

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

# FEB 2 1 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

U.S. Nuclear Regulatory Commission Page 2

# 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

# U.S. Nuclear Regulatory Commission Page 3 February 21, 2007

# 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** 

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

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

# CONCURRENCE AND APPROVAL SHEET

Name	Title	Signature	Date
Prepared by:  J. T. Lewis	ISI Program Engineer	John Tilewis	1-25-07
J. I. Lewis	r rogram Engineer	7.000000	<u> </u>
Concurred by:		0	
J. M. Lockwood	ISO Site ISI/NDE Coordinator	Sane m Inkurod	1/31/07
T. F. McDermott	ISO NDE Level III	17. Mc Dennett 1/	31/07
S. T. Webster III	System Pressure Test Engineer	A	1-25-07
E. D. Camp	Steam Generator Specialist	Emunth Cong	30Jan 07
J. K. McClanahan	Corporate ISI Specialist	Jung K. M. Game	2/6/07
Approved by:			
K. A. Lovell	System Engineering Manager	Lax Aloull	217/7

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

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

N/A

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Appendix II, Augmented Examination Plan

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Appendix IV, Pressure Test Report Summary

Appendix V, Report for Repairs and Replacements, Form NIS-2

> Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1 Commercial Service Date: May 27, 1996 Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

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

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 Watts Bar Nuclear Plant

> 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

Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402

Unit: 1 Commercial Service Date: May 27, 1996 Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

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

#### NIS-1 FOR THE ISI EXAMINATION PLAN

1. Owner <u>T</u>	Tennessee Valley Authority, 1101 Market St. Chattanooga, TN 37402-2801 (Name and Address of Owner)												
	·												
2. Plant W	Watts Bar Nuclear Plant, P.O. Box 2000, Spring City, TN 37381-2000 (Name and Address of Plant)												
0 Di . II '	`		,	N. D.									
3. Plant Unit O	one (1) 4. Owner Certi	ficate of Authoriza	tion (if required)	Not Require									
<ol><li>Commercial Ser</li></ol>	vice Date <u>May 27, 1996</u> 6.	National Board Nu	mber for Unit N	lone Assigned									
7. Components Ins	spected												
Component or Appurtenance	mponent or Manufacturer or Installer State or												
for List of Components													

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.

Chattanooga Office Complex

1101 Market Street Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

WATTS BAR NUCLEAR PLANT Plant:

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization:

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 Date January 25 20 07 Signed Tennessee Valley Authority By John T. Zou 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 <u>HSB-CT</u> of <u>HAYT Ford CT.</u> inspected the components described in this Owners' Data Report during the period 4/21/0.5 to 2/7/0.7 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. Inspector's Signature Commissions TN2534 National Board, State, National Board, State, Province and Endorsements Date 2/7 20 07

**TENNESSEE VALLEY AUTHORITY** 

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

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

N/A

# NIS-1 FOR STEAM GENERATOR TUBE EDDY CURRENT EXAMINATIONS

1. Owner <u>Ter</u>	ennessee Valley Authority, 1101 Market St. Chattanooga, TN 37402-2801 (Name and Address of Owner)											
2. Plant Wa	ts Bar Nuclear Plant, P.O. Box 2000, Spring City, TN 37381-2000											
z. Hant wa	(Name and Address of Plant)											
3. Plant Unit On	e (1) 4. Owner Certi	ficate of Authorizat	ion (if required)	Not Required								
5. Commercial Serv	ice Date <u>May 27, 1996</u> 6. 1	National Board Nur	nber for Unit No	one Assigned								
7. Components Insp	ected											
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.

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Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000 Spring City, TN 37381-2000

Certificate of Authorization:

N/A National Board Number for Unit: N/A

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  16. Abstract of Corrective Measures. See Appendix III  17. 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.  18. Certificate of Authorization No. (if applicable) N/A Expiration Date N/A  19. Date			FORM NIS-1 (B	ack)	
9. Inspection Period Identification:  10. Inspection Interval Identification:  11. Applicable Edition of Section XI:  12. Date/Revision of Inspection Plan:  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  16. Abstract of Corrective Measures. See Appendix III  17. 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.  18. Certificate of Authorization No. (if applicable)  19. N/A  19. Expiration Date  19. Application Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspectors and the State or Province of Pressure Vessel Inspector or Pressure Vessel Inspector or Pressure Vessel Inspector or Pressure Vessel Inspector or Pressure Vessel Inspector Pressure Vessel Inspector National State that to the best of my knowledge and belief, the Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.  18. 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 t	8 Examination Date	s: March 24, 2005	to	November (	28, 2006
10. Inspection Interval Identification:  11. Applicable Edition of Section XI:  12. Date/Revision of Inspection Plan:  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  16. Abstract of Corrective Measures. See Appendix III  17. We certify that a) the statements made in this report are correct, b) the examinations and tests meet th 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.  18. Certificate of Authorization No. (if applicable)  19. N/A  10. Expiration Date  10. N/A  11. Tennessee Valley Authority  12. Owner  13. Certificate of Authorization No. (if applicable)  14. Date  15. 20 27 Signed  16. Tennessee Valley Authority  17. Owner  17. Of HarTFord  18. Dave inspected the components described in this Owner's Data Report during the period employed by  18. Jac 19. April 19. 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.  19. 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.  18. Lange 1. Commissions 18. 25.34  19. Nettonal Board, State, Province and Endorsements 19. Action 19. Ac	•			1101011111	20, 2000
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  16. We certify that a) the statements made in this report are correct, b) the examinations and tests meet th 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.  16. Certificate of Authorization No. (if applicable) N/A Expiration Date N/A  17. Date	-	<del></del>			
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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 th 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  Date    N/A					
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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  Date  Fb 5 20 7 Signed  Tennessee Valley Authority 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  N/A  Signed  Tennessee Valley Authority Owner  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  N/A  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  N/A  Inspector Vessel Inspectors and the State or Province of Tennessee Valley Authority  By Signing the period  N/A  The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspect of Inspector or Inspector Of Tennessee Valley Authority  By Signing the period  N/A  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.  Summy Employer Signature  Commissions  N/A  N/A  National Board of					
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  Fig. 5  20 7 Signed  Tennessee Valley Authority  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 and employed by  N/S - CT  of Hartford CT  have inspected the components described in this Owners' Data Report during the period  1/21/05  10  2/1/07  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.  But M. Emissector's Signature  Commissions  Mala Report during 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.  Commissions  Mala Report during 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	14. Abstract of Result	s of Examinations an	d Tests. See App	pendix III	
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    Solution   Sol	15. Abstract of Correct	tive Measures. See	Appendix III		
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 ISB-CT of Hartford CT have inspected the components described in this Owners' Data Report during the period 4/21/05 to 2/107, 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.  Brue M. Eamist Commissions To 2534  National Board, State, Province and Endorsements	Date Feb 5				
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.  Commissions To 2534  Inspector's Signature Commissions Mational Board, State, Province and Endorsements		CERTIFICAT	TE OF INSERVI	CE INSPECT	<b>FION</b>
	Pressure Vessel In employed by inspected the computer of the computer	spectors and the Start S	ate or Province of n this Owners' D of performed exame port in accorda XI. e Inspector nor be examinations, and thermore, neithe	of Tenne HarTFord Data Report do , and so ninations and ance with the his employer nd tests, and er the Inspector	and have uring the period state that to the best of my tests and taken corrective Inspection Plan and as makes any warranty, corrective measures or nor his employer shall be
	Brue W.	1. Earnigh	Commission	~ TN 95:	34
	Inspecto	1- 01		IIS 17- 200	Chata Duarduan and Continuous

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402 Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000 Spring City, TN 37381-2000

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

NIS-1 FOR PRESSURE TESTS

FORM N	IIS-1 OWNERS' REPORT As required by the Provision			TIONS									
1. Owner <u>Te</u>	1. Owner Tennessee Valley Authority, 1101 Market St. Chattanooga, TN 37402-2801 (Name and Address of Owner)												
2. Plant W													
	(Name and Address of Plant)												
3. Plant Unit Or	te (1) 4. Owner Certif	ficate of Authoriza	tion (if required)	Not Required									
5. Commercial Serv	rice Date May 27, 1996 6. I	National Board Nu	mber for Unit N	Ione Assigned									
7. Components Insp	pected												
Component or Appurtenance	Component or Manufacturer or Installer State or												
See Appendix IV, Pressure Test Summary	Tennessee Valley Authority	N/A	N/A	N/A									
Summary													
				,									

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.

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Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

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
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Date 1251 20 07 Signed Tennessee Valley Authority By
Date 125 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-c7 of Hartford C7. have inspected the components described in this Owners' Data Report during the period how 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.  Brue M Eamy Commissions Tw 2534  National Board, State, Province and Endorsements
Date

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402 Unit: 1 Commercial Service Date: May 27, 1996 Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization:
National Board Number for Unit:

N/A + N/Δ

#### 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."

Chattanooga Office Complex

1101 Market Street Chattanooga, TN 37402

Commercial Service Date: May 27, 1996

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N/A

# TABLE 1 SUMMARY OF CYCLE 7 ISI EXAMINATIONS

Examination	Item		Number
Category	Number	Component Description	Examined
Code Class 1	Component	S	
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,	Piping Supports	30
	B, C & D)		
	F1.40	Equipment Supports	5
Cada Class O	Cam	_	
Code Class 2 C-A	Components C1.20	S CSHX Head Circ. Weld	1
C-C	C3.10	Pressure Vessel Welded Attachment	1
0-0	C3.10	Piping Welded Attachment	4
	C3.20	Pump Welded Attachment	1
F-A	F1.20(A,	Piping Supports	1 61
L-W		Fibring Supports	01
	B, C & D) F1.40	Equipment Supports	7
	F1.40	Equipment Supports	1
Code Class 1	and 2 Risk-l	nformed ISI Piping Welds	
R-A	R1.11	Elements Subject to Thermal Fatigue	23
	R1.18	Elements Subject to Flow Accelerated Corrosion	14
		,	

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#### 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.

