. test pressure 1481 (psi)

Items 11 and 12 to be completed for tube sections.

11. Tubesheets:

SA-508 Class 3a	129.88 in. (S side) / 125.62 in. (P side)	22.00 in.	Welded
(stationary, mat'l spec. no.)	(dia. in. (subject to press.))	(thickness (in.))	(attachment (welded, bolted))
N/A	N/A	N/A	N/A
(floating, mat'l spec. no.)	(dia. (in.))	(thickness (in.))	(attachment)

12. Tubes:

SB-163 UNS N06690	0.750 in.	0.043 in.	5128	U-Bend Tubes
(mat'l. spec. no.)	(OD (in.))	(thickness (inches or gage))	(no.)	(type (straight or U))

Items 13 to 16 inclusive to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

13. Shell:

N/A	N/A	N/A	N/A	N/A	N/A
(mat'l. spec. no.)	(tensile strength)	(nom. thickness (in.))	(min. design thickness (in.))	(dia. ID (ft & in.))	(length (overall) (ft & in.))

14. Seams:

N/A	N/A	N/A	N/A	Double butt weld	Yes	Full	N/A
(long. (welded, dbl., single))	(HT[1] (yes or no))	(RT)	(eff. %)	(girth)	(HT[1])	(RT)	(no. of courses)

15. Heads:

SA-508 Class 3a	90 Ksi	N/A	N/A	N/A	N/A
((a) mat'l spec. no.)	(tensile strength)	((b) mat'l spec. no.)	(tensile strength)	((c) mat'l spec. no.)	(tensile strength)

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a) Top, bottom, ends	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(b) Channel	6.19 in.	N/A	N/A	N/A	N/A	62.81 in. (ID)	N/A	Concave
(c) Floating	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used: N/A (mat'l spec. no., size, quantity) Other fastening: N/A (describe or attach sketch)

16. Design pressure[2] 2485 (psi) at 650 (°F). Min. pressure-test temp. 70 (°F). Pneu., (hydro), or comb. test pressure 3107 (psi)

[1] If postweld heat treated. [2] List other internal or external pressure with coincident temperature when applicable.

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of this form.

(7/98)

App. V

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 (Back - Pg. 2 of 4)

Certificate Holder's Serial No. **WB1-RSG-C**

17. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	Quantity	Dia. or Size	Type	How Attached	Mat'l	Thickness	Reinforcement Material	Location
(See pages 3 and 4 of this Data Report for complete table of nozzle, inspection and safety valve openings)								

18. Supports: Skirt **No** (yes or no) Lugs **N/A** (quantity) Legs **N/A** (quantity) Other **4 Support Pads** (describe) Attached **Channel head / integral forged** (where and how)

19. Remarks: **1.) This assembly manufactured, inspected and tested by Doosan Heavy Industries & Construction Co. Ltd. under NPT Certificate of Authorization N-2767, which expires January 8, 2006. See the attached N-2 Certificate Holders' Data Report for S/N –N02018M01-03**

2.) Unit received full PWHT and RT examination with full MT/PT after hydrostatic test.

3.) The Primary Side of the tube plate and channel head interior, including nozzles and manways overlaid with weld-deposited Ni-Cr-Fe alloy.

4.) Line 10 - Max. Pressure Differential across tubes = 670 PSID at 650° F; Line 16 - Max. Pressure Differential across tubes = 1600 PSID at 650° F

CERTIFICATION OF DESIGN

Design specification certified by **Bruce A. Bell** P.E. State **TN** Reg. no. **102034**

Design report certified by **James R. Schwall** P.E. State **TN** Reg. no. **10121**

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this nuclear vessel conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. **N-1149** Expires **November 24, 2007**

Date **August 17, 2005** Name **Westinghouse Electric Company LLC** (N Certificate Holder) Signed **Terry L. Casteel** (authorized representative)

CERTIFICATE OF SHOP 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 **The Hartford Steam Boiler Inspection and Insurance Company of Connecticut** of **Hartford, Connecticut** have inspected the component described in this Data Report on **8-17-05**, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this component in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data 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.

Date **August 17, 2005** Signed **James R. Myhan** (Authorized Nuclear Inspector) Commissions **NB 10822 N TENN 2693** [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this nuclear vessel conforms to the rules of construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. **N/A** Expires **N/A**

Date **N/A** Name **N/A** (N Certificate Holder) Signed **N/A** (authorized representative)

CERTIFICATE OF FIELD ASSEMBLY 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 **N/A** and employed by **N/A** of **N/A** have compared the statements in this Data Report with the described component and state that parts referred to as data items **N/A** ,not included in the certificate of shop inspection, have been inspected by me on **N/A** and that to the best of my knowledge and belief the Certificate Holder has constructed and assembled this component in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data 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.

Date **N/A** Signed **N/A** (Authorized Nuclear Inspector) Commissions **N/A** [Nat'l Bd. (incl endorsements) and state or prov. and no.]

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by **Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146**
(name and address of N Certificate Holder)

2. Manufactured for **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address of Purchaser)

3. Location of installation **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-C	N/A	10010E01, Rev. 3	87	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

6. Shell:

(Additional shell course data table)

Shell Course Component	Material Specification No.	Tensile Strength	Nominal Thickness (Inches)	Minimum Design Thickness (Inches)	Inside Diameter (Ft. and In.)	Overall Length (Ft. and In.)
Upper Shell -2 Barrel	SA-508 Class 3a	90 Ksi	3.72 in.	3.72 in.	14 ft. - 0.50 in.	13 ft. - 5.09 in.
Upper Shell -1 Barrel	SA-508 Class 3a	90 Ksi	3.72 in.	3.72 in.	14 ft. - 0.50 in.	5 ft. - 2.41 in.
Conical Shell Transition	SA-508 Class 3a	90 Ksi	3.72 in. and 3.73 in. and 3.11 in.	3.72 in. and 3.73 in. and 3.11 in.	14 ft. - 0.50 in. (top) and 10 ft. - 9.88 in. (bottom)	7 ft. - 8.09 in.
Lower Shell -2 Barrel	SA-508 Class 3a	90 Ksi	3.11 in.	3.11 in.	10 ft. - 9.88 in.	14 ft. - 1.58 in.
Lower Shell -1 Barrel	SA-508 Class 3a	90 Ksi	3.11 and 4.06 in.	3.11 and 4.06 in.	10 ft. - 9.88 in.	14 ft. - 1.58 in.

17. Nozzles, inspection and safety valve openings:

(Continuation - Shell openings data table)

Purpose (inlet, outlet, drain, etc.)	Qty.	Dia. or Size	Type	How Attached	Material	Thickness	Reinforcement Material	Location
Primary Side Nozzle (Inlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	Integral	Primary Head
Primary Side Nozzle (Outlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	Integral	Primary Head
Primary Manway	2	16.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.98"	Integral	Primary Head
Steam Outlet Nozzle	1	32.0 in. OD	Forging	Integrally	SA-508 Class 3a	6.42/1.307"	Integral	Top Head
Level Tap Nozzle	5	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Upper Shell
Pressure Tap Nozzle	3	1.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.617/0.42"	Weld build-up	Upper Shell
Secondary Manway	2	16.0 in. ID	Forging	Welded	SA-508 Class 3a	5.565"	Integral	Upper Shell
Recirculation Nozzle	1	3.0 in. NPS	Forging	Welded	SA-508 Class 3a	3.317"	Integral	Upper Shell
Auxiliary Feedwater Nozzle	1	6.0 in. OD	Forging	Welded	SA-508 Class 3a	3.767/0.595"	Integral	Upper Shell
Level Tap Nozzle	3	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Cone Shell
Sampling Nozzle	1	2.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.75/0.507"	Weld build-up	Lower Shell
Feedwater Nozzle	1	16.0 in. OD	Forging	Welded	SA-508 Class 3a	4.033/0.903"	Integral	Lower Shell
6" Hand hole	2	6.0 in. ID	Forging	Welded	SA-508 Class 3a	3.69"	Integral	Lower Shell
8" Hand hole	2	8.0 in. ID	Forging	Welded	SA-508 Class 3a	3.44"	Integral	Lower Shell
Level Tap Nozzle	1	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Lower Shell
Inspection Port	3	2.0" NPS	Forging	Welded	SA-508 Class 3a	2.876"	Integral	Lower Shell
Drain Nozzle	1	1.0" NPS	Forging	Welded	SA-508 Class 1a	0.420"	Weld build-up	Tubesheet
Cold Leg Blowdown Nozzle	1	2.5" NPS	Forging	Welded	SA-182 Grade F11	0.276"	Weld build-up	Tubesheet
Hot Leg Blowdown Nozzle	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Weld build-up	Tubesheet

Section 17. Table Notes:
Primary Side Nozzles supplied with welding safe end of SA-336, Class F316N forged material
Feedwater Nozzle supplied with welding safe end of SA-182 F11a forged material
Pressure Tap Nozzles are permanently plugged with SA-508 Class 1a material by socket welding at the nozzle end
Closure hardware for nozzles, inspection and safety valve openings listed in closure hardware table on page 4 of 4 of this data report

N Certificate Holder:	Westinghouse Electric Company LLC	N Certificate of Authorization No.:	N-1149	Expires:	November 24, 2007
Authorized Representative	Terry L. Casteel			Date	August 17, 2005

Authorized Nuclear Inspector	James R. Myhan	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

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DOOSAN
TVA Watts Bar Unit--1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by **Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146**
(name and address of N Certificate Holder)

2. Manufactured for **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address of Purchaser)

3. Location of installation **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-C	N/A	10010E01, Rev. 3	87	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

17. Nozzles, inspection and safety valve openings:

(Continuation - Closure hardware table)

Purpose (inlet, outlet, drain, etc.)	Qty.	Dia. or Size	Type	How Attached	Material	Thickness	Reinforcement Material	Location
Recirculation Nozzle Cover	1	9.625"	Forged	Bolted	SA-508 Class 3a	1.778"	N/A	Upper Shell
Recirculation Nozzle Studs	8	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Upper Shell
Recirculation Nozzle Nuts	8	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Upper Shell
Primary Manway Cover	2	26.75"	Forged	Bolted	SA-508 Class 3a	4.230"	N/A	Primary Head
Primary Manway Studs	32	1.875	1.875-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Primary Head
Primary Manway Nuts	32	1.875	1.875-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Primary Head
Secondary Manway Cover	2	23"	Forged	Bolted	SA-508 Class 3a	3.158	N/A	Upper Shell
Secondary Manway Studs	40	1.25"	1.25-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Upper Shell
Secondary Manway Nuts	40	1.25"	1.25-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Upper Shell
6" Secondary Handhole Cover	2	11.62"	Forged	Bolted	SA-508 Class 3a	1.778"	N/A	Lower Shell
6" Secondary Handhole Studs	16	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Lower Shell
6" Secondary Handhole Nuts	16	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Lower Shell
8" Secondary Handhole Cover	2	11.62"	Forged	Bolted	SA-508 Class 3a	1.87"	N/A	Lower Shell
8" Secondary Handhole Studs	24	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Lower Shell
8" Secondary Handhole Nuts	24	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Lower Shell

N Certificate Holder:	Westinghouse Electric Company LLC	N Certificate of Authorization No.:	N-1149	Expires:	November 24, 2007
Authorized Representative	Terry L. Casteel			Date	August 17, 2005

Authorized Nuclear Inspector	James R. Myhan	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

APP. V

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

F-8.4-2 Rev. 0

Westinghouse

CODE SYMBOL STAMPING REVIEW LIST

Customer: Tennessee Valley Authorit | Westinghouse PO No.: 4500103901

Item: Replacement Steam Generator | Mfr. Ser. No.: N02018M01-03

Supplier: Doosan Heavy Ind. & Const. Co. Ltd. | Natl. Board No.: 87

Code Section: III - Div. 1 Class: 1 | Edition: 1989 Addenda: None

		OK	N/A
1.	Design Specification	☒	☐
2.	Design Report	☒	☐
3.	Supplier Traveler:		
	a. All operations have been completed and accepted by Quality and ANI.	☒	☐
4.	Hydrostatic, pneumatic or structural integrity test:		
	a. Proper procedure available and in use;	☒	☐
	b. Pressure gage properly calibrated;	☒	☐
	c. Pressure, holding time;	☒	☐
	d. Fluid quality, temperature.	☒	☐
5.	Completion of Data Report Form for fabrication.	☒	☐
6.	Code Symbol stamping by supplier for fabrication.	☒	☐
7.	Completion of Data Report form by Westinghouse and ANI.	☒	☐
8.	ANI authorization for Westinghouse to apply Code Symbol stamp.	☒	☐

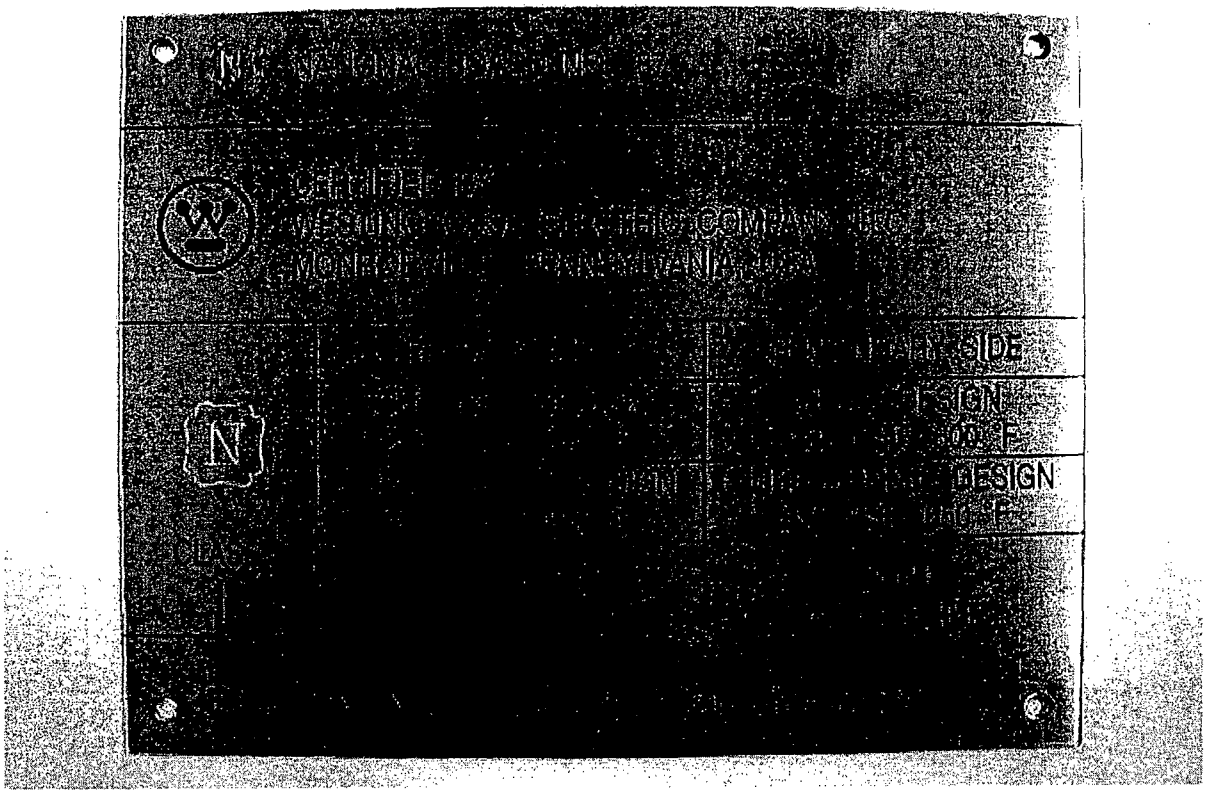
Comments:

Terry L. Casteel — Quality — August 17, 2005 — Date

James Myhan — Authorized Nuclear Inspector — August 17, 2005 — Date

Forms\Code Symbol Stamping Review List-f8-4-2.doc

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346



DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Doosan Heavy Industries & Construction Co.,Ltd. 555,Guygok-Dong, Chang-Won, Kyung-Nam, Korea.
(name and address of NPT Certificate Holder)

2. Manufactured for Westinghouse Electric Company LLC Energy Center Site 4350 Northern Pike Monroeville, PA 15146, USA
(name and address of purchaser)

3. Location of installation Tennessee Valley Authority Watts Bar Nuclear Power Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City, TN 37381 USA.
(name and address)

4. Type: 10010E01 Rev.3 (drawing no.) | SA508 CL.3a (mat'l. spec. no.) | 90 ksi (tensile strength) | N/A (CRN) | 2005 (year built)

5.ASME Code,Section III,Division 1 : 1989 (edition) | No Addenda (addenda data) | 1 (class) | N-20-3 (Code Case no.)

6.Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no) Revision N/A Date N/A

7.Remarks : 1. Item Name : Watts Bar Unit 1 Replacement Steam Generator "1C" set
2. ( )* : DOOSAN No.

8.Nom. thickness (in.) See Page 3 Min. design thickness (in.) See Page 3 Dia. ID (ft & in.) See Page 3 Length overall (ft & in.) 54 ft. - 6.75 in.

9.When applicable, Certificate Holder' Data Reports are attached for each item of this report :

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	N02018M01-03	N/A(DN-1306)*
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10.Design pressure 1185 (S side)/2485 (P side) psi. Temp. 600 / 650 °F. Hydro. test pressure 1481(S side)psi/3107(P side)psi at temp. °F
70 °F/ 70 °F

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

App. V

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 (Back - Pg. 2 of 3)

Certificate Holder's Serial Nos. N02018M01-03 through N/A

CERTIFICATION OF DESIGN

Design specifications certified by BRUCE A. BELL (when applicable) P.E.State TN Reg.no. 102034

Design report* certified by JAMES R. SCHWALL (when applicable) P.E.State TN Reg.no. 10121

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PART conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2767 Expires JANUARY. 8. 2006

Date 8/12/05 Name Doosan Heavy Industries & Construction Co. Ltd. (NPT Certificate Holder) Signed J. S. Gong (authorized representative)

CERTIFICATE OF SHOP 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 OHIO and employed by The Hartford Steam Boiler Inspection and Insurance Co. of CT. have inspected these items described in this Data Report on 8-12-05, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data 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.

Date 8/12/05 Signed C R Thomas (Authorized Inspector) Commissions OHIO 169 [Nat'l.Bd.(incl.endorsements) and state or prov.and no.]

APP. V

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Doosan Heavy Industries & Construction Co.,Ltd. 555,Guygok-Dong, Chang-Won, Kyung-Nam, Korea.
(name and address of NPT Certificate Holder)

2. Manufactured for Westinghouse Electric Company LLC Energy Center Site 4350 Northern Pike Monroeville, PA 15146, USA
(name and address of purchaser)

3. Location of installation Tennessee Valley Authority Watts Bar Nuclear Power Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City, TN 37381 USA.
(name and address)

4. Type: 10010E01 Rev.3 (drawing no.) | SA508 CL.3a (mat'l. spec. no.) | 90 ksi (tensile strength) | N/A (CRN) | 2005 (year built)

8.Nom. thickness (in.) See Below Min. design thickness (in.) See Below Dia. ID (ft & in.) See Below Length overall (ft & in.) 54 ft. - 6.75 in.

Part Description	Material Specification	Tensile Strength	Nom. Thickness (in.)	Min. design thickness (in.)	Dia. ID (ft & in.)	Length overall (ft & in.)
2:1 Torispherical Top Head	SA508 CL3a	90 Ksi	3.92"	3.72	SR147.06" / R28.0"	5'-5.25"
Tubesheet	SA508 CL3a	90 Ksi	22.00"	22.00	Φ 125.62"(S side) Φ 129.88"(P side)	2'-4.60"
Primary Head	SA508 CL3a	90 Ksi	6.21"	6.19	SR62.81"	N/A
Upper Shell #1	SA508 CL3a	90 Ksi	3.92"	3.72	Φ 168.50"	5'-2.41"
Upper Shell #2	SA508 CL3a	90 Ksi	3.92"	3.72	Φ 168.50"	13'-5.09"
Shell Cone	SA508 CL3a	90 Ksi	3.92"/ 3.90"/ 3.19"	3.72"/ 3.73"/ 3.11"	Φ 129.88"/Φ 168.50"	7'-8.09"
Lower Shell #1	SA508 CL3a	90 Ksi	4.13"/ 3.19"	4.06"/ 3.11"	Φ 129.88"	14'-1.58"
Lower Shell #2	SA508 CL3a	90 Ksi	3.19"	3.11"	Φ 129.88"	14'-1.58"

Purpose	Q'ty	Dia.or Size	Type	How Attached	Material Specification	Thickness	Reinforcement Material	Location
Primary Side Nozzle (Inlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	integral	Primary Head
Primary Side Nozzle (Outlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	integral	Primary Head
Primary Manway	2	16.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.98"	integral	Primary Head
Steam Outlet Nozzle	1	32.0 in. OD	Forging	Integrally	SA-508 Class 3a	1.3075"	integral	Top Head
Level Tap Nozzle	5	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.428"	Build-up	Upper Shell-2
Pressure Tap Nozzle	3	1.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.42"	Build-up	Upper Shell-2
Secondary Manway	2	16.0 in. ID	Forging	Welded	SA-508 Class 3a	5.565"	integral	Upper Shell-2
Recirculation Nozzle	1	3.0 in. NPS	Forging	Welded	SA-508 Class 3a	3.3175"	integral	Upper Shell-1
Auxiliary Feedwater Nozzle	1	6.0 in. OD	Forging	Welded	SA-508 Class 3a	0.595"	integral	Upper Shell-1
Level Tap Nozzle	3	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.4275"	Build-up	Cone Shell
Sampling Nozzle	1	2.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.507"	Build-up	Lower Shell-1
Feedwater Nozzle	1	16.0 in. OD	Forging	Welded	SA-508 Class 3a	0.903"	integral	Lower Shell-1
6" Hand hole	2	6.0 in. ID	Forging	Welded	SA-508 Class 3a	3.69"	integral	Lower Shell-1
8" Hand hole	2	8.0 in. ID	Forging	Welded	SA-508 Class 3a	3.44"	integral	Lower Shell-1
Level Tap Nozzle	1	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.4275"	Build-up	Lower Shell-1
Inspection Port	3	2.0" NPS	Forging	Welded	SA-508 Class 3a	2.876"	integral	Lower Shell-1
Drain Nozzle	1	1.0" NPS	Forging	Welded	SA-508 Class 1a	0.420"	Build-up	Tubesheet
Cold Leg Blowdown Nozzle	1	2.5" NPS	Forging	Welded	SA-182 Grade F11	0.276"	Build-up	Tubesheet
Hot Leg Blowdown Nozzle	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Build-up	Tubesheet


DOOSAN NO.
CERTIFIED BY
SERIAL NO.
EQUIPMENT NAME
DESIGN PRESSURE
HYDRO TEST PRESSURE
APPLICABLE CODE
WATTS BAR NUCLEAR POWER PLANT, UNIT 1
Doosan Heavy Industries & Construction Co., Ltd.

DUPLICATE
ORIGINAL

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga, TN 37402 (Address)
Date 12-8-06
Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name)
P. O. Box 2000, Spring City, TN 37381 (Address)
Unit Unit 1
WO #: 05-816062-004 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name)
P. O. Box 549, Soddy-Daisy, TN 37384 (Address)
Type Code Symbol Stamp N/A
Authorization No N/A
Expiration Date N/A

4. Identification of system RCS

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
(31" ID) WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF RCS PIPING - STM GEN #4 CROSSOVER & MAIN LOOP PIPING

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-68-901
Other ☐ Pressure ____ psi Test Temp ____ °F WO# 06-918055-000

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.

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DUPLICATE
ORIGINAL

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-102 WO Number: 05-816062-004
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed [signature] Field Engineer Date 12-5 20 06
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 9/6/06 to 12/8/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/8 20 06

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by **Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146**
(name and address of N Certificate Holder)

2. Manufactured for **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address of Purchaser)

3. Location of installation **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-D	N/A	10010E01, Rev. 3	88	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

5. ASME Code, Section III, Division 1:

1989	No Addenda	Class 1	N-20-3
(edition)	(addenda date)	(class)	(Code Case no.)

Items 6 - 10 inclusive to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

6. Shell:

SA-508 Class 3a	90 Ksi	See Page 3, Sect 6	See Page 3, Sect 6	See Page 3, Sect 6	54 ft. - 6.75 in
(mat'l spec. no.)	(tensile strength)	(nom. thickness (in.))	(min. design thickness (in.))	(dia. ID (ft. & in.))	(length (overall) (ft & in.))