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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

PRZ Pressurizer SG Steam Generator

RCP Reactor Coolant Pump CVCS Chemical Volume Control System

RHRS CSS Core Spray System Residual Heat Removal 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

Item examined per the requirements of the 1989 Edition of ASME Section XI for P89001

preservice credit (i.e. repaired/replaced item)

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** 

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WATTS BAR NUCLEAR PLANT

Unit: 1

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Plant:

System	Component Number	ISO Drawing	Category	Item Numbe		Exam	NDE ed Procedure	Calibration Standard		Nominal Thickness		Exam Report	Exam Results	Comments
					•				Diameter					
RV	W09-10	CHM-2549-C-01	B-A	B1.21	89E-01	UT	N-UT-78	WB-51		06.890	20060928		P	
PZR	WP-01	CHM-2570-C-01	B-B	B2.11	89E-01	UT	N-UT-19	WB-55	92	03.750	20060924		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		P	
SG	RSGW-AA	CHM-2660-C-04	B-B	B2.40	P89000	UT	N-UT-19	WB-86	138.12	06.190	20050722		P	
SG	RSGW-AB	CHM-2660-C-04	В-В	B2.40	P89000	UT	N-UT-19	WB-86	138.12	06.190	20050809		P	
SG	RSGW-AC	CHM-2660-C-04	B-B	B2.40	P89000	UT	N-UT-19	WB-86	138.12	06.190	20050729		P	
SG	RSGW-AD	CHM-2660-C-04	B-B	B2.40	P89000	UT	N-UT-19	WB-86	138.12	06.190	20050801		P	55 00 00000000
PZR	WP-10	CHM-2570-C-01	B-D	В3.110	89E-01	UT	N-UT-19	WB-55	24.50	03.000	20060916		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		P	
SG	RSG-A-C-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050724		P	
SG	RSG-A-H-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050724		P	
\$G	RSG-B-C-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050807		P	
SG	RSG-B-H-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050808		P	
SG	RSG-C-C-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050727		P	
SG	RSG-C-H-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050727		P	
SG	RSG-D-C-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050730		P	
SG	RSG-D-H-IR	CHM-2660-C-04	B-D	B3.140	P89000	UT	N-UT-55	WB-90			20050730		P	and the answer of the answer o
RV	VENT-1	CHM-2684-C-01	B-E	B4.11	89E-01	VT-2	N-VT-4				20061129	K1384	P	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-21	CHM-2684-C-0	1 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-0	1 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-0	1 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-0	1 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-0	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-0	1 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-0	1 B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	Р	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000
RV	CRDN-42	CHM-2684-C-0	1 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-0	01 B-E	B4.12	89E-01	VT-2	N-VT-4				20061129	R1384	Р	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000 06- 818055-000
RV	CRDN-48	CHM-2684-C-0	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-0	1 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-0	1 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

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WATTS BAR NUCLEAR PLANT

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Certificate of Authorization: National Board Number for Unit:

System	Component Number	ISO Drawing	Category			Exam Schedule	NDE ed Procedure	Component Diameter	Nominal Exam Date Thickness	Exam Report	Exam Results	Comments
RV	CRDN-57	CHM-2684-C-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	2 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-0	2 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-0	2 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-0	2 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-0	2 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-0	2 B-E	B4.13	89E-01	V'I'-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-0	2 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-0	2 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-0	2 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-0	2 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-0	2 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-0	2 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-0	2 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-0	2 B-E	B4.13	89E-01	VT-2	N-VT-4	01.50	20061129	R1384	Р	Credited under system hydro test 1-TRI-68-901, WO 06-818055-000

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P.O. Box 2000

Plant:

WATTS BAR NUCLEAR PLANT

COMMINE	sicial Service Date. Iviay	121, 1330											Malional L	odard Number for Offic. 1974
System	n Component	ISO Drawing	Category	Item Number	Exam	Exam	NDE	Calibration	Component	Nominal	Exam Date	Exam	Exam	Comments
	Number				Requireme	entSchedule	edProcedure	Standard	Diameter	Thickness	5	Report	Results	
RV	INSTPEN-57	ISI-0427-C-0	2 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-0	2 B-E	B4.20	89E-01	<b>VT-</b> 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	3 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 B-G-1	B6.180	89E-01	UT	N-UT-67	WB-75	04.50	30.50	20061006	R1261	P	

Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402

P.O. Box 2000 Spring City, TN 37381-2000

WATTS BAR NUCLEAR PLANT

Commercial Service Date: May 27, 1996

Certificate of Authorization: National Board Number for Unit:

Plant:

System	n Component Number	ISO Drawing	Category			Exam Schedule	NDE ed Procedure	Calibration Standard	Component Diameter		Exam Date	Exam Report	Exam Results	Comments
RCP	RCP1MFBLT-14	ISI-0447-C-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	3 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-0	3 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-0	3 B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-40	ISI-0427-C-0	3 B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-41	ISI-0427-C-0	3 B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		Р	
RV	RVSTUD-42	ISI-0427-C-0	3 B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-43	ISI-0427-C-0	3 B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-44	ISI-0427-C-0	3 B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-45	ISI-0427-C-0		B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	•
RV	RVSTUD-46	ISI-0427-C-0	3 B-G-1	B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-47	ISI-0427-C-0		B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-48	ISI-0427-C-0		B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-49	ISI-0427-C-0		B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-50	ISI-0427-C-0		B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-51	ISI-0427-C-0		B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-52	ISI-0427-C-0		B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-53	ISI-0427-C-0		B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVSTUD-54	ISI-0427-C-0		B6.30	89E-01	UT	N-UT-67	WB-76	07.00	64.57	20061016		P	
RV	RVLIG-37	ISI-0427-C-0		B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112		P	
RV	RVLIG-38	ISI-0427-C-0		B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112		P	
RV	RVLIG-39	ISI-0427-C-0		B6.40	89E-01	UT	N-UT-37	WB~70	06.00		20061112		P	
RV	RVLIG-40	ISI-0427-C-0		B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112		P	•
RV	RVLIG-41	ISI-0427-C-0		B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112		P	
RV	RVLIG-42	ISI-0427-C-0		B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112		P	
RV	RVLIG-43	ISI-0427-C-0		B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112		P	
RV	RVLIG-44	ISI-0427-C-0		B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112		P P	
RV	RVLIG-45	ISI-0427-C-0		B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112		-	
RV	RVLIG-46	ISI-0427-C-0	B-G-1 د	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	K1341	P	

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

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WATTS BAR NUCLEAR PLANT

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Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

System	Component Number	ISO Drawing	Category	Item Numbe		Exam Schedule	NDE ed Procedure		Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
RV	RVLIG-47	ISI-0427-C-0	3 B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-48	ISI-0427-C-0	3 B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-49	ISI-0427-C-0	3 B-G <b>-</b> 1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-50	ISI-0427-C-0	3 B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-51	ISI-0427-C-0	3 B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-52	ISI-0427-C-0	3 B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-53	ISI-0427-C-0	3 B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVLIG-54	ISI-0427-C-0	3 B-G-1	B6.40	89E-01	UT	N-UT-37	WB-70	06.00		20061112	R1341	P	
RV	RVWASHER-37	ISI-0427-C-0	3 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-0	3 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-0	3 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-0	3 B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061014		Р	
RV	RVWASHER-41	ISI-0427-C-0	3 B-G-1	B6.50	89E-01	VT-1	N-VT-1		07.00	01.48	20061014		P	
RV	RVWASHER-42	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061014		P	
RV	RVWASHER-43	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061014		P	
RV	RVWASHER-44	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061014		P	~
RV	RVWASHER-45	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061016		P	
ŔV	RVWASHER-46	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061016		P	
RV	RVWASHER-47	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061016		P	
RV	RVWASHER-48	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061016		P	
RV	RVWASHER-49	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061016		P	
RV	RVWASHER-50	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061016		P	
RV	RVWASHER-51	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061009		P	
RV	RVWASHER-52	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061009		P	
RV	RVWASHER-53	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061009		P	
RV	RVWASHER-54	ISI-0427-C-0			89E-01	VT-1	N-VT-1		07.00	01.48	20061009		P	
SG	RSGMWCB-1-A-01-C	CHM-2660-C-0	5 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-0	5 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-0	5 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-0	5 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-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875- 8UNC-2A	20050721	R1002	Р	
SG	RSGMWCB-1-A-03-H	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875- 8UNC-2A	20050721	R1003	Р	
SG	RSGMWCB-1-A-04-C	CHM-2660-C-0	5 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-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875- 8UNC-2A	20050721	R1003	Р	

Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402

Unit: 1

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WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

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	System	Component Number	ISO Drawing	Category	Item Numbe		Exam Schedule	NDE ed Procedure		Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments	
	SG	RSGMWCB-1-A-05-C	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1			1.875- 9UNC-2A	20050721	R1002	P		
	SG	RSGMWCB-1-A-05-H	CHM-2660-C-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	15 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-0	15 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-0	15 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	15 B <b>-</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-0	15 B-G-2	В7.30	P89000	VT-1	N-VT-1			1.875- 8UNC-2A	20050721	R1003	P		

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

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Plant:

WATTS BAR NUCLEAR PLANT

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Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

Comme	iciai seivice Dale. Iviay	21, 1990										Malional D	odra nambel içi çili	II. 19/75	
System	Component Number	ISO Drawing	Category			Exam Schedul	NDE ed Procedure	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments		
SG	RSGMWCB-1-A-16-C	CHM-2660-C-0	)5 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-0	)5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050721	R1003	Р			
SG	RSGMWCB-1-B-01-C	CHM-2660-C-0	)5 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-0	)5 B-G-2	В7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050731	R1027	P			
SG	RSGMWCB-1-B-02-C	CHM-2660-C-0	)5 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-0	)5 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-0	)5 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-0	)5 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-0	)5 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-0	)5 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-0	)5 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-0	)5 B-G <b>-</b> 2	В7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050731	R1027	P			
SG	RSGMWCB-1-B-06-C	CHM-2660-C-0	)5 B-G-2	В7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050731	R1026	₽			
SG	RSGMWCB-1-B-06-H	CHM-2660-C-0	05 B-G-2	В7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050731	R1027	P			
SG	RSGMWCB-1-B-07-C	CHM-2660-C-0	)5 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-0	)5 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-0	)5 B-G-2	В7.30	P89000	VT-1	N-VT-1		1.875~ 8UNC-2A	20050731	R1026	P			
SG	RSGMWCB-1-B-08-H	CHM-2660-C-0	)5 B-G-2	В7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050731	R1027	P			
SG	RSGMWCB-1-B-09-C	CHM-2660-C-0	)5 B-G-2	В7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050731	R1026	Р			
SG	RSGMWCB-1-B-09-H	CHM-2660-C-0	)5 B-G-2	В7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050731	R1027	P			
SG	RSGMWCB-1-B-10-C	CHM-2660-C-0	)5 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-0	)5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050731	R1027	Р			
SG	RSGMWCB-1-B-11-C	CHM-2660-C-0	)5 B-G <b>-</b> 2	B7.30	P89000	VT-1	N-VT-1		1.875-	20050731	R1026	P			

Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402

P.O. Box 2000 Spring City, TN 37381-2000

WATTS BAR NUCLEAR PLANT

Unit: 1

Commercial Service Date: May 27, 1996

Certificate of Authorization: National Board Number for Unit:

Plant:

8UNC-2A

System	n Component Number	ISO Drawing	Category			Exam Schedule	NDE d Procedure	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments
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 <b>-</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	

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

Commi	rcial cel vice Date. Iviay	27, 1000						 				ivauonai D	oard Number for Onic.	N/A
System	Component Number	ISO Drawing	Category			Exam Schedule	NDE ed Procedure	Component Diameter	Nominal Thickness	Exam Date	Exam Report	Exam Results	Comments	
SG	RSGMWCB-1-C-06-H	CHM-2660-C-0	)5 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-0	5 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-0	)5 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-0	)5 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-0	95 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050721	R1005	Р		
SG	RSGMWCB-1-C-09-C	CHM-2660-C-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	5 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-0	95 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-0	5 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-0	95 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-0	5 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-0	5 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-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875-	20050728	R1020	P		

Owner:

TENNESSEE VALLEY AUTHORITY

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

Comme	ercial Service Date. Iviay	27, 1990										Malional D	oard Number for Onic.	IN/A
							,	 	8UNC-2A					
System	n Component Number	ISO Drawing	Category			Exam Schedule	NDE ed Procedure	Component Diameter			Exam Report	Exam Results	Comments	
SG	RSGMWCB-1-D-02-C	CHM-2660-C-0	5 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-0	5 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-0	5 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-0	5 B-G-2	В7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A		R1020	P		
SG	RSGMWCB-1-D-04-C	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050728	R1019	Р		
SG	RSGMWCB-1-D-04-H	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A		R1020	P		
SG	RSGMWCB-1-D-05-C	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A		R1019	P		
SG	RSGMWCB-1-D-05-H	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A		R1020	P		
SG	RSGMWCB-1-D-06-C	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875~ 8UNC-2A		R1019	P		
SG	RSGMWCB-1-D-06-H	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A		R1020	P		
SG	RSGMWCB-1-D-07-C	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A		R1019	P		
SG	RSGMWCB-1-D-07-H	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A			P		
SG	RSGMWCB-1-D-08-C	CHM-2660-C-0	5 B-G-2	B7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A			Р		
SG	RSGMWCB-1-D-08-H	CHM-2660-C-0			P89000	VT-1	N-VT-1		8UNC-2A			Р		
SG	RSGMWCB-1-D-09-C	CHM-2660-C-0			P89000	VT-1	N-VT-1		1.875- 8UNC-2A			P		
SG	RSGMWCB-1-D-09-H	CHM-2660-C-0			P89000	VT-1	N-VT-1		1.875- 8UNC-2A			P		
SG	RSGMWCB-1-D-10-C	CHM-2660-C-0			P89000	VT-1	N-VT-1		1.875~ 8UNC-2A			P		
SG	RSGMWCB-1-D-10-H	CHM-2660-C-0			P89000	VT-1	N-VT-1		1.875- 8UNC-2A			P		
SG	RSGMWCB-1-D-11-C	CHM-2660-C-0			P89000	VT-1 VT-1	N-VT-1 N-VT-1		1.875- 8UNC-2A 1.875-			P P		
SG SG	RSGMWCB-1-D-11-H RSGMWCB-1-D-12-C	CHM-2660-C-0			P89000 P89000	VT-1	N-VT-1		8UNC-2A			P		
SG	RSGMWCB-1-D-12-H	CHM-2660-C-0			P89000	VT-1	N-VT-1		8UNC-2A			P		
эG	KOGEWCD-I-D-12-N	CIM-2000-C-0	., p-G-2	. 67,50	103000	A 1 - T	14- A T-T		8UNC-2A		111020			

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

System	Component Number	ISO Drawing	Category			Exam Schedule	NDE ed Procedure	Component Diameter		Exam Date	Exam Report	Exam Results	Comments
SG	RSGMWCB-1-D-13-C	CHM-2660-C-05	5 B-G-2		P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050728	R1019	P	
SG	RSGMWCB-1-D-13-H	CHM-2660-C-09	5 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	5 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	5 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	5 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	5 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-09	5 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-0	5 B-G-2	В7.30	P89000	VT-1	N-VT-1		1.875- 8UNC-2A	20050728	R1020	Р	,
CVCS	CVC-02-BC	ISI-0050-C-01	1 P-C-2	B7.50	89E-01	VT-1	N-VT-1	01.50	0.281	20061006	R1255	P	
	CVC-03-BC	ISI-0050-C-02			89E-01	VT-1	N-VT-1	01.50	0.281	20061010		P	
CVCS									0.281	20061010		P	
SIS	SI-02-BC	CHM-2758-C-11			89E-01	VT-1	N-VT-1	01.50				_	
SIS	SI-03-BC	CHM-2758-C-12			89E-01	VT-1	N-VT-1	01.50		20061004		P	
RCP	RCP1CSABLT-01	ISI-0447-C-01	1 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-0	1 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-0	1 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-0	1 B-G-2	В7.60	89E-01	VT-1	N-VT-1	01.50		20061101	R1320	Р	Examine, Remove Bolts for ISI Credit
RCP	RCP1CSABLT-05	ISI-0447-C-03	1 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-03	1 B-G-2	B7.60	89E-01	VT-1	N-VT-1	01.50		20061101	R1320	Р	Examine, Remove Bolts for ISI Credit
RCP	RCP1CSABLT-07	ISI-0447-C-0	1 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-03	1 B-G-2	в7.60	89E-01	VT-1	N-VT-1	01.50		20061101	R1320	P	Examine, Remove Bolts for ISI Credit
RCP	RCP1SL1BLT-01	ISI-0447-C-03	1 B-G-2	В7.60	89E-01	VT-1	N-VT-1	02.00		20060922	R1207	P	EXAMINE IN PLACE WITH RCP-1-SHAFT EXAM

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

System	Component Number	ISO Drawing	Category			Exam Schedule	NDE ed Procedure	Calibration Standard	Component Diameter		xam Date	Exam Report	Exam Results	Comments
RCP	RCP1SL1BLT-02	ISI-0447-C-0	1 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-0	1 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-0	1 B-G-2	В7.60	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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 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-0	1 B-G-2	B7.70	89E-01	VT-1	N-VT-1		06.00		20060915	R1135	P	
RHRS	63~641-BC	CHM-2636-C-0	7 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-0	1 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-1	0 R-C-2	B7.70	89E-01	VT-1	N-VT-1		10.00		20060922	R1206	P	
PZR	WP-17	CHM-2570-C-0		B10.10	89E-01	MT	N-MT-6	WB-58	92	01.500	20060924		P	Per CC N-323-1, a surface or
LBI	***	CIM 2370 C 0	4 D K	B10.10	050 01	711	N MI 0		78	01.300	20000324	NIBI V	•	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		B12.10	89E-01	VT-2	N-VT-4				20061129		Р	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

Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402

P.O. Box 2000 Spring City, TN 37381-2000

WATTS BAR NUCLEAR PLANT

Unit: 1

Commercial Service Date: May 27, 1996

Certificate of Authorization: National Board Number for Unit:

Plant:

System	Component Number	ISO Drawing	Category			Exam Schedul	NDE ed 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-0	1 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-0	1 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-0	1 C-A	C1.20	89E-01	UT	N-UT-18	SQ-104	60.00	0.675	20061014	R1298	₽	
SG	RSGW-CA	CHM-2660-C-0	4 C-A	C1.20	P89000	UT	N-UT-19	WB-88	175.94	03.720	20050720	R1000	P	
SG	RSGW-BB	CHM-2660-C-0	4 C-A	C1.30	P89000	UT	N-UT-19	WB-87	138.12	04.120	20050810	R1038	P	
SG	RSGAFW-D	CHM-2660-C-0	4 C-B	C2.21	P89000	MT	N-MT-6		06.00	03.720	20050729	R1021	P	
SG	RSGAFW-D	CHM-2660-C-0	4 C-B	C2.21	P89000	UT	N-UT-19	WB-88	06.00	03.720	20050801	R1031	P	
SG	RSGFW-C	CHM-2660-C-0	4 C-B	C2.21	P89000	МT	N-MT-6		16.00	04.060	20050724	R1011	P	
SG	RSGFW-C	CHM-2660-C-0	4 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-0	4 C-B	C2.22	P89000	UT	N-UT-55	WB-91	16.00		20050726	R1016	P	
CSS	CSHXH-1-1A-IA	ISI-0371-C-0	2 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-0	4 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-2	1 C-C	C3.20	89E-01	PT	N-PT-9		02.00		20061008	R1273	P	
RHRS	1-63-349-IA	ISI-0020-C-0	8 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-1	4 C-C	C3.20	89E-01	PT	N-PT-9		02.00		20061014	R1295	₽	
RHRS	RHRPH-1A-A-IA	ISI-0117-A-0	1 C-C	C3.30	89E-01	PT	N-PT-9			0.750	20061024	R1317	₽	
CVCS	1-62A-001	ISI-0063-C-0	1 F-A	F1.10A	89E-01	VT-3	N-VT-1		02.00		20060929	R1289	P	
CVCS	1-62A-304	ISI-0026-C-0	1 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-0	1 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-0	2 F-A	F1.10A	89E-01	VT-3	N-VT-1		06.00		20060914	R1133	P	
RCS	1-68-030	ISI-0364-C-0	2 F-A	F1.10A	89E-01	VT-3	N-VT-1		04.00		20060914	R1134	P	
SIS	1-63-088	ISI-0021-C-0	4 F-A	F1.10A	89E-01	VT-3	N-VT-1		10.00		20060921	R1203	P	
SIS	1-63-186	ISI-0021-C-1	1 F-A	F1.10A	89E-01	VT-3	N-VT-1		01.50		20060918	R1184	P	
SIS	1-63-524	ISI-0021-C-1	1 F-A	F1.10A	89E-01	VT-3	N-VT-1		01.50		20060928	R1227	P	
SIS	1-63-550	ISI-0021-C-1	2 F-A	F1.10A	89E-01	VT-3	N-VT-1		01.50		20060924	R1214	P	
SIS	47A435-08-073	ISI-0021-C-0	9 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-0	2 F-A	F1.10B	P89000	VT-3	N-VT-1		02.00		20061116	R1365	Б	
CVCS	1-62A-298	ISI-0026-C-0	1 F-A	F1.10B	89E-01	VT-3	N-VT-1		03.00		20060929	R1232	₽	
CVCS	1-62A-301	ISI-0026-C-0	1 F-A	F1.10B	89E-01	VT-3	N-VT-1		03.00		20060929		P	
RHRS	1-63-345	ISI-0020-C-0	8 F-A	F1.10B	89E-01	VT-3	N-VT-1		08.00		20060921	R1200	P	
RHRS	1-63-369	ISI-0020-C-0	7 F-A	F1.10B	89E-01	<b>VT-</b> 3	N-VT-1		08.00		20060920	R1193	P	
SIS	1-63-115	ISI-0021-C-0	9 F-A	F1.10B	89E-01	VT-3	N-VT-1		02.00		20060921	R1204	P	
SIS	1-63-155	ISI-0021-C-0	8 F-A	F1.10B	89E-01	VT-3	N-VT-1		02.50		20060919	R1190	P	
SIS	1-63-176	ISI-0021-C-1	1 F-A	F1.10B	89E-01	VT-3	N-VT-1		01.50		20061010		P	
SIS	1-63-181	ISI-0021-C-1	1 F-A	F1.10B	89E-01	VT-3	N-VT-1		01.50		20061004		P	
SIS	1-63-221	ISI-0021-C-1	2 F-A	F1.10B	89E-01	VT-3	N-VT-1		01.50		20060927	R1222	P	
SIS	1-63-223	ISI-0021-C-1	2 F-A	F1.10B	89E-01	VT-3	N-VT-1		01.50		20060927		P	
CVCS	1-62A-290	ISI-0026-C-0	1 F-A	F1.10C	89E-01	VT-3	N-VT-1		03.00		20060917		P	
RCS	1-68-348	ISI-0364-C-0	3 F-A	F1.10C	89E-01	VT-3	N-VT-1		02.00		20060917	R1168	P	

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

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Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