7. Seams:

Seamless	N/A	N/A	100	Double butt weld	Yes	Full	5
(long.)	(HT[1])	(RT)	(eff. %)	(girth)	(HT[1])	(RT)	(no. of courses)

8. Heads:

SA-508 Class 3a	90 Ksi	N/A	N/A
((a) mat'l spec no.)	(tensile strength)	((b) mat'l spec no.)	(tensile strength)

	Location (top, bottom, ends)	Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)	Top	3.72"	0.0625"	12'- 3.06"	28.0"	N/A	N/A	N/A	14'- 0.50"	Concave
(b)	Bottom	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used: N/A (mat'l. spec. no., size, quantity) Other fastening: N/A (describe or attach sketch)

9. Jacket closure: N/A
(Describe as ogee & weld, bar, etc. If bar, give dimensions, describe or sketch)

10. Design Pressure[2] 1185 (psi) at max. temp. 600 (°F). Min. pressure-test temp. 70 (°F). Pneu., (hydro) or comb. test pressure 1481 (psi)

Items 11 and 12 to be completed for tube sections.

11. Tubesheets:

SA-508 Class 3a	129.88 in. (S side) / 125.62 in. (P side)	22.00 in.	Welded
(stationary, mat'l spec. no.)	(dia. in. (subject to press.))	(thickness (in.))	(attachment (welded, bolted))
N/A	N/A	N/A	N/A
(floating, mat'l spec. no.)	(dia. (in.))	(thickness (in.))	(attachment)

12. Tubes:

SB-163 UNS N06690	0.750 in.	0.043 in.	5128	U-Bend Tubes
(mat'l. spec. no.)	(OD (in.))	(thickness (inches or gage))	(no.)	(type (straight or U))

Items 13 to 16 inclusive to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

13. Shell:

N/A	N/A	N/A	N/A	N/A	N/A
(mat'l. spec. no.)	(tensile strength)	(nom. thickness (in.))	(min. design thickness (in.))	(dia. ID (ft & in.))	(length (overall) (ft & in.))

14. Seams:

N/A	N/A	N/A	N/A	Double butt weld	Yes	Full	N/A
(long. (welded. dbl., single))	(HT[1] (yes or no))	(RT)	(eff. %)	(girth)	(HT[1])	(RT)	(no. of courses)

15. Heads:

SA-508 Class 3a	90 Ksi	N/A	N/A	N/A	N/A
((a) mat'l spec. no.)	(tensile strength)	((b) mat'l spec. no.)	(tensile strength)	((c) mat'l spec. no.)	(tensile strength)

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a) Top, bottom, ends	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(b) Channel	6.19 in.	N/A	N/A	N/A	N/A	62.81 in. (ID)	N/A	Concave
(c) Floating	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used: N/A (mat'l spec. no., size, quantity) Other fastening: N/A (describe or attach sketch)

16. Design pressure[2] 2485 (psi) at 650 (°F). Min. pressure-test temp. 70 (°F). Pneu., (hydro), or comb. test pressure 3107 (psi)

[1] If postweld heat treated. [2] List other internal or external pressure with coincident temperature when applicable.

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and number of sheets is recorded at top of this form.

(7/98)

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DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 (Back - Pg. 2 of 4)

Certificate Holder's Serial No. **WB1-RSG-D**

17. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	Quantity	Dia. or Size	Type	How Attached	Mat'l	Thickness	Reinforcement Material	Location
(See pages 3 and 4 of this Data Report for complete table of nozzle, inspection and safety valve openings)								

18. Supports: Skirt **No** (yes or no) Lugs **N/A** (quantity) Legs **N/A** (quantity) Other **4 Support Pads** (describe) Attached **Channel head / Integral forged** (where and how)

19. Remarks: **1.) This assembly manufactured, inspected and tested by Doosan Heavy Industries & Construction Co. Ltd. under NPT Certificate of Authorization N-2767, which expires January 8, 2006. See the attached N-2 Certificate Holders' Data Report for S/N –N02018M01-04**

2.) Unit received full PWHT and RT examination with full MT/PT after hydrostatic test.

3.) The Primary Side of the tube plate and channel head interior, including nozzles and manways overlaid with weld-deposited Ni-Cr-Fe alloy.

4.) Line 10 - Max. Pressure Differential across tubes = 670 PSID at 650° F; Line 16 - Max. Pressure Differential across tubes = 1600 PSID at 650° F

CERTIFICATION OF DESIGN

Design specification certified by **Bruce A. Bell** P.E. State **TN** Reg. no. **102034**

Design report certified by **James R. Schwall** P.E. State **TN** Reg. no. **10121**

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this nuclear vessel conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. **N-1149** Expires **November 24, 2007**

Date **August 17, 2005** Name **Westinghouse Electric Company LLC** (N Certificate Holder) Signed **Terry L. Casteel** (authorized representative)

CERTIFICATE OF SHOP 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 **The Hartford Steam Boiler Inspection and Insurance Company of Connecticut** of **Hartford, Connecticut** have Inspected the component described in this Data Report on **8-17-05**, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this component in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data 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.

Date **August 17, 2005** Signed **James R. Myhan** (Authorized Nuclear Inspector) Commissions **NB 10822 N TENN 2693** (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this nuclear vessel conforms to the rules of construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. **N/A** Expires **N/A**

Date **N/A** Name **N/A** (N Certificate Holder) Signed **N/A** (authorized representative)

CERTIFICATE OF FIELD ASSEMBLY 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 **N/A** and employed by **N/A** of **N/A** have compared the statements in this Data Report with the described component and state that parts referred to as data items **N/A**, not included in the certificate of shop inspection, have been inspected by me on **N/A** and that to the best of my knowledge and belief the Certificate Holder has constructed and assembled this component in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data 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.

Date **N/A** Signed **N/A** (Authorized Nuclear Inspector) Commissions **N/A** (Nat'l Bd. (incl endorsements) and state or prov. and no.)

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by **Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146**
(name and address of N Certificate Holder)

2. Manufactured for **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address of Purchaser)

3. Location of installation **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-D	N/A	10010E01, Rev. 3	88	2005
(horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Natl. Bd. no.)	(year built)

6. Shell:

(Additional shell course data table)

Shell Course Component	Material Specification No.	Tensile Strength	Nominal Thickness (Inches)	Minimum Design Thickness (Inches)	Inside Diameter (Ft. and In.)	Overall Length (Ft. and In.)
Upper Shell -2 Barrel	SA-508 Class 3a	90 Ksi	3.72 in.	3.72 in.	14 ft. - 0.50 in.	13 ft. - 5.09 in.
Upper Shell -1 Barrel	SA-508 Class 3a	90 Ksi	3.72 in.	3.72 in.	14 ft. - 0.50 in.	5 ft. - 2.41 in.
Conical Shell Transition	SA-508 Class 3a	90 Ksi	3.72 in. and 3.73 in. and 3.11 in.	3.72 in. and 3.73 in. and 3.11 in.	14 ft. - 0.50 in. (top) and 10 ft. - 9.88 in. (bottom)	7 ft. - 8.09 in.
Lower Shell -2 Barrel	SA-508 Class 3a	90 Ksi	3.11 in.	3.11 in.	10 ft. - 9.88 in.	14 ft. - 1.58 in.
Lower Shell -1 Barrel	SA-508 Class 3a	90 Ksi	3.11 and 4.06 in.	3.11 and 4.06 in.	10 ft. - 9.88 in.	14 ft. - 1.58 in.

17. Nozzles, inspection and safety valve openings:

(Continuation - Shell openings data table)

Purpose (Inlet, outlet, drain, etc.)	Qty.	Dia. or Size	Type	How Attached	Material	Thickness	Reinforcement Material	Location
Primary Side Nozzle (Inlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	Integral	Primary Head
Primary Side Nozzle (Outlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	Integral	Primary Head
Primary Manway	2	16.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.98"	Integral	Primary Head
Steam Outlet Nozzle	1	32.0 in. OD	Forging	Integrally	SA-508 Class 3a	6.42/1.307"	Integral	Top Head
Level Tap Nozzle	5	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Upper Shell
Pressure Tap Nozzle	3	1.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.617/0.42"	Weld build-up	Upper Shell
Secondary Manway	2	16.0 in. ID	Forging	Welded	SA-508 Class 3a	5.565"	Integral	Upper Shell
Recirculation Nozzle	1	3.0 in. NPS	Forging	Welded	SA-508 Class 3a	3.317"	Integral	Upper Shell
Auxiliary Feedwater Nozzle	1	6.0 in. OD	Forging	Welded	SA-508 Class 3a	3.767/0.595"	Integral	Upper Shell
Level Tap Nozzle	3	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Cone Shell
Sampling Nozzle	1	2.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.75/0.507"	Weld build-up	Lower Shell
Feedwater Nozzle	1	16.0 in. OD	Forging	Welded	SA-508 Class 3a	4.033/0.903"	Integral	Lower Shell
6" Hand hole	2	6.0 in. ID	Forging	Welded	SA-508 Class 3a	3.69"	Integral	Lower Shell
8" Hand hole	2	8.0 in. ID	Forging	Welded	SA-508 Class 3a	3.44"	Integral	Lower Shell
Level Tap Nozzle	1	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.599/0.428"	Weld build-up	Lower Shell
Inspection Port	3	2.0" NPS	Forging	Welded	SA-508 Class 3a	2.876"	Integral	Lower Shell
Drain Nozzle	1	1.0" NPS	Forging	Welded	SA-508 Class 1a	0.420"	Weld build-up	Tubesheet
Cold Leg Blowdown Nozzle	1	2.5" NPS	Forging	Welded	SA-182 Grade F11	0.276"	Weld build-up	Tubesheet
Hot Leg Blowdown Nozzle	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Weld build-up	Tubesheet

Section 17, Table Notes:
Primary Side Nozzles supplied with welding safe end of SA-336, Class F316N forged material
Feedwater Nozzle supplied with welding safe end of SA-182 F11a forged material
Pressure Tap Nozzles are permanently plugged with SA-508 Class 1a material by socket welding at the nozzle end
Closure hardware for nozzles, inspection and safety valve openings listed in closure hardware table on page 4 of 4 of this data report

N Certificate Holder:	Westinghouse Electric Company LLC	N Certificate of Authorization No:	N-1149	Expires:	November 24, 2007
Authorized Representative	Terry L. Casteel			Date	August 17, 2005

Authorized Nuclear Inspector	James R. Myhan	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

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DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by **Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146**
(name and address of N Certificate Holder)

2. Manufactured for **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address of Purchaser)

3. Location of Installation **Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381**
(name and address)

4. Type

Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-D	N/A	10010E01, Rev. 3	88	2005
horiz. or vert.)	(tank, jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nat'l. Bd. no.)	(year built)

17. Nozzles, inspection and safety valve openings:

(Continuation - Closure hardware table)

Purpose (inlet, outlet, drain, etc.)	Qty.	Dia. or Size	Type	How Attached	Material	Thickness	Reinforcement Material	Location
Recirculation Nozzle Cover	1	9.625"	Forged	Bolted	SA-508 Class 3a	1.778"	N/A	Upper Shell
Recirculation Nozzle Studs	8	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Upper Shell
Recirculation Nozzle Nuts	8	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Upper Shell
Primary Manway Cover	2	26.75"	Forged	Bolted	SA-508 Class 3a	4.230"	N/A	Primary Head
Primary Manway Studs	32	1.875	1.875-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Primary Head
Primary Manway Nuts	32	1.875	1.875-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Primary Head
Secondary Manway Cover	2	23"	Forged	Bolted	SA-508 Class 3a	3.158	N/A	Upper Shell
Secondary Manway Studs	40	1.25"	1.25-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Upper Shell
Secondary Manway Nuts	40	1.25"	1.25-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Upper Shell
6" Secondary Handhole Cover	2	11.62"	Forged	Bolted	SA-508 Class 3a	1.778"	N/A	Lower Shell
6" Secondary Handhole Studs	16	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Lower Shell
6" Secondary Handhole Nuts	16	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Lower Shell
8" Secondary Handhole Cover	2	11.62"	Forged	Bolted	SA-508 Class 3a	1.87"	N/A	Lower Shell
8" Secondary Handhole Studs	24	1"	1.000-8UN-2A	Thread	SA-193 Grade B7	N/A	N/A	Lower Shell
8" Secondary Handhole Nuts	24	1"	1.000-8UNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Lower Shell