Comme	rciai Service Dale:	IVIAY 21, 1990										national c	soard Number for Onit: N/A
System	Component Number	ISO Drawing	Category	/ Item Numbe		Exam Schedul	NDE ed Procedure	Calibration Standard		Nominal Exam Date Thickness	Exam Report	Exam Results	Comments
RCS	1-68-364	ISI-0364-C-	03 F-A	F1.10C	SR1-01	VT-3	N-VT-1	O.a.r.aa.ra	02.00	20061122	•	P	Successive Exam for R0843
RX	1-68-001	ISI-0124-C-		F1.10C	89E-01	VT-3	N-VT-1		14.00	20061122		P	Setting Exam Perfomed 9/11/06
													Secting Exam refromed 9/11/00
	1-62A-563	ISI-0026-C-		F1.10D	89E-01	VT-3	N-VT-1		03.00	20060927		P	
RCS	1-68-031	ISI-0364-C-		F1.10D	89E-01	VT-3	N-VT-1		04.00	20060916		P -	
RCS	1-68-412	ISI-0364-C-		F1.10D	89E-01	VT-3	N-VT-1		06.00	20061010		P	
	1-63-366	ISI-0020-C-		F1.10D	89E-01	VT-3	N-VT-1		08.00	20060920		P	
	1-63-368	ISI-0020-C-		F1.10D	89E-01	VT-3	N-VT-1		08.00	20060920		P	
SIS	1-63-081	ISI-0021-C-	04 F-A	F1.10D	89E-01	VT-3	N-VT-1		06.00	20060921		P	
SIS	1-63-185	ISI-0021-C-	11 F-A	F1.10D	89E-01	VT-3	N-VT-1		01.50	20060918		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	
	1-62A-111	ISI-0424-C-		F1.20A	89E-01	VT-3	N-VT-1		02.00	20060915		P	
	1-62A-122	ISI-0424-C-		F1.20A	89E-01	VT-3	N-VT-1		02.00	20060915	R1149	P	
	1-62A-590	ISI-0424-C-		F1.20A	89E-01	VT-3	N-VT-1		02.00	20060916		P	
CVCS	47A406-17-001	ISI-0424-C-		F1.20A	89E-01	VT-3	N-VT-1		02.00	20061009		P	
FWS	1-03A-246	ISI-0062-C-		F1.20A	89E-01	VT-3	N-VT-1		16.00	20060916		P	
FWS	1-03A-290	ISI-0062-C-		F1.20A	89E-01	VT-3	N-VT-1		16.00	20060916		P	
FWS	1-03A-367	ISI-0062-C-		F1.20A	P89000	VT-3	N-VT-1		06.00	20061114		P	
FWS	1-03A-403	ISI-0062-C-		F1.20A	P89000	VT-3	N-VT-1		06.00	20061114		P	
FWS	1-03A-412	ISI-0062-C-		F1.20A	P89000	VT-3	N-VT-1		06.00	20061113		P	
LMO	1-03A-412	131-0002-C-	OO P-A	F1.20A	100000	V1-5	N-VI-I		00.00	20001113	111500	-	
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-		F1.20A	89E-01	VT-3	N-VT-1		04.00	20061010		P	
SIS	1-63-257	ISI-0440-C-		F1.20A	89E-01	VT-3	N-VT-1		02.00	20060917		P	
SIS	1-63-314	ISI-0440-C-		F1.20A	89E-01	VT-3	N-VT-1		04.00	20061010		P	
SIS	47A435-01-050	ISI-0021-C-		F1.20A	89E-01	VT-3	N-VT-1		08.00	20061012		P	
SIS	72-1CS-R102	ISI-0021-C-		F1.20A	89E-01	VT-3	N-VT-1		02.00	20061007		P	
SIS	72-1CS-R102 72-1CS-R104	ISI-0440-C-		F1.20A	89E-01	VT-3	N-VT-1		02.00	20061007		P	
				F1.20A F1.20A		VT-3	N-VT-1 N-VT-1		08.00	20060808		P	
SIS	74-1RHR-R124	ISI-0021-C-	OT E-W	F1.20A	82E-01	A.13	M-A.L T		08.00	20000808	V1700	r	

Chattanooga Office Complex

1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

Comme	iciai Seivice Date. Iviay 2	27, 1990											Ivalional D	oald Number for Offic.	IN/A
System	Component Number	ISO Drawing	Category			Exam Schedul	NDE ed Procedure	Calibration Standard	Component Diameter	Nominal E Thickness	Exam Date	Exam Report	Exam Results	Comments	
CSS	72-1CS-R146	ISI-0423-C-0	3 F-A	F1.20B	89E-01	VT-3	N-VT-1		10.00		20061006	R1257	P		
CVCS	1-62A-020	ISI-0424-C-1	6 F-A	F1.20B	89E-01	VT-3	N-VT-1		02.00		20060915	R1141	P		
	1-62A-085	ISI-0424-C-2		F1.20B	89E-01	VT-3	N-VT-1		02.00		20060915		P		
	1-62A-093	ISI-0424-C-1		F1.20B	89E-01	VT-3	N-VT-1		02.00		20060915		P		
	1-62A-098	ISI-0424-C-2		F1.20B	89E-01	VT-3	N-VT-1		02.00		20060915		P		
	1-62A-124	ISI-0424-C-1		F1.20B	89E-01	VT-3	N-VT-1		02.00		20060917		P		
	1-62A-591	ISI-0424-C-1		F1.20B	89E-01	VT-3	N-VT-1		02.00		20060916		P		
CVCS	47A060-62-017	ISI-0424-C-2		F1.20B	89E-01	VT-3	N-VT-1		02.00		20061008		P		
FWS	1-03A-364	ISI-0062-C-0		F1.20B	89E-01	VT-3	N-VT-1		06.00		20060917		P		
FWS	1-03A-421	ISI-0062-C-0		F1.20B	89E-01	VT-3	N-VT-1		06.00		20060916		P		
FWS	1-03A-428	ISI-0062-C-0		F1.20B	SR1-01	VT-3	N-VT-1		06.00		20061004		P	Successive Exam for	r R0990
FWS	1-03A-428 1-03A-499	ISI-0062-C-0		F1.20B	SR1-01	VT-3	N-VT-1		06.00		20061004		P	Successive Exam for	
FWS	1-03A-499	ISI-0062-C-0		F1.20B	SR1-01	VT-3	N-VT-1		06.00		20061002		P	Successive Exam fo	
RHRS	1-63-377	ISI-0002-C-0		F1.20B	89E-01	VT-3	N-VT-1		08.00		20061002		P	Successive Exam 10	I ROJZJ
	1-63-122	ISI-0440-C-0		F1.20B	89E-01	VT-3	N-VT-1		02.00		20060921		P		
SIS	1-63-126	ISI-0440-C-0		F1.20B	89E-01	VT-3	N-VT-1		02.00		20060918		P		
	1-63-126	ISI-0440-C-0		F1.20B	89E-01 89E-01	VT-3	N-VT-1		04.00		20060918		P P		
SIS					89E-01 89E-01	VT-3	N-VT-1 N-VT-1		02.00		20061010		P		
SIS	1-63-253 1-63-262	ISI-0440-C-0		F1.20B	89E-01	VT-3	N-VT-1 N-VT-1		02.00		20060918		P P		
SIS	1-63-202	ISI-0440-C-0 ISI-0440-C-1		F1.20B F1.20B	89E-01	VT-3	N-VT-1		02.00		20060917		P P		
SIS	1-63-587	ISI-0440-C-1		F1.20B	89E-01	VT-3	N-VT-1	•	02.00		20061013		P		
212	1-63-387	151-0440-0-1	4 F-A	F1.20B	09E-01	V1-2	W- A I - T		02.00		20001013	KIDO4	r		
CSS	72-1CS-V148	ISI-0423-C-0	3 F-A	F1.20C	89E-01	VT-3	N-VT-1		10.00		20061006	R1258	P		
CVCS	62-1CVC-V192	ISI-0424-C-1	3 F-A	F1.20C	89E-01	VT-3	N-VT-1		02.00		20060721	R1130	P		
MSS	1-01A-389	ISI-0011-C-0	3 F-A	F1.20C	SR1-01	VT-3	N-VT-1		32.00		20060930	R1237	P	Successive Exam fo	r R0526
MSS	1-01A-431	ISI-0011-C-0	4 F-A	F1.20C	89E-01	VT-3	N-VT-1		32.00		20060917	R1174	P		
RHRS	1-63-349	ISI-0020-C-0	8 F-A	F1.20C	89E-01	VT-3	N-VT-1		08.00		20060921	R1198	P		
RHRS	63-1SIS <b>-</b> V186	ISI-0107-C-0	2 F-A	F1.20C	89E-01	VT-3	N-VT-1		03.00		20061007	R1270	P		
SIS	63-1SIS-V044	ISI-0440-C-2	2 F-A	F1.20C	89E-01	VT-3	N-VT-1		08.00		20060822	R1111	P		
CSS	63-1SIS-R228	ISI-0423-C-0	2 F-A	F1.20D	89E-01	VT-3	N-VT-1		20.00		20061006	R1153	P		
CSS	63-1SIS-R242	ISI-0423-C-0	2 F-A	F1.20D	89E-01	VT-3	N-VT-1		12.00		20061006	R1160	P		
CVCS	1-62A-097	ISI-0424-C-2	0 F-A	F1.20D	89E-01	VT-3	N-VT-1		02.00		20060915	R1139	P		
FWS	1-03A-200	ISI-0062-C-0	1 F-A	F1.20D	89E-01	VT-3	N-VT-1		16.00		20060917	R1169	P		
FWS	1-03A-374	ISI-0062-C-0	5 F-A	F1.20D	SR1-01	VT-3	N-VT-1		06.00		20061002	R1240	P	Successive Exam fo	r R0522
FWS	1-03A-409	ISI-0062-C-0	6 F-A	F1.20D	P89000	VT-3	N-VT-1		06.00		20061114	R1363	P		
FWS	1-03A-480	ISI-0062-C-0	8 F-A	F1.20D	SR1-01	VT-3	N-VT-1		06.00		20061003	R1245	P	Successive Exam fo	r R0824
FWS	47A401-07-035	ISI-0062-C-0	8 F-A	F1.20D	89E-01	VT-3	N-VT-1		06.00		20060929	R1229	P		
MSS	1-01A-343	ISI-0011-C-0	2 F-A	F1.20D	89E-01	VT-3	N-VT-1		32.00		20061007	R1267	P		
MSS	1-01A-428	ISI-0011-C-0	4 F-A	F1.20D	89E-01	VT-3	N-VT-1		32.00		20060917	R1158	P		
RHRS	1-63-591	ISI-0020-C-0	8 F-A	F1.20D	89E-01	VT-3	N-VT-1		08.00		20060925	R1218	P		
RHRS	63-1SIS-R195	ISI-0107-C-0	2 F-A	F1.20D	89E-01	VT-3	N-VT-1		03.00		20061007	R1269	P		
SIS	1-63-494	ISI-0440-C-0	9 F-A	F1.20D	89E-01	VT-3	N-VT-1		02.00		20060928	R1224	P		
SIS	1-63-571	ISI-0440-C-1	.7 F-A	F1.20D	89E-01	VT-3	N-VT-1		02.00		20061015	R1297	P		
PZR	PZRH-1	CHM-2570-C-0	4 F-A	F1.41B	89E-01	VT-3	N-VT-1				20060924	R1215	P		
RCP	RCPH-2	ISI-0446-C-0	1 F-A	F1.41B	SC1-01	VT-3	N-VT-1				20060920	R1194	P		
RV	RVSUPPORT	ISI-0427-C-0	7 F-A	F1.41B	89E-01	VT-3	N-VT-1				20061118	R1373	P		

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

System	n Component	ISO Drawing	Category			Exam	NDE			Nominal Exam	Date	Exam	Exam	Comments
	Number				Requirement	Schedule	ed Procedure	Standard	Diameter	Thickness		Report	Results	
SG	SGH-2-1	CHM-2660-C-0	3 F-A	F1.41B	P89000	VT-3	N-VT-1			200	61113	R1355	P	
SG	SGH-2-2	CHM-2660-C-0	3 F-A	F1.41B	P89000	VT-3	N-VT-1			200	61113	R1356	P	
SG	SGH-2-3	CHM-2660-C-0	3 F-A	F1.41B	P89000	VT-3	N-VT-1			200	61113	R1357	P	
SG	SGH-2-4	CHM-2660-C-0	3 F-A	F1.41B	P89000	VT-3	N-VT-1			200	61113	R1358	P	
CVCS	1-62A-318	ISI-0026-C-0	2 F-A	F1.41D	89E-01	VT-3	N-VT-1		03.00	2006	60919	R1189	P	
CVCS	1-62A-319	ISI-0026-C-0	2 F-A	F1.41D	89E-01	VT-3	N-VT-1		03.00	200	60919	R1187	P	
RCS	1-68-033	ISI-0364-C-0	2 F-A	F1.41D	89E-01	VT-3	N-VT-1		04.00	200	60916	R1144	P	
CSS	72-1CS-R126	ISI-0423-C-0	7 F-A	F1.42A	89E-01	VT-3	N-VT-1		10.00	200	60719	R1046	P	
CSS	CSHXH-1-1A	ISI-0371-C-0	2 F-A	F1.42B	89E-01	VT-3	N-VT-1		60.00	200	61011	R1285	P	
CSS	CSPH-1A-A	ISI-0483-C-0	1 F-A	F1.42B	89E-01	VT-3	N-VT-1		HX	200	60828	R1129	P	
RHRS	RHRPH-1A-A	ISI-0117-C-0	1 F-A	F1.42B	89E-01	VT-3	N-VT-1		PMP	200	61014	R1296	P	
SG	SGH-1-1	CHM-2660-C-0	3 F-A	F1.42B	P89000	VT-3	N-VT-1			200	61116	R1369	P	Dual Credit Exam
SG	SGH-1-1	CHM-2660-C-0	3 F-A	F1.42B	SR1-01	VT-3	N-VT-1			200	61116	R1369	P	Dual Credit Exam, Successive Exam for R0704
SG	SGH-1-2	CHM-2660-C-0	3 F-A	F1.42B	P89000	VT-3	N-VT-1			200	61116	R1368	P	Dual Credit Exam
SG	SGH-1-2	CHM-2660-C-0	3 F-A	F1.42B	SR1-01	VT-3	N-VT-1			200	61116	R1368	P	Dual Credit Exam, Successive exam for R0516
SG	SGH-1-3	CHM-2660-C-0	3 F-A	F1.42B	P89000	VT-3	N-VT-1			200	61113	R1359	P	
SG	SGH-1-4	CHM-2660-C-0	3 F-A	F1.42B	P89000	VT-3	N-VT-1			200	61116	R1370	P	Dual Credit Exam
SG	SGH-1-4	CHM-2660-C-0	3 F-A	F1.42B	SR1-01	VT-3	N-VT-1			200	61116	R1370	P	Dual Credit Exam, Successive exam for R0517
CVCS	47A406-02-003	ISI-0424-C-2	1 F-A	F1.42D	89E-01	VT-3	N-VT-1		02.00	200	61009	R1277	P	
FWS	47A401-07-032	ISI-0062-C-0	5 F-A	F1.42D	89E-01	VT-3	N-VT-1		03.00	200	60916	R1152	P	
SIS	63-1SIS-R085	ISI-0440-C-1	9 F-A	F1.42D	89E-01	VT-3	N-VT-1		02.00	200	60822	R1110	P	
AFWS	FWS-079	CHM-2671-C-0	8 R-A	R1.11	89E-01	UT	N-UT-76	ALT CS	06.00	0.432 200	60921	R1211	P	
AFWS	FWS-084	CHM-2671-C-0	8 R-A	R1.11	89E-01	UT	N-UT-76	ALT CS	06.00	0.432 200	60922	R1212	P	
BDS	1-015A-B001-02	ISI-0508-C-0	1 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80 200	61111	R1346	P	
BDS	1-015A-B001-07	ISI-0508-C-0	1 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80 200	60912	R1145	P	
BDS	1-015A-B001-10	ISI-0508-C-0	1 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80 200	61111	R1347	P	
BDS	1-015A-B001-14	ISI-0508-C-0	1 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80 200	60912	R1147	P	
BDS	1-015A-B003-01	ISI-0508-C-0	4 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80 200	61106	R1332	P	
BDS	1-015A-B003-02	ISI-0508-C-0	4 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80 200	61106	R1333	P	
BDS	1-015A-B003-07	ISI-0508-C-0	4 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80 200	61110	R1338	P	
BDS	1-015A-B003-09	ISI-0508-C-0	4 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80 200	60912	R1146	P	
BDS	1-015A-B008-02	ISI-0508-C-0	5 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80 200	61106	R1334	P	
BDS	1-015A-B008-06	ISI-0508-C-0	5 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80 200	60920	R1209	P	
BDS	1-015A-B008-10	ISI-0508-C-0	5 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80 200	61109	R1339	P	
BDS	1-015A-B008-10A	ISI-0508-C-0	5 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80 200	61109	R1340	P	
BDS	1-015A-B008-11	ISI-0508-C-0		R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80 200	60921	R1208	P	
BDS	1-015A-B014-02	ISI-0508-C-0		R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80 200	61105	R1335	P	
BDS	1-015A-B014-05	ISI-0508-C-0		R1.11	P89000	UT	N-UT-76	ALT CS	03.00	SCH 80 200	61105	R1336	P	
BDS	1-015A-B014-08	ISI-0508-C-0		R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80 200	61111	R1348	P	
BDS	1-015A-B014-12	ISI-0508-C-0		R1.11	P89000	UT	N-UT-76	ALT CS	02.50	SCH 80 200	60921	R1210	P	
BDS	1-015A-T002-18	ISI-0508-C-0		R1.11	89E-01	UT	N-UT-76	ALT CS	04.00	SCH 80 200	61018	R1294	P	•
BDS	1-015A-T013-30	ISI-0508-C-1		R1.11	89E-01	UT	N-UT-76	ALT CS	04.00	0.337 200	60928	R1235	P	

Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

System	Component	ISO Drawing	Category	Itam Numba	r Exam	Exam	NDE	Calibration	Component	Nominal	Exam Date	Exam	Exam	Comments
Gysten	Number	100 Diawing	Calegory		Requirement			Standard		Thickness	LAGIII DGIO	Report	Results	Commonto
CSS	CSF-D066-11	ISI-0421-C-0	8 R-A	R1.11	89E-01	UT	N-UT-64	WB-83	06.00	0.280	20060908		P	
CVCS	CVCW-01A	ISI-0050-C-0		R1.11	89E-01	UT	N-UT-64	WB-20	01.50	0.200	20061006	R1265	P	
cvcs	CVCW-02A	ISI-0050-C-0	2 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-0	3 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-0	4 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-0	1 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-0	4 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-0	4 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-0	3 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-0	2 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-0	2 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-0	5 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-0	7 R-A	R1.11	P89000	UT	N-UT-76		06.00	0.432	20061114	R1364	P	
FWS	1-003B-B372-17	CHM-2671-C-0	6 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-0	7 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-0	8 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	06.00	0.432	20061112	R1345_	Ρ.	
FWS	FWF-D372-28	CHM-2671-C-0	6 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-0	1 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-0	3 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	32.00	01.175	20061112		P	
MSS	1-001A-B006-01	CHM-2669-C-0	4 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	32.00	01.175	20061112		P	
MSS	1-001A-B009-01	CHM-2669-C-0	2 R-A	R1.11	P89000	UT	N-UT-76	ALT CS	32.00	01.175	20061115		P	
RCS	RCS-112	ISI-0365-C-0	2 R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	04.00	0.531	20061029		P	
RHRS	RHRF-D053-02	CHM-2636-C-0	1 R-A	R1.11	89E-01	UT	N-UT-64	ALT SS	14.00	01.250	20061005		P	
RHRS	RHRS-182	ISI-0421-C-0	2 R-A	R1.11	89E-01	UT	N-UT-64	WB-83	08.00	0.322	20061013		P	
RHRS	SIF-D081-01	CHM-2758-C-0	3 R-A	R1.11	89E-01	UT	N-UT-64	WB-83	08.00	0.322	20061021		P	96% COVERAGE
SG	1-068D-B001-02	CHM-2547-C-0	1 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-0	1 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-0	1 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-0	1 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-0	1 R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061105	R1329	Р	
SG	1-068F-B002-01	CHM-2547-C-0	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-0	1 R-A	R1.11	P89000	UT	N-UT-64/33			02.600	20061101		P	
SG	1-068F-B004-01	CHM-2547-C-0	1 R-A	R1.11	P89000	UT	N-UT-64/33	WB-60/89	31.00	02.600	20061104		P	
SG	RSG-A-C-SE	CHM-2660-C-0		R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050724		P	
SG	RSG-A-H-SE	CHM-2660-C-0		R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050724		P	
SG	RSG-B-C~SE	CHM-2660-C-0		R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050809		P	
SG	RSG-B-H-SE	CHM-2660-C-0		R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050808		P	
SG	RSG-C-C-SE	CHM-2660-C-0	04 R-A	R1.11	P89000	UT	N-UT-82	WB-89	31.03	04.870	20050726	R1012	P	

Chattanooga Office Complex

1101 Market Street Chattanooga, TN 37402 P.O. Box 2000 Spring City, TN 37381-2000

WATTS BAR NUCLEAR PLANT

Unit: 1

Certificate of Authorization:

Plant:

N/A National Board Number for Unit: N/A Commercial Service Date: May 27, 1996 Component ISO Drawing Category Item Number Exam Exam NDE Calibration Component Nominal Exam Date Exam Exam Comments Number Requirement Scheduled Procedure Standard Diameter Thickness Report Results 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 Ρ RSG-D-C-SE UT N-UT-82 WB-89 31.03 04.870 20050731 R1028 P SG CHM-2660-C-04 R-A R1.11 P89000 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 Ρ 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 Ρ Р CHM-2660-C-04 R-A R1.11 P89000 UT N-UT-76 WB-92 16.00 0.923 20050726 R1014 SG RSGFW-C-SE 20050729 R1022 Ρ SG RSGFW-D-SE CHM-2660-C-04 R-A R1.11 P89000 UT N-UT-76 WB-92 16.00 0.923 0.906 Ρ SIS RHRF-D055-11 CHM-2636-C-08 R-A R1.11 89E-01 UT N-UT-64 ALT SS 08.00 20061004 R1251 02.00 Р SIS SIF-B-T047-08 ISI-0375-C-19 R-A R1.11 89E-01 UT N-UT-64 WB-06 0.346 20061016 R1299 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 Ρ 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 ₽ 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 Ρ 94% COVERAGE N-UT-64 ALT SS 10.00 01.00 20061021 R1316 Ρ SIS SIS-113 CHM-2758-C-09 R-A R1.11 89E-01 UT SIS-126 CHM-2758-C-10 R-A R1.11 89E-01 UТ N-UT-64 ALT SS 10.00 01.00 20061006 R1262 Ρ SIS Р UT N-UT-64 ALT SS 06.00 0.718 20061020 R1310 CHM-2758-C-10 R-A R1.11 89E-01 SIS SIS-132 SIS-242 ISI-0375-C-16 R-A R1.11 89E-01 UT N-UT-64 WB-83 03.00 0.438 20061016 R1301 Р SIS N-UT-26 FAC R1375 Ρ AFWS 103BE374 FAC Program R-A R1.18 89E-01 UT 103BE375 FAC Program R-A R1.18 89E-01 UT N-UT-26 FAC R1375 Р AFWS R1376 Р AFWS 103BE465 FAC Program R-A R1.18 89E-01 UT N-UT-26 FAC R-A R1.18 89E-01 UT N-UT-26 FAC R1376 Е AFWS 103BE466 FAC Program R1.18 89E-01 UT N-UT-26 FAC R1377 P AFWS 103BE531 FAC Program R-A R-A R1.18 89E-01 UT N-UT-26 FAC R1375 P AFWS 103BN376 FAC Program Þ 103BN467 FAC Program R-A R1.18 89E-01 UT N-UT-26 FAC R1376 AFWS P BDS 115E141 FAC Program R-A R1.18 89E-01 UT N-UT-26 FAC R1378 R1379 Р R1.18 UT N-UT-26 FAC BDS 115E312 FAC Program R-A 89E-01 N-UT-26 R1381 Ρ 115P042 FAC Program R-A R1.18 89E-01 UT FAC BDS N-UT-26 FAC R1380 Ρ BDS 115P071 FAC Program R-A R1.18 89E-01 UT R1.18 89E-01 UT N-UT-26 FAC R1381 Ρ BDS 115T041 R-A FAC Program Р 115X021 FAC Program R-A R1.18 89E-01 UT N-UT-26 FAC R1381 BDS R1381 Ρ 115X040 FAC Program R-A R1.18 89E-01 UT N-UT-26 FAC BDS

TENNESSEE VALLEY AUTHORITY Owner:

Chattanooga Office Complex 1101 Market Street

Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization:

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

Unit: 1

Commercial Service Date: May 27, 1996

Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization:

N/A

National Board Number for Unit: N/A

Syster	n Component Number	ISO Drawing	Category	ltem Number	Exam Requiremer	Exai t Sched		Calibration re Standar			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	Р	
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	Р	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

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

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

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box:2000

Spring City, TN 37381-2000

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

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

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: N/A
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.

TENNESSEE VALLEY AUTHORITY Owner:

Chattanooga Office Complex 1101 Market Street Chattanooga, TN 37402

Unit: 1

Commercial Service Date: May 27, 1996

Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000 Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit:

N/A 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

Commercial Service Date: May 27, 1996

Chattanooga, TN 37402

Unit: 1

Plant:

WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: National Board Number for Unit: N/A 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, TN 37402

Chattanooga Office Complex 1101 Market Street

Unit: 1

Commercial Service Date: May 27, 1996

Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000

Spring City, TN 37381-2000

Certificate of Authorization: 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
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Owner:

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

Certificate of Authorization:

Spring City, TN 37381-2000

Plant: WATTS BAR NUCLEAR PLANT P.O. Box 2000

Unit: 1

Commercial Service Date: May 27, 1996

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

TENNESSEE VALLEY AUTHORITY Chattanooga Office Complex Owner:

1101 Market Street

Chattanooga, TN 37402

Unit: 1 Commercial Service Date: May 27, 1996 Plant: WATTS BAR NUCLEAR PLANT

P.O. Box 2000 Spring City, TN 37381-2000

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

		NER'S REPORT FOR I by the Provisions of		*****************		
1. Owner TENN	IESSEE VALLEY A	JTHORITY	Ďate	10/26/200	6	
1101 Ma	Name arket St., Chattanoog	ga , TN 37402	Sheet	1 of 2		
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1		
P. O. Bo	Name ox 2000, Spring City,	TN, 37381	Work Ord	er 03-004783-0	00	
3. Work Performe	Address d by TVA Modificat	tions		Repair Organization I e Symbol Stam	P.O. No Job No et p N/A	C.
   Watts Bar Nuclea		Name	Authorizat	tion No N/A	:	
	Address		Expiration	Date N/A		
4. Identification of	system 068 Read	ctor Coolant	Expiration	1071		<u> </u>
(b) Applicable E		ASME III 19 71 Utilized for Repairs or	•	nents 1989	,	ode Case
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Repaired, Year Replaced, o	
1-RTV-68-454A	Flowserve	14AYE	N/A	N/A	2004 Repaired	Yes
						1
						<del> </del>
						-
						<del> </del>
7. Description of V	Vork Add weld me	tal to existing vendor	weld on the	above valve.		
8. Tests Conducte	d: Hydrostatic □ Other □ Pre	Pneumatic □ Nomi ssure ps	nal Operati si Test T	ing Pressure ⊈ emp	REF WO . 05-820567- _°F	000
11 in., (2	) information in item	of lists, sketches, or one of this in through 6 on this in of sheets is recorded	eport is inc	luded on each		

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## NIS-2 FORM SHEET 2 OF 2

gn L-18 FORM NIS-2 (Back)
9. Remarks Code Case N-416-23 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 <u>repair</u> conforms to the
repair or replacement rules of the ASME Code, Section XI.
Talica of the Meivil Gode, Geotlett Mi.
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
Signed
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 <u>Terwessec</u> and employed by <u>HSB-CT</u>
of HarT Ford CT- have inspected the components described in this
Owner's Report during the period
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.
B mc.
Source   Commissions   TN 2534
Date 10/28 20 0 6
Date 20_0

App. V Pa5 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

								Pg. 1 of _
	Manufactured by	Flowserve	Corporation, 19	000 S. Sav	inders St., Ra	leigh, NC 2	7603	
2.	Manufactured for Tenn	essee Valley Au	ithority, PO Box 1	5500 Knd		1		···
•	Location of Installation V	Vatts Bar Nucle	ar Plant, Highwa	y 68, Pow lame and Addr	er Stores Rd. S	pring City, T	N 37381	<del> </del>
4. Pump or Valve Valve Nominal Inlet Size ½" Outlet Size								
	(a) Model No.	(b) N Certificate	e (c) Canadian		(inch)			inch)
	Series No.	Holder's	Registration	(d	) Drawing		(f) Nat'l.	(g) Yes
	or Type	Serial No.	No.	,-	No.	(e) Class	Bd. No.	Built
•	(1) 1878#	14AYE	N/A	03-261	45-02 Rev. B	2	N/A	2004
	(2)		<del></del>					
	(3)					<del></del>	<del></del>	
	(4)	~					·	
	(5)					<del></del>		
	(6)							
	(7)						<del></del>	
	(8)		<del></del>	<del></del>	<del></del>			
	(9)							
(	10)					<del></del>		
	1878 3/4" 1878 T-GBI	BELLOWS	(Brief description o	f service for wi	nich equipment was design	ned)		
	1878 3/4" 1878 T-GBI	BELLOWS	(Brief description o	f service for wh	nich equipment was design	ned)	26145	
	1878 3/4" 1878 T-GBI	2485	psi65	0	°F or Valve Press		26145 1878	
	Design Conditions  Cold Working Pressure	2485 (Pressure) 4507	psi65		·····			
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.	0	⁰F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure	2485 (Pressure) 4507	psi 65	0	·····	sure Class		(1)
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.	0	⁰F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece  Mark No.	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.	0	°F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece  Mark No.	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.	0	°F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece  Mark No.	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.	0	°F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece  Mark No.	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.	0	°F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece  Mark No.	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.	0	°F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece  Mark No.	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.	0	°F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece  Mark No.  (a) Castings	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.	0	°F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure Pressure Retaining Piece Mark No.  (a) Castings	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.  Material Spec. No.	0	°F or Valve Press	sure Class	1878 Remark	(1)
	Design Conditions  Cold Working Pressure  Pressure Retaining Piece  Mark No.  (a) Castings	2485 (Pressure) 4507	psi 65 psi at 100 °F.  Material Spec. No.	0	°F or Valve Press	sure Class	1878	(1)
	Design Conditions  Cold Working Pressure Pressure Retaining Piece Mark No.  (a) Castings  (b) Forgings  55715	2485 (Pressure) 4507	psi 65 (Tampo psi at 100 °F.  Material Spec. No.	0	°F or Valve Press  Manufactu  Flowser	ve	1878  Remark	(1) KS Y ENSION
	Design Conditions  Cold Working Pressure Pressure Retaining Piece Mark No.  (a) Castings  (b) Forgings  55715  150617	2485 (Pressure) 4507	psi 65 (Tempor psi at 100 °F.  Material Spec. No.  SA479 type 316 SA479 type 316	0	°F or Valve Press  Manufactu  Flowser  Dubose	ve	BODY BODY EXT	(1) KS Y ENSION ET
	Cold Working Pressure Pressure Retaining Piece Mark No.  (a) Castings  (b) Forgings  55715  150617  71934-1	2485 (Pressure) 4507	psi 65  psi at 100 °F.  Material Spec. No.  SA479 type 316 SA479 type 316 SA479 type 316	0	Flowser Dubose Colonia	ve	BODY BODY BONN	(1) KS Y ENSION ET
	Cold Working Pressure Pressure Retaining Piece Mark No.  (a) Castings  (b) Forgings  55715  150617  71934-1	2485 (Pressure) 4507	psi 65  psi at 100 °F.  Material Spec. No.  SA479 type 316 SA479 type 316 SA479 type 316	0	Flowser Dubose Colonia	ve	BODY BODY BONN	(1) KS Y ENSION ET

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<sup>(1)</sup> For manually operated valves only

<sup>\*</sup>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.