N Certificate Holder: Westinghouse Electric Company LLC	N Certificate of Authorization No.: N-1149			Expires: November 24, 2007
Authorized Representative	Terry L. Casteel		Date	August 17, 2005
Authorized Nuclear Inspector	James R. Myhan	Comissions: NB 10822 N TENN 2693	Date	August 17, 2005

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F-8.4-2 Rev. 0

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

Westinghouse

CODE SYMBOL STAMPING REVIEW LIST

Customer: Tennessee Valley Authorit | Westinghouse PO No.: 4500103901

Item: Replacement Steam Generator | Mfr. Ser. No.: N02018M01-04

Supplier: Doosan Heavy Ind. & Const. Co. Ltd. | Natl. Board No.: 88

Code Section: III - Div. 1 | Class: 1 | Edition: 1989 | Addenda: None

		OK	N/A
1.	Design Specification	☒	☐
2.	Design Report	☒	☐
3.	Supplier Traveler:		
	a. All operations have been completed and accepted by Quality and ANI.	☒	☐
4.	Hydrostatic, pneumatic or structural integrity test:		
	a. Proper procedure available and in use;	☒	☐
	b. Pressure gage properly calibrated;	☒	☐
	c. Pressure, holding time;	☒	☐
	d. Fluid quality, temperature.	☒	☐
5.	Completion of Data Report Form for fabrication.	☒	☐
6.	Code Symbol stamping by supplier for fabrication.	☒	☐
7.	Completion of Data Report form by Westinghouse and ANI.	☒	☐
8.	ANI authorization for Westinghouse to apply Code Symbol stamp.	☒	☐

Comments:

Terry L. Casteel — Quality — August 17, 2005 — Date

James Myhan — Authorized Nuclear Inspector — August 17, 2005 — Date

Forms\Code Symbol Stamping Review List-f8-4-2.doc

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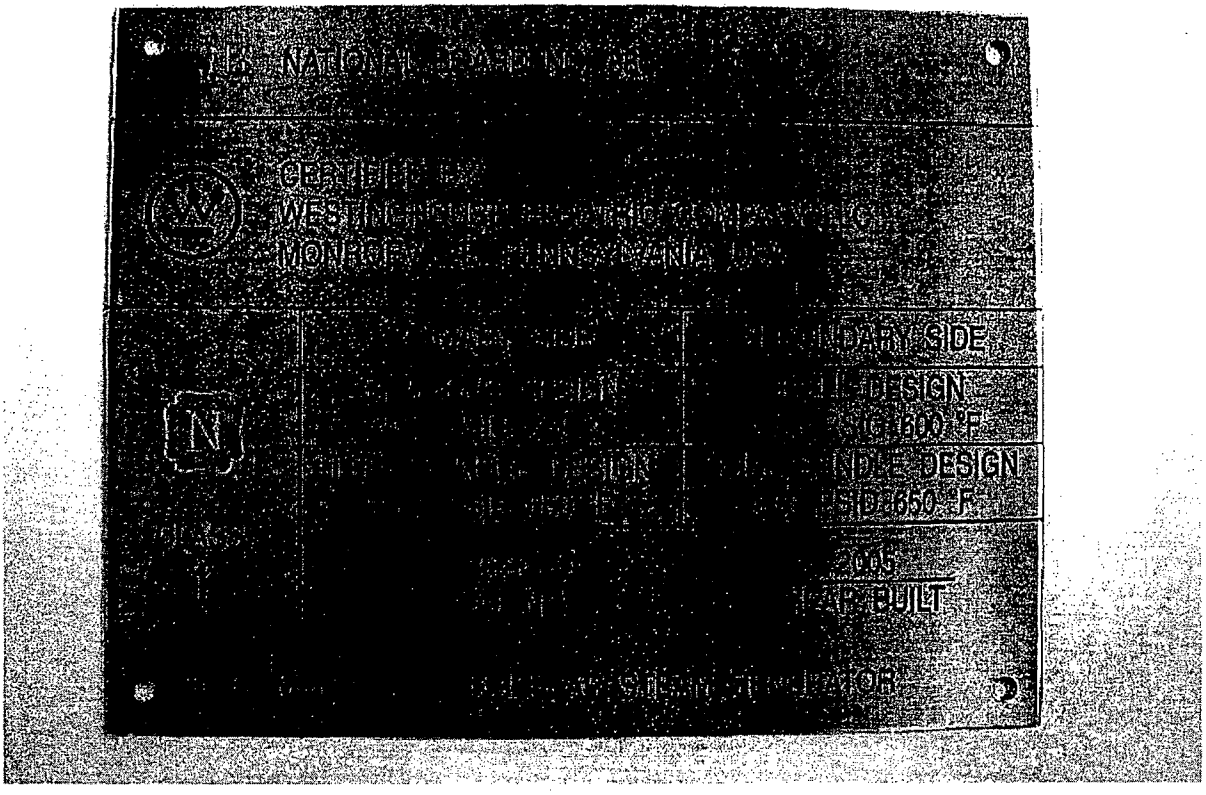
DOOSAN
TVA Watts Bar Unit–1 RSG
Contract # 16346



DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Doosan Heavy Industries & Construction Co.,Ltd. 555,Guygok-Dong, Chang-Won, Kyung-Nam, Korea.
(name and address of NPT Certificate Holder)

2. Manufactured for Westinghouse Electric Company LLC Energy Center Site 4350 Northern Pike Monroeville, PA 15146, USA
(name and address of purchaser)

3. Location of installation Tennessee Valley Authority Watts Bar Nuclear Power Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City, TN 37381 USA.
(name and address)

4. Type: 10010E01 Rev.3 (drawing no.) | SA508 CL.3a (mat'l. spec. no.) | 90 ksi (tensile strength) | N/A (CRN) | 2005 (year built)

5.ASME Code,Section III,Division 1 : 1989 (edition) | No Addenda (addenda data) | 1 (class) | N-20-3 (Code Case no.)

6.Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7.Remarks : 1. Item Name : Watts Bar Unit 1 Replacement Steam Generator "1D" set
2. ( )* : DOOSAN No.

8.Nom. thickness (in.) See Page 3 Min. design thickness (in.) See Page 3 Dia. ID (ft & in.) See Page 3 Length overall (ft & in.) 54 ft. - 6.75 in.

9.When applicable, Certificate Holder' Data Reports are attached for each item of this report :

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	N02018M01-04	N/A(DN-1307)*
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10.Design pressure 1185 (S side)/2485 (P side) psi. Temp. 600 / 650 °F. Hydro. test pressure 1481(S side)psi/3107(P side)psi at temp. °F
70 °F/ 70 °F

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

App. V

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 (Back - Pg. 2 of 3)

Certificate Holder's Serial Nos. N02018M01-04 through N/A

CERTIFICATION OF DESIGN

Design specifications certified by BRUCE A. BELL (when applicable) P.E.State TN Reg.no. 102034

Design report* certified by JAMES R. SCHWALL (when applicable) P.E.State TN Reg.no. 10121

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PART conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2767 Expires JANUARY. 8. 2006

Date 8/11/05 Name Doosan Heavy Industries & Construction Co. Ltd. (NPT Certificate Holder) Signed J. S. Gong (authorized representative)

CERTIFICATE OF SHOP 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 OHIO and employed by The Hartford Steam Boiler Inspection and Insurance Co. of CT. have inspected these items described in this Data Report on 8-12-05, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data 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.

Date 8-12-05 Signed C R Gronen (Authorized Inspector) Commissions OHIO 169 [Nat'l.Bd.(incl.endorsements) and state or prov.and no.]

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Doosan Heavy Industries & Construction Co.,Ltd. 555,Guygok-Dong, Chang-Won, Kyung-Nam, Korea.
(name and address of NPT Certificate Holder)

2. Manufactured for Westinghouse Electric Company LLC Energy Center Site 4350 Northern Pike Monroeville, PA 15146, USA
(name and address of purchaser)

3. Location of installation Tennessee Valley Authority Watts Bar Nuclear Power Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City, TN 37381 USA.
(name and address)

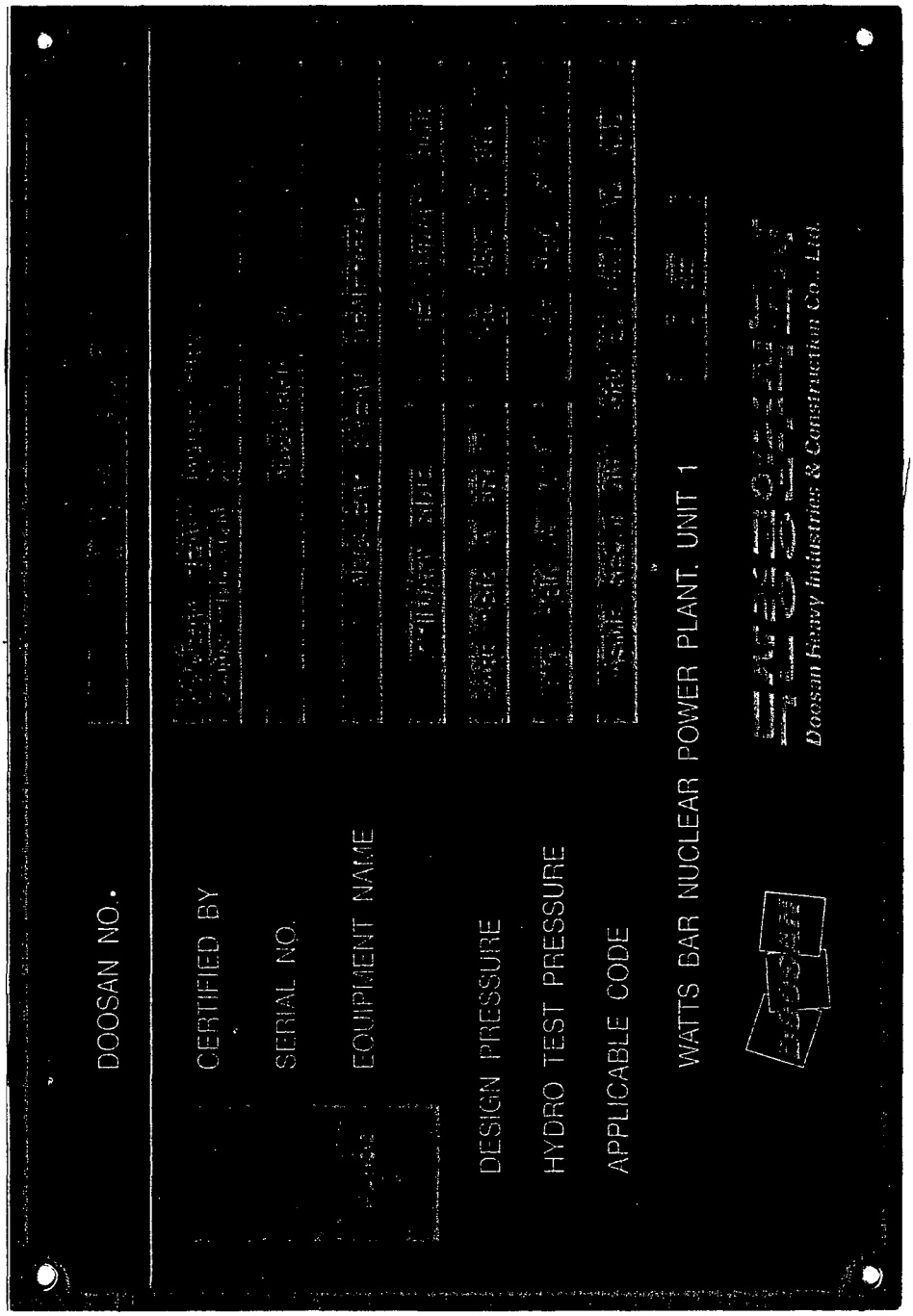
4. Type: 10010E01 Rev.3 (drawing no.) | SA508 CL.3a (mat'l. spec. no.) | 90 ksi (tensile strength) | N/A (CRN) | 2005 (year built)

8. Nom. thickness (in.) See Below Min. design thickness (in.) See Below Dia. ID (ft & in.) See Below Length overall (ft & in.) 54 ft. - 6.75 in.