			Valve S	/N 14AYE through *****
Mark No.	Materia	l Spec. No.	Manufacturer	Remarks
(c) Bolting				
			<u> </u>	<u> </u>
		<b>**</b>		
	-			
· · · · · · · · · · · · · · · · · · ·		<del></del>		
(d) Other Parts 440715	SA3	76 T304	CONSOLIDATED POWER SUPPLY	PIPE
440/13	SAS	70 1304		TIFE
	<del></del>	<del></del>	<del></del>	<u> </u>
We certify that the statements r conforms of the ASME Code for Nuc	nade in this report a		at this pump, or valve, to	the rules of construction 1986
Addenda No	, Code Case No.	N/A	, Date	118/04
Signed Flowser		by		Chipmen
(N Certificate He Our ASME Certificate of Authorization		to use th	e N symbol expires	11 50 00
OU ASME Certificate of Authorization	on No. N-150	52 to use in	N symbol expires	11-26-06
	C	ERTIFICATION		10818)
Design information on file	at	F	lowserve Corporation Raleigh	, NC
Stress analysis report (Class			Flowserve Corporation Ral	eigh, NC
Design specifications certified		D. a. Ma	Floyd Bensinger	
PE State Stress analysis certified by (1)	PA	Reg. No.	PE-31002-E	
PE State	NC	Reg. No.	Ron S. Farrell 028656	
		rag	028030	
(1) Signature not required, List name	e only.			
	CERTI	FICATE OF SHO	OP INSPECTION	
l, the undersigned, holding a valid co <b>North Carolina</b> and employed b	mmission issued by t	ne National Board of HSB CT_	Boiler and Pressure Vessel Inspecto	ors and the State or Province of Hartford Connecticut
have inspected the pump, or valve.			18 104 , and state that,	to the best of my knowledge and
belief, the N Certificate Holder has or By signing this certificate neither the this s Data Report. Furthermore, neit loss of any kind arising from or conn	onstructed this pump, Inspector nor his emp ther the Inspector nor l	or valve, in accorda lloyer makes any wa his employer shall be	rranty, expressed or implied, concern	ing the equipment described in al injury or property damage or a
Date 7 1 8 104	100			
Signed (inspec	101)	Commissions	NC/42/ (Nat'l Bd., State, Prov. and N	(o.)

APP, V 5 RG 7 OF 196

		NER'S REPORT FOR I by the Provisions of I						rs	
1. Owner TENN	NESSEE VALLEY AU	JTHORITY	Date	е	10/2	2/20	06		
1101 Ma	Name arket St., Chattanoog	ja , TN 37402	She	et	1 0	f 6			
2. Plant Watts	Address s Bar Nuclear Plant		Unit	t <u>U</u>	nit 1				
P. O. Bo	Name ox 2000, Spring City,	TN, 37381	Woi	rk Ord	er 03-0	08794-0	00		
3. Work Performe	Address ed by TVA Modificat	ions	Тур			canization ool Stam		lo Job No etc. /A	
Watts Bar Nuclea		lame	Auth	horizat	tion No	N/A			
Address				iration	) Date	N/A			
4. Identification of	f system 062 Cher	mical and Volume Cor	•						
(b) Applicable I		ASME III 19 71  Utilized for Repairs or red or Replaced and F	r Rep	olacem	nents -	Addend 1989 ponents	la, <u>N</u>	N/A Coc	de Case
Name of Component		Manufacturer Serial No.	Na	ational ard No.		entification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-INJ-62-556	Flowserve	09AXM	14	1 .	7	A	200	Repaired	Yes
1-INJ-62-557	Flowserve	08AXM	2	A	7	A	200	Repaired	Yes
1-INJ-62-558	Flowserve	06AXM	N	Α	N	A	9	Repaired	Yes
1-INJ-62-559	Flowserve	07AXM	N	A	N	A	2003	Repaired	Yes
									,
7. Description of V	Nork Add weld met	tal to existing vendor v	veld ·	on the	above	valves.	<u> </u>	1	
8. Tests Conducte		neumatic Nominal sure psi					°F	PER WO 3-007194-0	ÞΙ
11 in., (2	2) information in item	of lists, sketches, or d s 1 through 6 on this r of sheets is recorded	eport	t is inc	luded c	n each			

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# NIS-2 FORM SHEET 2 OF 2 10 22 2006

FORM NIS-2 (Back)
9. Remarks Code Case N-416-23 Tracking No. RR-07-023  Applicable Manufacturer's Data Reports to be Attached
Work Order 03-008794-000 Will 10/21/206
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>repair</u> 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 Oodd Const. Eugh. Date 10/22/2006
Owner or Owner's Designee. Title
CERTIFICATE OF INSERVICE INSPECTION
l, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel
Inspectors and the State or Province of <u>Jennessee</u> and employed by <u>HSB-CT</u>
ofhave inspected the components described in this
Owner's Report during the period to to 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 2 5 3 4       Inspector's Signature   National Board, State, Province, and Endorsements
Inspector's Signature National Board, State, Province, and Endorsements
Date 10/26 20 06

## 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

	Manufactured for TYPA	P 0 D0V 1880	· ·	dress of N Certificate Holder)			
	Manufactured forTVA		(Name and Add	fress of Purchaser or Owner)			
	Location of Installation T	VA- WATTS BA		ANT, CHICHAMAUC	GA TN		
	Pump or Valve	Valve	Nominal Inl	•	Outle	et Size	1"
	(a) Model No.	(b) N Certificate	(c) Canadian	(inch)	<u> </u>		nch)
	Series No.	Holder's	Registration	(d) Drawing		(f) Nat'l.	(g) Ye
	or Type	Serial No.	No.	No.	(e) Class	Bd. No.	Buil
-	(1) 1878-YGB	06AXM	N/A	03-25196-01 / A	2	N/A	200
	(2)	07AXM					
	(3)	08AXM			·		
	(4) 1878-YGB	09AXM	N/A	03-25196-01 / A	2	N/A	200
	(5)						
	(6)						
	(7)						
	(8)				<del></del>		<del></del>
	(9)						
(1	10)						
		2735	(Brief description of si	ervice for which equipment was desired.  OF or Valve Pres:	gned)	25196 1878	(
	Design Conditions  Cold Working Pressure  Pressure Relaining Pieces	2735 (Pressure) 4507 s	(Brief description of so	oF or Valve Pres	gned) sure Class	1878	
	Design Conditions  Cold Working Pressure	2735 (Pressure) 4507 s	(Brief description of so	ervice for which equipment was desired.  OF or Valve Pres:	gned) sure Class		
	Design Conditions  Cold Working Pressure  Pressure Relaining Pieces	2735 (Pressure) 4507 s	(Brief description of so	oF or Valve Pres	gned) sure Class	1878	
	Design Conditions  Cold Working Pressure  Pressure Relaining Pieces  Mark No.  (a) Castings	2735 (Pressure) 4507 s	(Brief description of some second sec	orvice for which equipment was desired.  OF or Valve Pressires.  Manufact	sure Class	1878	s
	Design Conditions  Cold Working Pressure  Pressure Relaining Pieces  Mark No.	2735 (Pressure) 4507 s	(Brief description of so	oF or Valve Pres	sure Class	1878  Remark	s
	Design Conditions  Cold Working Pressure  Pressure Relaining Pieces  Mark No.  (a) Castings	2735 (Pressure) 4507 s	(Brief description of some second sec	orvice for which equipment was desired.  OF or Valve Pressires.  Manufact	sure Class  urer	1878  Remark	s
	Design Conditions  Cold Working Pressure  Pressure Relaining Pieces  Mark No.  (a) Castings  M5597	2735 (Pressure) 4507 s	(Brief description of some second sec	oF or Valve Press	sure Class urer	1878 Remark BODY	S
	Design Conditions  Cold Working Pressure  Pressure Relaining Pieces  Mark No.  (a) Castings  M15597  (b) Forgings  724910	2735 (Pressure) 4507 s	(Brief description of some section of some sec	oF or Valve Pressure)  Manufact  FLOWSE	sure Class  urer  RVE	1878  Remark  BODY	S
	Design Conditions  Cold Working Pressure Pressure Relaining Pieces Mark No.  (a) Castings  M5597  (b) Forgings 724910 H586	2735 (Pressure) 4507 s	(Brief description of some section of some sec	oF or Valve Pressure)  Manufact  FLOWSE  FLOWSE  NOVA	sure Class  Urer  RVE	BODY  BONNE DISC	s T
	Design Conditions  Cold Working Pressure  Pressure Relaining Pieces  Mark No.  (a) Castings  M15597  (b) Forgings  724910	2735 (Pressure) 4507 s	(Brief description of some section of some sec	oF or Valve Pressure)  Manufact  FLOWSE  FLOWSE  NOVA	sure Class  Urer  RVE	1878  Remark  BODY	s T
	Design Conditions  Cold Working Pressure Pressure Relaining Pieces Mark No.  (a) Castings  M5597  (b) Forgings 724910 H586	2735 (Pressure) 4507 s	(Brief description of some section of some sec	oF or Valve Pressure)  Manufact  FLOWSE  FLOWSE  NOVA	sure Class  Urer  RVE	BODY  BONNE DISC	s T
	Design Conditions  Cold Working Pressure Pressure Relaining Pieces Mark No.  (a) Castings  M5597  (b) Forgings 724910 H586	2735 (Pressure) 4507 s	(Brief description of some section of some sec	oF or Valve Pressure)  Manufact  FLOWSE  FLOWSE  NOVA	sure Class  Urer  RVE	BODY  BONNE DISC	s T
	Design Conditions  Cold Working Pressure Pressure Relaining Pieces Mark No.  (a) Castings  M5597  (b) Forgings 724910 H586	2735 (Pressure) 4507 s	(Brief description of some section of some sec	Proceed for which equipment was desired for Valve Pressiture)  Manufact  FLOWSE  FLOWSE  NOVA  ASKEN	sure Class  Urer  RVE	BODY  BONNE DISC	T

Pg. 2 of 2

	~1	•	· 3· = · · _=
		Valve S/N _	06AXM_through_09AXM_
Mark No.	Material Spec. No.	Manufacturer	Remarks
Bolting			
	<u> </u>		·