Part Description	Material Specification	Tensile Strength	Nom. Thickness (in.)	Min. design thickness (in.)	Dia. ID (ft & in.)	Length overall (ft & in.)
2:1 Torispherical Top Head	SA508 CL3a	90 Ksi	3.92"	3.72	SR147.06" / R28.0"	5'-5.25"
Tubesheet	SA508 CL3a	90 Ksi	22.00"	22.00	Φ 125.62"(S side) Φ 129.88"(P side)	2'-4.60"
Primary Head	SA508 CL3a	90 Ksi	6.21"	6.19	SR62.81"	N/A
Upper Shell #1	SA508 CL3a	90 Ksi	3.92"	3.72	Φ 168.50"	5'-2.41"
Upper Shell #2	SA508 CL3a	90 Ksi	3.92"	3.72	Φ 168.50"	13'-5.09"
Shell Cone	SA508 CL3a	90 Ksi	3.92"/ 3.90"/ 3.19"	3.72"/ 3.73"/ 3.11"	Φ 129.88"/Φ 168.50"	7'-8.09"
Lower Shell #1	SA508 CL3a	90 Ksi	4.13"/ 3.19"	4.06"/ 3.11"	Φ 129.88"	14'-1.58"
Lower Shell #2	SA508 CL3a	90 Ksi	3.19"	3.11"	Φ 129.88"	14'-1.58"

Purpose	Q'ty	Dia.or Size	Type	How Attached	Material Specification	Thickness	Reinforcement Material	Location
Primary Side Nozzle (Inlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	integral	Primary Head
Primary Side Nozzle (Outlet)	1	31.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.129/4.71"	integral	Primary Head
Primary Manway	2	16.0 in. ID	Forging	Integrally	SA-508 Class 3a	5.98"	integral	Primary Head
Steam Outlet Nozzle	1	32.0 in. OD	Forging	Integrally	SA-508 Class 3a	1.3075"	integral	Top Head
Level Tap Nozzle	5	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.428"	Build-up	Upper Shell-2
Pressure Tap Nozzle	3	1.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.42"	Build-up	Upper Shell-2
Secondary Manway	2	16.0 in. ID	Forging	Welded	SA-508 Class 3a	5.565"	integral	Upper Shell-2
Recirculation Nozzle	1	3.0 in. NPS	Forging	Welded	SA-508 Class 3a	3.3175"	integral	Upper Shell-1
Auxiliary Feedwater Nozzle	1	6.0 in. OD	Forging	Welded	SA-508 Class 3a	0.595"	integral	Upper Shell-1
Level Tap Nozzle	3	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.4275"	Build-up	Cone Shell
Sampling Nozzle	1	2.0 in. NPS	Forging	Welded	SA-508 Class 1a	0.507"	Build-up	Lower Shell-1
Feedwater Nozzle	1	16.0 in. OD	Forging	Welded	SA-508 Class 3a	0.903"	integral	Lower Shell-1
6" Hand hole	2	6.0 in. ID	Forging	Welded	SA-508 Class 3a	3.69"	integral	Lower Shell-1
8" Hand hole	2	8.0 in. ID	Forging	Welded	SA-508 Class 3a	3.44"	integral	Lower Shell-1
Level Tap Nozzle	1	0.75 in. NPS	Forging	Welded	SA-508 Class 1a	0.4275"	Build-up	Lower Shell-1
Inspection Port	3	2.0" NPS	Forging	Welded	SA-508 Class 3a	2.876"	integral	Lower Shell-1
Drain Nozzle	1	1.0" NPS	Forging	Welded	SA-508 Class 1a	0.420"	Build-up	Tubesheet
Cold Leg Blowdown Nozzle	1	2.5" NPS	Forging	Welded	SA-182 Grade F11	0.276"	Build-up	Tubesheet
Hot Leg Blowdown Nozzle	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Build-up	Tubesheet

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346



FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12/1/06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-818887-004

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A (Repair Organization P.O. No., Job No., etc.)
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system FEEDWATER PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-PIPE-003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF FEEDWATER PIPING Stm. Gen #4

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-3-903
Other ☐ Pressure _____ psi Test Temp _____ °F (WO# 05-820596-000)

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-103 WO Number: 05-818887-004
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, SGR FIELD ENGR. Date December 1, 20 06
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 8/15/06 to 12/12/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga, TN 37402 (Address)

Date 12/19/06

Sheet 1 of 2

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

Unit Unit 1

WO #: 05-816062-018 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name)
P. O. Box 549, Soddy-Daisy, TN 37384 (Address)

Type Code Symbol Stamp N/A

Authorization No N/A

Expiration Date N/A

4. Identification of system VERTICAL COLUMN SUPPORTS

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work VERTICAL COLUMN SUPPORT MODIFICATION STM GEN 1, 2, 3 & 4
REPLACE CAP SCREWS

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-104 WO Number: 05-816062-018
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer Date December 19, 20 06
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 9/2/06 to 12/19/06 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 12/19 20 06

APP. V
PG 141 OF 196

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 11-30-06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-820128-000
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system RHR/CONTAINMENT SPRAY PIPING SUPPORTS – UPPER CONTAINMENT
(SUPPORT) DESIGN CRITERIA WB-DC-40-31.9 AND 7TH EDITION AISC

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-074	N/A	N/A	N/A	N/A	N/A	Replacement	NO
CBI-22 (20°)	N/A	N/A	N/A	N/A	N/A	REPLACEMENT	No
CBI-28 (328°)	N/A	N/A	N/A	N/A	N/A	REPLACEMENT	No

7. Description of Work REMOVAL AND REINSTALLATION OF RHR/CONTAINMENT SPRAY PIPING SUPPORTS SG 1 & 4 UPPER COMTAINMENT

8. Tests Conducted: Hydrostatic □ Pneumatic □ Nominal Operating Pressure □
Other ✳ Pressure _____ psi Test Temp _____ °F
✳ Spray Nozzle Test Per 1-SI-74-1-A&B.

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-109 WO Number: 05-820128-000
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROGRAM ENGR. Date Nov. 30 20 06
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 7/24/06 to 12/1/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/1 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga, TN 37402 (Address)
Date 11-30-06
Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name)
P. O. Box 2000, Spring City, TN 37381 (Address)
Unit Unit 1
WO #: 05-820128-001 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name)
P. O. Box 549, Soddy-Daisy, TN 37384 (Address)
Type Code Symbol Stamp N/A
Authorization No N/A
Expiration Date N/A

4. Identification of system RHR/CONTAINMENT SPRAY PIPING SUPPORTS – UPPER CONTAINMENT
(Support) DESIGN CRITERIA WB-DC-40-31.9 AND 7TH EDITION AISC

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-074	N/A	N/A	N/A	N/A	N/A	Replacement	NO
CBI-25(A3176)	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL AND REINSTALLATION OF RHR/CONTAINMENT SPRAY PIPING SUPPORTS SG 2 & 3 UPPER CONTAINMENT

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other * Pressure _____ psi Test Temp _____ °F
* Spray Nozzle Test Per 1-SI-74-1-A&B

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-110 WO Number: 05-820128-001
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROGRAM ENGR. Date Nov. 30 20 06
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 7/24/06 to 12/1/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/1 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12-12-06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-818887-003 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system FEEDWATER PIPING

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-PIPE-003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF FEEDWATER PIPING STM GEN #3

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-3-903
Other ☐ Pressure _____ psi Test Temp _____ °F (WO#05-820596-000)

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-111 WO Number: 05-818887-003
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis ISI PROGRAM ENGR. Date Dec. 12 20 06
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 8/15/06 to 12/12/06 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. Earnest Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12/5/06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-817773-034

3. Work Performed by Bechtel Construction Company (Name) — Repair Organization P.O. No., Job No., etc. — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system STEAM GENERATOR BLOW DOWN / SYSTEM 015

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-015	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF SHELL DRAIN PIPING STM GEN #1,2,3 & 4

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ 1-TRI-1-902
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-116 WO Number: 05-817773-034
Applicable Manufacturer's Data Reports to be Attached

CODE CASE N-416-3 APPLIES.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer Date December 5, 20 06
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 9/5/06 to 12/12/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 12/1/06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) WO #: 05-816062-015 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) Authorization No N/A
Expiration Date N/A

4. Identification of system UPPER LATERAL SUPPORT

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 ~~CODE CASE N-416-3~~ 9TZ 9-13-06

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF UPPER LATERAL SUPPORT STM GEN #2

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-117 WO Number: 05-816062-015
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~
9TZ 9-13-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer Date December 1, 20 06
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 8/15/06 to 12/7/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/7 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12/05/06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-816062-017 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system UPPER LATERAL SUPPORT

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 ~~CODE CASE N-416-3~~ JTL 9-13-06

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF UPPER LATERAL SUPPORT

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-118 WO Number: 05-816062-017
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~
QAZ 9-13-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer Date December 5, 20 06
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 8/15/02 to 12/7/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/7 20 06

DUPLICATE
ORIGINAL

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY — Name
1101 Market St., Chattanooga, TN 37402 — Address

Date 12-12-06
Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant — Name
P. O. Box 2000, Spring City, TN 37381 — Address

Unit Unit 1
WO #: 05-816062-010

3. Work Performed by Bechtel Construction Company — Name
P. O. Box 549, Soddy-Daisy, TN 37384 — Address

Repair Organization P.O. No., Job No., etc.
Type Code Symbol Stamp N/A
Authorization No N/A
Expiration Date N/A

4. Identification of system LOWER LATERAL SUPPORT

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 ~~CODE CASE N-416-3~~ QTZ 9-13-06

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF LOWER LATERAL SUPPORT SIM GOU #1

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

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DUPLICATE
ORIGINAL

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-119 WO Number: 05-816062-010
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~

9-13-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROG. ENGR Date Dec. 12 20 06
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 8/16/06 to 12/12/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

APP. V
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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St., Chattanooga, TN 37402 (Address)
Date 12-12-06
Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name)
P. O. Box 2000, Spring City, TN 37381 (Address)
Unit Unit 1
WO #: 05-816062-011 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name)
P. O. Box 549, Soddy-Daisy, TN 37384 (Address)
Type Code Symbol Stamp N/A
Authorization No N/A
Expiration Date N/A

4. Identification of system LOWER LATERAL SUPPORT

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 ~~CODE CASE N-416-3~~

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF LOWER LATERAL SUPPORT Stm Gen #2

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

9-13-06

App. V
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FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-120 WO Number: 05-816062-011
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~ QTZ 9-13-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROG ENGR Date Dec. 12 20 06
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 8/16/06 to 12/12/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

DUPLICATE
ORIGINAL

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12-12-06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-816062-012

3. Work Performed by Bechtel Construction Company (Name) — Repair Organization P.O. No., Job No., etc. — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system LOWER LATERAL SUPPORT

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 ~~CODE CASE N-416-3~~ SR 9.13.06

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF LOWER LATERAL SUPPORT STM GEN #3

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

DUPLICATE
ORIGINAL

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-121 WO Number: 05-816062-012
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~
IWA 5250-13 06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed John T. Lewis, ISI PROG ENGR. Date Dec. 12 20 06
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 8/16/06 to 12/12/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/12 20 06

APP. V
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DUPLICATE
ORIGINAL

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 12/1/06
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) WO #: 05-816062-013

3. Work Performed by Bechtel Construction Company (Name) Repair Organization P.O. No., Job No., etc. Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) Authorization No N/A
Expiration Date N/A

4. Identification of system LOWER LATERAL SUPPORT

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 ~~CODE CASE N-416-3~~ DVZ 9-13-06

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF LOWER LATERAL SUPPORT

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

DUPLICATE
ORIGINAL

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-122 WO Number: 05-816062-013
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~ 9-13-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis SGR MGRS ENGR. Date December 1, 20 06
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 8/16/06 to 12/4/06 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 12/4 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12-7-06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-816062-014

3. Work Performed by Bechtel Construction Company (Name) — Repair Organization P.O. No., Job No., etc. — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system UPPER LATERAL SUPPORT

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 ~~CODE CASE N-416-3~~ 9/29-14-06

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF UPPER LATERAL SUPPORT SG GEN #1

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ ~~Nominal Operating Pressure ☐~~ N/A
Other ☐ ~~Pressure~~ ____ ~~psi~~ Test Temp ____ °F
RHZ 11-30-06

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-125 WO Number: 05-816062-014
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~ 9-14-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer Date December 5, 20 06
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 8/15/06 to 12/7/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/7 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) Date 11/17/2006
1101 Market St., Chattanooga , TN 37402 (Address) Sheet 1 of 2

2. Plant Watts Bar Nuclear Plant (Name) Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) Work Order 06-815666-000
(Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name) Type Code Symbol Stamp N/A
Watts Bar Nuclear Plant (Address) Authorization No N/A
Expiration Date N/A

4. Identification of system 063 Safety Injection

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-063-B	TVA	N/A	N/A	1-FE-63-170	2006	Replace-ment	No

7. Description of Work ~~Replace flange bolting due to orifice plate replacement.~~ JJZ 11-16-06
REPLACE ORIFICE PLATE.

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure LEAK TEST IN WO# 06-815666-001
Other Pressure _____ psi Test Temp _____ °F

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.

NIS-2 FORM SHEET 2 OF 2

FORM NIS-2 (Back)

9. Remarks ~~Code Case N-416-3~~ 2552.11-16-06 Tracking No. RR-07-129
Applicable Manufacturer's Data Reports to be Attached

Work Order 06-815666-000

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed M A Dodd, CONST. ENGR. Date 11/17 20 06
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 9/18/06 to 11/23/06 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. Eastridge Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/23 2006

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12-7-06
1101 Market St., Chattanooga, TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN 37381 (Address) — WO #: 05-816062-016 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Bechtel Construction Company (Name) — Type Code Symbol Stamp N/A
P. O. Box 549, Soddy-Daisy, TN 37384 (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system UPPER LATERAL SUPPORT

5. (a) Applicable Construction Code ASME SECT. III 19 71 Edition S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 ~~CODE CASE N-416-3~~ 9-18-06

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO

7. Description of Work REMOVAL & REINSTALLATION OF UPPER LATERAL SUPPORT Stm Gen #3

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks Tracking Number: RR-07-130 WO Number: 05-816062-016
Applicable Manufacturer's Data Reports to be Attached

~~CODE CASE N-416-3~~

9-18-06

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Roger A. Landis, Field Engineer Date December 5, 20 06
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 8/15/06 to 12/7/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/7 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date **09/27/06**

1101 Market St., Chattanooga, TN 37402 (Address) Sheet 1 of 2

2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**

P. O. Box 2000, Spring City, TN 37381 (Address) W/O ~~05-~~05-820788-005 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**

P.O. BOX 2000 SPRING CITY,TN 37381 (Address) Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system **015 STEAM GEN. BLOW DOWN**

5. (a) Applicable Construction Code AISC 19 **NA** Edition, NA Addenda, **N/A** Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-SNUB-015-4006199	PSA	3470	NONE	SNUBBER	1977	REPL.	YES
1-SNUB-015-4006199	PSA	33262	NONE	47A400-6-199	2006	REPLACED (REMOVED)	YES

7. Description of Work **REPLACED SNUBBER** (will) SBQ 9/20/06

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure
Other X Pressure NA psi Test Temp NA °F
1-TRI-0-7

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.

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FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-136 WO# 05-820788-005
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Callin Maint Spec Date 10/3 20 06
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 9/27/06 to 10/4/06 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. Eamigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 10/4 20 06

APP. V

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*

As Required by the Provisions of the ASME Code Rules, Section III, Division 1

Non-Tech Division

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, Ca. 92803
(Name and address of NPT Certificate Holder)

Manufactured for ITT Grinnell Corporation 621 Dana Street N.E. Warren, Ohio 44481
(Name and address of purchaser or owner)

3. Location of Installation Unknown

4. Identification

(a) Component Support I.D. No.	(b) Canadian Registration No.	(c) Applicable Drawings with Last Rev. & Date	(d) Stress Report or Load Capacity Data Sheet	(e) Type of Component Support	(f) Class	(g) Nat'l Board No.	(h) Year Built
(1) 33070	None	1801104-03-J	Dr1412 Rev. 0	Linear	2	None	1983
(2) thru	"	"	"	"	"		
(3) 33294							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

8608-5-86V

W860724K0891 (4)

W860724K1745 (4)

98004974003

HARD COPY RETAINED

5. Remarks: Inspection Test Reports, CMTR's and Certificate of Conformance reviewed and meet ASME SEC III 1974 Edition, Summer '76 Addenda and Code Case 1644-6.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter 78 (Date), Code Case No. 1644-7

Date 1/3/83 Signed Pacific Scientific (NPT Certificate Holder) by Donald A Arney

Our ASME Certificate of Authorization No. 1193 to use the "NPT" (NPT)

Symbol expires Aug. 4, 1984 (Date).

FILMED FROM BEST AVAILABLE COPY

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at:

Pacific Scientific

Filed Per NCA 3256

Design Specifications Certified by (1) Leo E. Ay PE State California

Reg. No. 13533.

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay

PE State California Reg. No. 13533.

(1) List name only, signature not required.

JAN 13 1983

REVIEWED BY DS

Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½ in., (2) information in items 1, 2, 3, and 4 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

(10/77)

APP. V 23

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ITT Grinnell Corporation
621 Dana Avenue, N. E.
Warren, Ohio 44481
(216) 373-1500

February 26, 1983

REFERENCE: Bellefonte Nuclear Plant Order Number 77K53-820732
ITT Grinnell Corporation Atlanta Branch S.O. Number 00800
Specification Number BLNP-DS-1915-2992-00
Warren Plant Register Number E-BM-535

Gentlemen:

We, ITT Grinnell Corporation—Pipe Hanger Division, certify that the materials supplied on the referenced order comply with the applicable requirements of ASME Section III, Subsection NF, Article NF 2000-1974 Edition including the Winter 1975 Addenda.

We also certify that the fabrication complies with the requirements of ASME Section III, Subsection NF, Article NF 4000-1974 Edition including the Winter 1975 Addenda.

The following Paragraph of ASME Section III, Subsection NF, Summer 1976 Addenda apply: NF-1214.1. The following Paragraphs of ASME Section III also apply: Article XVII of Subsection NA Summer 1976 Addenda, NF-2130, NF-2160, NF-3291, NF-4721, NF-4622.3-1 of Subsection NF, Summer 1976 Addenda.

Code Cases applicable: 1644 Rev. 7, N-180, N-108, N-225, 1567, N-242-1, N-247, N-249-2, and N-71-11.

A marking code is utilized to identify material specification grade and/or class. See reverse side for material identification codes.

Material supplied per Certificate of Authorization Number N-2444-4, which expires September 8, 1984.

Rudolph Pavlik

RUDOLPH PAVLIK
Quality Assurance Manager

RP/sad

cc: R. Gospodarski

Master Certificate of Compliance Rev. D reviewed on 1-18-83 HSB

	Material	Letter Code		Material	Letter Code
1.	SA-36	A	51.	SA-387 Gr 11 CL-1	XA
2.	SA-53 Gr A	YQ	52.	SA-387 Gr 11 CL-2	XC
3.	SA-53 Gr B	H	53.	SA-387 Gr 22 CL-1	XE
4.	SA-106 Gr A	WB	54.	SA-387 Gr 22 CL-2	XG
5.	SA-106 Gr B	K	55.	SB-409 UNS 81900	XG
6.	A-108 Gr 1018	ZB or XR	56.	A-434 Gr BB	XJ
7.	A-108 Gr 1117	ZV	57.	A-434 Gr BC	XB
8.	A-108 Gr 1144	ZL	58.	A-434 Gr BD	XC
9.	SA-181 Gr 2	F	59.	SA-479 Ty 304	YH
10.	SA-182 Gr F2	XJ or F2	60.	SA-479 Ty 316	YR
11.	SA-182 Gr F22	YN or F22	61.	A-500 Gr B	YW
12.	SA-193 Gr B7	E or B7	62.	A-500 Gr C	YX
13.	SA-193 Gr B8	WA or B8	62.	A-501	YZ
14.	SA-194 Gr 2H	ZU or 2H or ZHB	64.	A-513 Gr 1020	ZJ
15.	SA-194 Gr 7	Z or 7 or 7B	65.	A-513 Gr 1025	ZK
16.	SA-194 Gr 8	XD or 8 or 8B	66.	SA-515 Gr 65	V or U
17.	SA-216 Gr WCA	YB or WCA	67.	SA-515 Gr 70	YH
18.	SA-225 Gr WCB	YA or WCB	68.	SA-516 Gr 70	ZT
19.	SA-217 Gr WC9	XF or WC9	69.	A-519 Gr 1018	XL
20.	SA-240 Ty 304	YE	70.	A-519 Gr 1020	XM
21.	SA-240 Ty 316	YT	71.	A-513 Gr 1025	ZK
22.	SA-249 Ty 304	ZC	72.	A-564 Gr 630	ZA
23.	SA-266 CL-1	N	73.	A-570 Gr C	YP
24.	SA-266 CL-2	P	74.	SA-580 Ty 316	WD
25.	SA-266 CL-3	Q	75.	A-668 CL-C	R
26.	A-276 Ty 304	ZH	75.	A-668 CL-D	S
27.	A-276 Ty 316	ZR	77.	A-668 CL-F	T
28.	SA-302 Gr B	YF	78.	SA-675 Gr 50	ZJ
29.	SA-306 Gr 50	B	79.	SA-675 Gr 55	ZE
30.	SA-306 Gr 55	D	80.	SA-675 Gr 60	ZF
31.	SA-306 Gr 60	C	81.	SA-675 Gr 65	ZG
32.	SA-306 Gr 65	X	82.	SA-675 Gr 70	YC
33.	SA-306 Gr 70	U	83.	C-1018	J
34.	SA-306 Gr 75	M	84.	C-1020	YK
35.	A-307 Gr A	K	85.	AISI-4140	YL
36.	SA-307 Gr B	L	86.	AISI-4140	ZN
37.	SA-312 Ty 304	ZJ	87.	SA-240 Ty 317L	YE
38.	SA-312 Ty 304L	ZS	88.	SA-240 Ty 304L	XD
39.	SA-312 Ty 316	YS	89.	A-513 Gr 1021	YF
40.	SA-312 Ty 316L	ZT	90.	SB-409 Gr 800	YD
41.	SA-320 Gr L7	ZY or L7	91.	SA-106 Gr C	YG
42.	SA-320 Gr L7A	YA or L7A	92.	SA-487 CL-4I	YH
43.	SA-320 Gr L7B	YB or L7B			
44.	SA-325 Ty 1	ZX			
45.	SA-335 Gr P5	ZD			
46.	SA-335 Gr P11	ZD or ZP			
47.	SA-335 Gr P12	XE			
48.	SA-354 Gr BD	XH			
49.	SA-376 Ty 304	ZU			
50.	SA-376 Ty 316	YV			

Note 1: Material Codes listed have taken into account material specification required markings as much as possible. In some cases, however, e. g.; SA-193 B7, the material specification requires certain specific markings for some items and not others. SA-193 B7 requires B7 on the ends of all bolting material. However, items such as pivot pins do not require the B7. In all cases, the material specification required markings take precedence over ITT Grinnell generated marking codes. Consult the applicable material specification or Q. A. Department if questions or doubts arise prior to marking materials which list more than one code above.

Note 2: The presence of any singular numeric prefix or suffix to the material identification code for SA-36 (letter Code A) should not be misinterpreted as part of ITT Grinnell's Material Code Identification Procedure. This numeric character is for internal purposes only.

Note 3: No additions or alterations may be made to the listing without Q. A. Department (Engineering) approval.

TENNESSEE VALLEY AUTHORITY MEB '841105 408 No. RD- 950407

REQUEST FOR DELIVERY OF MATERIALS UNDER CONTRACT
(PLEASE TYPE OR PRINT FIRMLY)

Project

Contract No. 78KA2-824160
Date Contract Expires 1-30-85
RD Date 11/2/84 RD Amount Est. $147,265 00
Account No. N3 -39 L

TO: Bergen-Patterson
Attn: Mr. Donald H. Laliberte
Street Address 74A Commerce Way P. O. Box 4011
City, State, Zip Woburn, Massachusetts 01888

SHIP MATERIALS
TO → Tennessee Valley Authority
Street Watts Bar Nuclear Plant
City, State, Zip (Near) Spring City, TN 37381
Attention S. H. Odum - Chief Storekeeper
Telephone (615) 365-5405

TVA, by RKA H/S
Name C. [illegible], Chief
Title Mechanical Engineering Branch

MAIL INVOICE IN TRIPLICATE FOR EACH PAYMENT TO: Tennessee Valley Authority
Accounts Payable Section
Central Accounting Branch (01)
E9D88, 400 W. Summit Hill Drive
Knoxville, TN 37902

MARK: (Use RD No. and Project above) or (02)
SHIP By: Motor Freight or UPS (07) To Above Address
F. O. B. Watts Bar Nuclear Plant by 3/1/85

If repair parts identify: Make Model License No.
Motor No. Serial No.

Invoice must show TVA RD No., Contract No., Discount or Terms of Payment, and F.O.B. point applicable to the contract, Item No., description of article or service, quantity, unit price and total amount. Additional details are provided in the Terms of Payment clause in the contract.

Terms	If materials are from GSA Store Stock, complete	Consign Add.			Date		Invoice Add.			RD Number		
	1-3	4-6	7	30-35	36-39	44	45-50	51	52-53	54-59	60-61	Advice
	AØA	GAØ	A	64		-	644	B			15	65-66

Item No	Cont. Item	Part, Catalog, and/or FSN No.	Articles or Services	Quantity	Unit	Unit Price	Amount
			ITEMS LISTED ARE TO BE SHIPPED AS INSTRUCTED. (See above — "SHIP TO")				
			WATTS BAR NUCLEAR PLANT UNITS 1 AND 2				
			MECHANICAL SHOCK ARRESTOR TESTING, REPAIR AND RECERTIFICATION				
			Please provide the service described on the attached sheets in accordance with all terms and conditions of the referenced contract.				
			This RD inlcudes sheets 1 of 3 and items 1 through 16.				
			COC for performance characteristics original with one copy to be sent direct to chief storekeeper above and one copy to accompany each shipment.				
			Prices given are estimated based on current B-P unit prices. B-P to submit invoice with exact prices of items and services.				
			Procurement request: DR-173 R0 Procurement item: P0853--408				

Date	Field Voucher No.	Amount	D. O. Voucher No.	Date	Field Voucher No.	Amount	D. O. Voucher No.
A				C			
B				D			

TVA USE ONLY
I certify that the articles or services listed above have been received in quality and quantity specified except as noted.

TVA 9625 (DP-1 83)

Date Material Received | G.B.L. No. | Carrier's Charges: Paid $ | Collect $

Truck		Common Carrier						
Vendor	TVA	Express		Freight				Par. Post
		Air	UPS	Air	Barge	Motor	Rail	

Purchase Cost	
Cash Discount-cr	
Carrier's Charges	
Total Cost	

Person receiving material

Approved as reported above

APP. V

PG 173 OF 196

Copy No. 1

DISTRIBUTION: 1. Contractor 2. Accounting Office 3. Purchasing Contract File 4-8. Issuing Office, for use as receiving reports and file copy

REQUEST FOR DELIVERY
OF MATERIALS UNDER CONTRACT
CONTINUATION SHEET

Item No.	Cont. Item	Part, Catalog, and/or FSN No.	Articles or Services	Quantity	Unit	Unit Price	Amount

Background Information: 499PSA mechanical shock arrestors, (serial numbers listed on attached pages) were mishandled, maladjusted and/or damaged during the long term construction period at Watts Bar Nuclear Plant.

BP's general work will consist of initial examination and testing to determine operability, rebuild, retest and recertification as required. The rebuild retesting and recertification shall be such, that all reworked snubber units shall be free of defect and shall be restored to certified operable condition.

The following person is to be the TVA site contact for shipping matters related to this work:

M. H. Huff
(615) 365-5403 - Ext. 415 telephone
(615) 365-5403 - Ext. 177 telecopy
Watts Bar Nuclear Plant
(Near) Spring City, Tennessee 37381

The following person is to be the B-P contact for shipping matters related to this work.

Greg Haynes
(603) 524-1990 - Ext. 184
Bergen-Paterson Pipe Support Corporation
34 Moulton Street
Laconia, New Hampshire 03246

Upon receipt of this RD, M. H. Huff (TVA) is to immediately contact Greg Hanyes (BP), who will advise as to day and time that BP truck will pick up bulk shipment of snubbers.

BP shall provide separate COC documentation for each snubber which certifies that each separate snubber (by serial number) will meet the operational and design requirements of Pacific Scientific Standard Design Specification Report No. DR-1319, Rev. E dated 1/3/84.

TVA inspector is to present as necessary to verify that all testing, rework, materials, retest and recertification is in accordance to this RD.

APP. V
PG 174 OF 196

REQUEST FOR DELIVERY OF MATERIALS UNDER CONTRACT CONTINUATION SHEET

Item No.	Cont. Item	Part, Catalog, and/or FSN No.	Articles or Services	Quantity	Unit	Unit Price	Amount
			The following listings shows types, quantities, and charges for the snubber rework program.				
			Initial Test (required)*				
1			PSA-1/4 initial test	286	EA	80	22,880
2			PSA-1/2 initial test	119	EA	80	9,520
3			PSA-1, initial test	25	EA	85	2,125
4			PSA-3, initial test	33	EA	85	2,805
5			PSA-10, initial test	26	EA	105	2,730
6			PSA-35, initial test	7	EA	120	840
7			PSA-100 & 100L, initial test	3	EA	135	405
			*Inlcudes receipt, inspection, set-up, testing, certification and transportation, excludes rebuild.				
			Rebuild & Retest (if required)**	***			
8			PSA-1/4 rebuild and retest	143	EA	355	50,765
9			PSA-1/2 rebuild and retest	60	EA	355	21,300
10			PSA-1 rebuild and retest	13	EA	370	4,810
11			PSA-3 rebuild and retest	16	EA	385	6,160
12			PSA-10 rebuild and retest	13	EA	595	7,735
13			PSA-35 rebuild and retest	4	EA	750	3,000
14			PSA-100 & 100L, rebuild and retest	2	EA	895	1,790
			**Includes disassembly, inspection, rebuild, retest, certification, and transportation.	*** estimated			
			Required replacement parts and unforseen labor costs (if required).				
15			Required replacement parts (estimated lump sum)	LS	--	NA	10,000
16			Labor costs (outside scope shown herein)	10	HR	40	400
						Total	147,265

REQUEST FOR DELIVERY OF MATERIALS UNDER CONTRACT CONTINUATION SHEET

Item No.	Cont. Item	Part, Catalog, and/or FSN No.	Articles or Services	Quantity	Unit	Unit Price	Amount
			BP is to advise TVA a scope of work approximately 3 weeks after receipt of snubbers consisting of the following: 1. Estimated quantities requiring only recertification. 2. Estimated quantities to be rebuilt. 3. Estimated availability of replacement parts and projected lead time if applicable. 4. Estimated quantity of units that are cost prohibitive to rebuild. 5. Estimated return shipping schedule. 6. Labor costs outside scope of work not shown in correspondence and herein. 7. Replacement parts lump sum amount. TVA's need date is 12/1/84 through 3/1/85. BP's projected delivery schedule is as follows: Size — Start — Complete All — 12/1/84 — 3/1/85				

TVA 9629 (Continued) (09-83)

788, 789, 820, 823, 824, 825, 827, 828, 829, 832
833, 837, 846, 849, 852, 858, 860, 861, 862, 863
865, 867, 868, 873, 877, 881, 882, 888, 889, 892
893, 903, 906, 907, 913, 918, 1013, 1017, 1018, 1025
1030, 1035, 1037, 1041, 1047, 1058, 1059, 1068, 1072, 1073
1074, 1079, 1082, 1085, 1088, 1089, 1090, 1091, 1093, 1096
1097, 1103, 1105, 1106, 1112, 1116, 1123, 1124, 1125, 1126
1128, 1133, 1134, 1135, 1137, 1147, 1149, 1154, 1157, 1159
1160, 1161, 1162, 1163, 1607, 1608, 1614, 1616, 1619, 1950
3240, 3241, 3242, 3244, 3245, 3401, 3403, 3412, 3413, 3414
3446, 3449, 3422, 3423, 3425, 3427, 3428, 3429, 3430, 3431
3432, 3435, 3436, 3438, 3443, 3444, 3445, 3446, 3447, 3448
3449, 3452, 3453, 3454, 3455, 3456, 3460, 3461, 3464, 3468
3470, 3476, 3478, 3479, 3483, 3485, 3486, 3490, 3492, 3493
3494, 3497, 3498, 3501, 3504, 3507, 3508, 3514, 3515, 3516
3522, 3523, 3525, 3536, 3542, 3543, 3546, 3548, 3549, 3554
3563, 3564, 3565, 3570, 3573, 3578, 3579, 3588, 3592, 3593
3594, 3600, 3693, 3742, 3753, 4107, 4108, 409, 4329, 4331
4343, 4359, 4362, 4363, 4366, 4368, 4372, 4373, 4375, 4380
4386, 4388, 4396, 4404, 4410, 4413, 4415, 4421, 4422, 4429
4432, 4442, 4444, 4460, 4463, 4482, 4485, 4486, 4487, 4498
4496, 4499, 4504, 4508, 4516, 4521, 4530, 4539, 4541, 4547
4553, 4556, 4562, 4569, 4573, 4576, 4878, 4882, 4889, 4903
4906, 4912, 4913, 4936, 4937, 4938, 4940, 4943, 4948, 4951
4953, 4957, 4965, 4968, 4972, 4978, 4981, 6460, 6461, 6642
6647, 6651, 6660, 6668, 6669, 6673, 8116, 8120, 8122, 8126
8144, 8146, 8149, 11332, 12068, 12082, 12086, 12088, 12090, 12106
12546, 12552, 12556, 12557, 12575, 21429, 21435, 21465, 21477, 21479

FORM NF-1 (Back)

9800497 4003

CERTIFICATE OF SHOP 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 OHIO and employed by USRI&I Co of Hartford, CT have inspected the component supports described in this Data Report on JAN 04 1983, 19 ___ and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data 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.

Date JAN 04 1983.

Signed [signature] Commissions CA-1518 / Ohio Commission
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD 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 _____ and employed by _____ of _____ have compared the statements in this Data Report with the described component supports and state that the parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data 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.

Date _____.

Signed _____ Commissions _____
(Nat'l Bd., State, Prov., and No.)

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date 10/01/2006
1101 Market St., Chattanooga, TN 37402 (Address) Sheet ____ of ____

2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**
P. O. Box 2000, Spring City, TN 37381 (Address) **MMG/WO# 01-015463-000** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**
WATTS BAR NUCLEAR PLANT,PO BOX 2000 SPRING CITY, TN 37381 (Address) Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system ~~074, Residual Heat Removal System (RHR)~~ Rwm 10/3/06 062, Chem Vol & Cont (CVCS)

5. (a) Applicable Construction Code **SECT III** 19 **71** Edition, **S73** Addenda, **N/A** Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-FCV-062-0128	ITT GRINNELL	74-2109-8-1	N/A	N/A	1977	Replaced	Y
1-FCV-062-0128	ITT Grinnell	74-2109-8-2	N/A	N/A	2001	Replace-ment	Y
SPINDLE	ITT Industries	N/A	N/A	Part # 400611 Ht. # S72490	2001	Replace-ment	Y

7. Description of Work Replace valve bonnet & SPINDLE

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ☑
Other Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks RR-07-139 KLM 10/3/06
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Callen Maint Specialist Date 11/13 20 06
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 10/3/06 to 11/18/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/18 20 06

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Pg 180 of 196

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) **1101 Market St., Chattanooga, TN 37402** (Address)
Date **10-02-2006**
Sheet ____ of ____

2. Plant **Watts Bar Nuclear Plant** (Name) **P. O. Box 2000, Spring City, TN 37381** (Address)
Unit **Unit 1**
W/O **05-815568-000** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) **P.O. BOX 2000 SPRING CITY,TN 37381** (Address)
Type Code Symbol Stamp **N/A**
Authorization No **N/A**
Expiration Date **N/A**

4. Identification of system **062- C.V.C.S**

5. (a) Applicable Construction Code SECTION III 19 **71** Edition, S72 Addenda, **N/A** Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-FCV-62-72-A	FISHER CNTLS	5726049	N/A	N/A	1987	replaced	Y
Seat ring	↓	N/A	N/A	Ht. # 13949-1	1987	Replacement	N
Stem from U2 Valve	↓	Valve S/N 5726052	N/A	N/A	1977	Replacement	Y

7. Description of Work **REPLACED VALVE DISC**

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ☑ Transferred to WO 06-818055-000
Other Pressure ____ psi Test Temp ____ °F (I-TRI-68-901)

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.

FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR 07-140 WO# 05-815568-000
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the repair or replacement rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Calle Maint Specialist Date 11/16 20 06
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 10/4/06 to 11/23/06 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. Eanigh Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/23 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** Date **10-02-2006**
Name
1101 Market St., Chattanooga, TN 37402 Sheet 1 of 1
Address
2. Plant **Watts Bar Nuclear Plant** Unit **Unit 1**
Name
P. O. Box 2000, Spring City, TN 37381 W/O **05-815565-000**
Address Repair Organization P.O. No., Job No., etc.
3. Work Performed by **MECHANICAL MAINTENANCE** Type Code Symbol Stamp **N/A**
Name
P.O. BOX 2000 SPRING CITY,TN 37381 Authorization No **N/A**
Address
Expiration Date **N/A**

4. Identification of system **062- C.V.C.S**

5. (a) Applicable Construction Code SECTION III 19 **71** Edition, S72 Addenda, **N/A** Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-FCV-62-73-A	FISHER CNTLS	5726050	N/A	N/A	N/A	replaced	Y
Seat Ring	↓	N/A	N/A	Ht. # 13949-4	68	Replacement	N
Stem from U2 valve	↓	Valve S/N 5726053	N/A	N/A	91	Replacement	Y

7. Description of Work **REPLACED VALVE DISC**

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ☑ Transferred to WO 06-818055-000
Other Pressure _____ psi Test Temp _____ °F (1-TRI-68-901)

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.

FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-141 WO# 05-815585-000
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the repair or replacement rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J. Collins Maint Specialist Date 11/16 20 06
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 10/4/06 to 11/23/06 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. Earnest Commissions TN2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/23 20 06

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date **10-02-2006**

1101 Market St., Chattanooga, TN 37402 (Address) Sheet 1 of 1

2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**

P. O. Box 2000, Spring City, TN 37381 (Address) W/O **05-815567-000** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**

P.O. BOX 2000 SPRING CITY,TN 37381 (Address) Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system **062- C.V.C.S**

5. (a) Applicable Construction Code SECTION III 19 **71** Edition, S72 Addenda, **N-3-10** Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-FCV-62-76-A	FISHER CNTLS	5945221	4446	N/A	1980	replaced	Y
seat ring	↓	N/A	N/A	Ht # 3949-3	1987	Replacement	N
stem from U2 valve	↓	Valve S/N 5945222	N/A	N/A	1977	Replacement	Y

7. Description of Work **REPLACED VALVE DISC**

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ☑ Transferred to WO 06-818055-000 (1-TRI-68-901)
Other Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-142 WO# 05-815567-000
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the repair or replacement rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Calli Maint Specialist Date 11/14 20 06
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 10/4/06 to 11/23/06 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 TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 11/23 2006

APP. V.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date **10-17-2006**

1101 Market St., Chattanooga, TN 37402 (Address) Sheet 1 of 1

2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**

P. O. Box 2000, Spring City, TN 37381 (Address) W/O **06-811039-000** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**

P.O. BOX 2000 SPRING CITY,TN 37381 (Address) Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system **062 - C.V.C.S.**

5. (a) Applicable Construction Code AISC 19 **NA** Edition, NA Addenda, **N/A** Code Case STEEL CONSTRUCTION MANUAL

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
HANGER 1-062A-038	TVA	N/A	N/A	1-HGR-062-RB	N/A	repaired	N

7. Description of Work **CUT HANGER AND REASSEMBLED WITH FULL PENETRATION WELD**

EXEMPT PER IWA 4120 & 2-706

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Pressure _____ psi Test Temp _____ °F

06-818055-000 (1-TRI-68-504)

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.

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FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR07-145 ~~CODE CASE N 416-2~~ 11-16-06

Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPLACEMENT conforms to the repair or replacement rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed Maint Specialist Date 11/15 20 06

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 10/17/06 to 11/15/06 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. Enright Commissions TN 2534

Inspector's Signature National Board, State, Province, and Endorsements

Date 11/17 20 06

APP V
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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner TENNESSEE VALLEY AUTHORITY (Name) — Date 12/4/2006
1101 Market St., Chattanooga , TN 37402 (Address) — Sheet ____ of ____

2. Plant Watts Bar Nuclear Plant (Name) — Unit Unit 1
P. O. Box 2000, Spring City, TN, 37381 (Address) — Work Order 05-823405-000 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA Modifications (Name) — Type Code Symbol Stamp N/A
Watts Bar Nuclear Plant (Address) — Authorization No N/A
Expiration Date N/A

4. Identification of system 043 Sampling

5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-TUBE-043-B	N/A	N/A	N/A	N/A	N/A	Repaired	No

7. Description of Work Repair weld 1-043A-T027-2A

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure _____ psi Test Temp _____ °F

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.

NIS-2 FORM SHEET 2 OF 2

FORM NIS-2 (Back)

9. Remarks Code Case N-416-3 Tracking No. RR-07-151
Applicable Manufacturer's Data Reports to be Attached

Work Order 05-823405-000

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed [signature], CONST. ENGR. Date 12/4 20 06
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 10/24/06 to 12/7/06 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. Eamigh Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/7 20 06

APP V.

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name) Date **10-11-2005**

1101 Market St., Chattanooga, TN 37402 (Address) Sheet 1 of 1

2. Plant **Watts Bar Nuclear Plant** (Name) Unit **Unit 1**

P. O. Box 2000, Spring City, TN 37381 (Address) **W/O 04-820384-000** (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name) Type Code Symbol Stamp **N/A**

P.O. BOX 2000 SPRING CITY,TN 37381 (Address) Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system **062 – CVCS** ~~12-7-06~~

5. (a) Applicable Construction Code SECTION ~~VIII~~ III 19 **74** Edition, **W74** Addenda, **N/A** Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-ISV-062-0550-S	**KEROTEST**	**KP23-19**	**N/A**	**N/A**	75	~~REPLACE~~ per 10/1/05 ~~MENT~~	Y
Disc	Kero test	S/N 11	NA	NA	1994	~~Repaired~~ Replace-ment	Y
Stem	Kerotest	N/A	NA	~~NA~~ per 11/30/06 P/N B-9909-502		↓	Y

7. Description of Work **REPLACE DISC**

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ☑
Other Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-07-019 CODE CASE N/A WO 04-820384-000
Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J Calli MAINT. SPECIALIST Date 11/30 20 06
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 10/11/05 to 12/7/06 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 12/7 20 06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner **TENNESSEE VALLEY AUTHORITY** (Name)
1101 Market St., Chattanooga, TN 37402 (Address)

Date **10/29/03**

Sheet _____ of _____

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

Unit **Unit 1**

W/O 03-015765-000 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by **MECHANICAL MAINTENANCE** (Name)
P.O. BOX 2000 SPRING CITY,TN 37381 (Address)

Type Code Symbol Stamp **N/A**

Authorization No **N/A**

Expiration Date **N/A**

4. Identification of system **SYSTEM 067 ERCW**

5. (a) Applicable Construction Code **ASME SEC III 19 71** Edition, **S/73** Addenda, **N/A** Code Case **N/A**

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements **1989**

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
BOLTING MAT'L 3/4" ALL-THD	MFG.	N/A	N/A	HT# 7Z7642	N/A	REPLACEMENT	NO
SA 564 GR 630							
NUTS 3/4" SA 194 GR 6	MFG.	N/A	N/A	HT# 38202	N/A	REPLACEMENT	NO

7. Description of Work REPLACED BOLTING IN FLANGES

8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure ☑
Other Pressure _____ psi Test Temp _____ °F

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.

FORM NIS-2 (Back)

9. Remarks TRACKING NO. RR-06-005 ~~CODE CASE N-416-1~~ RR-A/B-3

Applicable Manufacturer's Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Replacement conforms to the repair or replacement rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Signed J. Calli Maint Specialist Date 11/3 20 06

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 10/3/03 to 11/8/06 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 11/8 20 06

App. V

FORM NPV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

371 As Required by the Provisions of the ASME Code Rules

1. Manufactured by Henry Pratt Co., 401 S. Highland Ave., Aurora, Ill. 60507 Order No. D-0045-6
(Name & Address of Manufacturer)

2. Manufactured for Dravo Corp., 1115 Gilman St., Marietta, Ohio Order No. E-2897-HPN-1
(Name and Address)

3. Owner Tennessee Valley Authority

4. Location of Plant Watts Bar Nuclear Plant Unit 1 & 2, Spring City, Tennessee

5. Pump or Valve Identification D-0045-6-4V W860804K1543 (2)

Raw Water
(Brief description of service for which equipment was designed)

6" N MK II

(a) Drawing No. C-3525 Prepared by N. Polito

(b) National Board No. N/A

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6. Design Conditions 160 (Pressure) psi 130 (Temperature) °F

7. The material, design, construction, and workmanship complies with ASME Code Section III, Class 2

Edition 1974, Addenda Date N/A, Case No.

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
Disc D-2864-13	SA-351, CF8M	Quaker	Ht. No. D-2864
(b) Forgings			
Top Shaft	A564, TP630	Cartech	Ht. No. 75804
Bot. Shaft	A564, TP630	Cartech	Ht. No. 75804

App V
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G. J. Silvestri 11-12-76 DATE INITIAL

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1, 2, 5a and 5b on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this

Mark No. 37	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
Bot. Cover Bolts	SA193, Gr.B7	Erie Fastener	
Pin A-B	SA320 GR B8M	Cartech	Ht. No. 820436
(d) Other Parts			
Body Shell 651720-D012	SA516, Gr.55	Bethlehem Steel	Ht.No. 801T09310
Bot. Cover W11092-91	SA515, Gr.70	U.S. Steel	Ht.No. W11092

8. Hydrostatic test 425 psi.

CERTIFICATION OF DESIGN

Design information on file at Henry Pratt Co., 401 S. Highland, Aurora, Ill. 60507

Stress analysis report on file at Henry Pratt Co., 401 S. Highland, Aurora, Ill. 60507

Design specifications certified by Marcus N. Bressler (1) Prof. Eng. State Tenn. Reg. No. 9411

Stress analysis report certified by Bomi M. Zarolia (1) Prof. Eng. State Ill. Reg. No. 30701

(1) Signature not required. List name only.

We certify that the statements made in this report are correct.

Date 9-29 1976 Signed Henry Pratt Company (Manufacturer) By J M Hearn

Certificate of Authorization No. N-1030 expires May 6, 1978

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Illinois and employed by Hartford Stm. Blr. Insp. & Ins. of Hartford, Conn. have inspected the equipment described in this Data Report on 9-29 1976, and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data 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.

Date 9-29 1976

REG. NO. 83015
ITEM NO. 4
209 NO. 77-2541

11-12-76 DATE INITIAL

Robert T. Kinney (Inspector) Commissions 11932 (National Board, State, Province and No.)

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