•		Į.			
(d) Other Parts					
					· ·
	<del></del>		<del></del>	· · · · · · · · · · · · · · · · · · ·	
Hydrostatic test 6775	psi. Disk Differe	ential test pressure	4958	psi.	
	CERTIE	ICATE OF COM	PLIANCE		
We certify that the statements mad				re, to the	rules of construction
conforms		4			1986
of the ASME Code for Nuclear	r Power Plant Comp	onents. Section I	II, Div. 1.,	Edition	1,00
Addenda NO , C	Code Case No.	N/A	. Date		
Signed Flowserve Corpo	oration by				
(N Certificate Holder					······································
Our ASME Certificate of Authorization N	No. N-1562	to use the	N sy	mbol expires	11-26-03
		<del></del> -	(N)		(Date)
	CERT	IFICATION OF			
Design information on file at			WSERVE CO	RPORATION	
Stress analysis report (Class 1 on	nly) on file at				
Design specifications certified by	(1)		LEO F L	ANE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
PE State	TN	Reg. No.	15195		
Stress analysis certified by (1)					
PE State	-	Reg. No.			
<ol> <li>Signature not required. List name on</li> </ol>	ıly.				
		ATE OF SHOP IN			
the undersigned, holding a valid comm	ission issued by the Na		r and Pressure Ve		
		HSB CT	1 1 7		lartford Connecticut
North Carolina and employed by					e best of my knowledge and
ave inspected the pump, or valve, desc			IIII ASIVIL COOR, 3		
ave inspected the pump, or valve, desceller, the N Certificate Holder has consti		makes any warranty	expressed or imp	ilied, concernina t	he equipment described in
ave inspected the pump, or valve, desc elief, the N Certificate Holder has const y signing this certificate neither the Insp is s Data Report. Furthermore, neither	pector nor his employer the Inspector nor his en				
ave inspected the pump, or valve, desc elief, the N Certificate Holder has const y signing this certificate neither the Insp his s Data Report. Furthermore, neither loss of any kind arising from or connecte	pector nor his employer the Inspector nor his en				
ave inspected the pump, or valve, desc elief, the N Certificate Holder has const y signing this certificate neither the Insp is s Data Report. Furthermore, neither	pector nor his employer the Inspector nor his en				
ave inspected the pump, or valve, descelief, the N Certificate Holder has construy signing this certificate neither the Inspirits s Data Report. Furthermore, neither toss of any kind arising from or connected to 1 7 1 0 3	pector nor his employer the Inspector nor his en ed with this Inspection.	nployer shall be liable	e in any manner (c		
ave inspected the pump, or valve, descelief, the N Certificate Holder has construy signing this certificate neither the Inspiris s Data Report. Furthermore, neither ass of any kind arising from or connected ate.	pector nor his employer the Inspector nor his en ed with this Inspection.		e in any manner (c	or any personal inj	
ave inspected the pump, or valve, desc elief, the N Certificate Holder has const y signing this certificate neither the Insp his s Data Report. Furthermore, neither loss of any kind arising from or connecte	pector nor his employer the Inspector nor his en ed with this Inspection.	nployer shall be liable	e in any manner (c		
ave inspected the pump, or valve, descelief, the N Certificate Holder has construy signing this certificate neither the Inspiris s Data Report. Furthermore, neither ass of any kind arising from or connected ate.	pector nor his employer the Inspector nor his en ed with this Inspection.	nployer shall be liable	e in any manner fo	or any personal inj	ury or property damage or a
ave inspected the pump, or valve, descelief, the N Certificate Holder has construy signing this certificate neither the Inspiris s Data Report. Furthermore, neither ass of any kind arising from or connected ate.	pector nor his employer the Inspector nor his en ed with this Inspection.	nployer shall be liable	e in any manner fo	or any personal inj	ury or property damage or a
ave inspected the pump, or valve, descelief, the N Certificate Holder has construy signing this certificate neither the Inspiris s Data Report. Furthermore, neither ass of any kind arising from or connected ate.	pector nor his employer the Inspector nor his en ed with this Inspection.	nployer shall be liable	(N3(1 8d. :	State, Prov. and No.)	ury or property damage or a
ave inspected the pump, or valve, descelief, the N Certificate Holder has construy signing this certificate neither the Inspiris s Data Report. Furthermore, neither ass of any kind arising from or connected ate.	pector nor his employer the Inspector nor his en ed with this Inspection.	nployer shall be liable	(N3(1 8d. :	or any personal inj	

### 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

	NOT TO EXCEED	one Day ST Toutetto		Fg. 1 01 _2
1. Manufactured and certified by $F_1$	OWSERVE COPOR	+7104,1900 SSAI	MDERS-ST.	RALFIGH, NC 27603.
2. Manufactured for TVA				
3. Location of installation		· · · · · · · · · · · · · · · · · · ·	_	ICHAMAUGA TN
4. Type: 03-25196-01/A	SA376-304	N/A	N/A ICRNI	2003
5. ASME Code, Section III, Division 1		NO	(class)	N/A
6. Fabricated in accordance with Con			· ·	DateNA
7. Remarks: 11878 P(FE		[no.)		
D8AXM 5/N 546,	09 AXM SIN 74.	8		
<b>,</b> .	. •			
8. Nom. thickness (in.) N				th overall (ft & in.)N/A
9. When applicable, Certificate Holde	rs' Data Reports are attache	d for each item of this repor	t:	
Part or Appurtenance	National	Part or App	unenance	National
Serial Number	Board No.	Serial N	umber	Board No.
	in Numerical Order			In Numerical Order
(1) B3TB 142	N/A	(26)		
(2) B3TB 344	15/A	(27)	- 1	
(3) B3TB 546	NA	(28)		
(4) B3TB 748	NA	(29)	l l	
(5)		(30)	1	·
[6]		(31)	1	
(7)		(32)	1	
(8)		(33)	ŧ	
(9)		(34)		
(10)		(35)		
(11)		(36)		
(12)		(37)		
(13)		(38)		
(14)		(39)		
(15)		(40)		
(16)		(41)		
(17)		(42)		
(18)		(43)	1	
(19)		(44)		
(20)		(45)		

2735 200 10. Design pressure \_

(49) (50)

Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8% x 11, (2) information in items 2 and 3 gn this Data Report This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. Is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(22).

### FORM N-2 (Back - Pg. 2 of \_\_\_\_\_\_)

	Certificate Holder's	s Serial Nos. B3TB-1	_ through B3TB-8
	CERTIFICATION OF DESIGN	N	
Design specifications certified by	LEO FLANE [when applicable]	P.E. State	N Reg. no. 15195
Design report* certified by	(when applicable)	P.E. State	Reg. no
	CERTIFICATE OF COMPLIAN	CE	·
We certify that the statements made in this re conforms to the rules of construction of the A		PARTS	
NPT Certificate of Authorization No.		~~~	6/03
Date 10/7/03 Name FLOW	SERVE CORPORATION S	Signad Jauthorize	d representative)
	CERTIFICATE OF INSPECTIO	N	
I, the undersigned, holding a valid commission	n issued by the National Board of Boiler a	nd Pressure Vessel Inspectors	and the State or Province of
of RTEORD CT have inspected			, and state that to the
best of my knowledge and belief, the Certifica	ate Holder has fabricated these parts or a	ppurtenances in accordance w	vith the ASME Code, Section
III, Division 1. Each part listed has been autho			
By signing this certificate, neither the inspect			
in this Data Report. Furthermore, neither the in		n any manner for any personal	injury or property damage or
loss of any kind arising from or connected with	h this inspection.		<b>→</b>
Date 10/7/03 Signed 11	M. Jull	Commissions NC/42/	
	(Authorized Inspector)	[Nat'l. Bd. fincl. endo	rsements) and state or prov. and no.)

APP. V 15 Pc 13 0 = 196

		NER'S REPORT FOR I by the Provisions of				3		
1. Owner TEN	NESSEE VALLEY A	UTHORITY	Date	1-12-06				
1101 M	Name arket St., Chattanoo	oga, TN 37402		1 of 2				
2 Plant Watt	Address s Bar Nuclear Plant		Unit Unit 1					
P. O. B	ox 2000, Spring Cit	y, TN 37381	.w/o <i>0</i>	5-82225	1-0	00		
3. Work Perform	Address ed by MECHANICAL	_ MAINTENANCE	Type Coc	Repair Organization File Symbol Stamp	O No	Job No etc	<del></del>	
P.O. BOX 2000 S	SPRING CITY,TN 37	Name 381	Authoriza	ition No N/A			`	
	Address	. ,	Expiration	n Date N/A				
4. Identification o	f system 068.	Reactor Coolan	•					
(b) Applicable	Construction Code Edition of Section XI	SECTION III 19 74  Utilized for Repairs or Replaced and F	Edition, Replacen	574 Addend	a, — —	N/A Cod	de Case	
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacemen t	ASME Code Stamped (Yes or No)	
RCP CARTRIDGE seal Assembly	Westinghouse	2181	ŊΆ	2074703-601		Replace ment	NO	
						·		
······································								
<u></u>								
7. Description of N	ed: Hydrostatic P	neumatic Nominal psi	l Operating	Pressure A	- 68 Nd 1-7 F	8-901 18-68-6 18-68-6	L	
11 in., (2	?) information in item	of lists, sketches, or o s 1 through 6 on this r of sheets is recorded	eport is inc	luded on each s				

App. V PG 14 OF 196

FORM NIS-2 (Back)
9. Remarks TRACKING NO. PR-07-032 Applicable Manufacturer's Data Reports to be Attached
WO 05-82225/-000
The CArTridge real heing Installed (S/N 2181) WAS Removed
From RCP-+ By wo 02-012528-000 And Reburbished By
mo 03-009361-001
00 03 00 00 1 00 1
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> 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 Talla 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 Temes see and employed by HSB-c7
of <u>HarTford</u> CT. have inspected the components described in this
Owner's Report during the period 1/23/06 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. Earnigh Commissions TN 2 5 3 4 Inspector's Signature National Board, State, Province, and Endorsements
Date

1. Owner TE	NNESSEE VALLEY	AUTHORITY	Date	11/22/06		
1101	Market St., Chattano	oga, TN 37402	Sheet	) of 1		
2. Plant Wa	Address atts Bar Nuclear Plan	nt .	Unit <b>U</b>	nit 1		
P. O.	Name Box 2000, Spring Ci	ty, TN 37381	W/O 05-8	817979-001		
3. Work Perfor	Address med by <b>MECHANICA</b>	L MAINTENANCE		Repair Organization Ple Symbol Stamp		
P.O. BOX 200	SPRING CITY,TN 3	Name <b>7381</b>	Authoriza	tion No N/A		
	Address		Expiration	Date <b>N/A</b>		
4. Identification	of system 068 – R	EACTOR COOLANT	÷			
5. (a) Applicab	le Construction Code	SECTION III 19 71	Edition,	w72 Addenda	a, <b>N</b> //	A C
(b) Applicab	le Edition of Section X	I Utilized for Repairs o	r Replacen	nents 1989		
6. Identification	of Components Repa	aired or Replaced and I	Replaceme	nt Components		
						Repaired
Name of Compone	ent Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	
Name of Compone		Manufacturer Serial No. N56964-10-0033	1	Other Identification	Į.	Replacem
	4 CROSBY		Board No.	N/A	Built	Replacement REPLAC
1-RFV-068-056	64 CROSBY	N56964-10-0033	906	N/A	Built 83	
1-RFV-068-0564	CROSBY  CROSBY	N56964-10-0033 N56964-10-0096	906 850	N/A N/A	Built 83	REPLAC D REPLAC MENT REPLACE
1-RFV-068-0564	CROSBY  CROSBY	N56964-10-0033 N56964-10-0096	906 850	N/A N/A	Built 83	REPLAC D REPLAC MENT REPLACE
1-RFV-068-0564	CROSBY  CROSBY	N56964-10-0033 N56964-10-0096	906 850	N/A N/A	Built 83	REPLAC D REPLAC MENT
1-RFV-068-0564	CROSBY  CROSBY	N56964-10-0033 N56964-10-0096	906 850	N/A N/A	Built 83	REPLAC D REPLAC MENT REPLAC
1-RFV-068-0564	CROSBY  CROSBY	N56964-10-0033 N56964-10-0096	906 850	N/A N/A	Built 83	REPLAC D REPLAC MENT REPLAC
1-RFV-068-056  1-RFV-068-056  SUPER NUT  ASTENER  13/2" 4 11  7. Description of	CROSBY  CROSBY  NOVA  Of Work DROP AND	N56964-10-0033  N56964-10-0096  HT # 49419  107 Pid not	Board No.  906  850  NIA  replace	N/A N/A	Built 83	REPLAC D REPLAC MENT REPLACI MENT
1-RFV-068-056  1-RFV-068-056  SUPER NUT  ASTENER  13/2" 4 11  7. Description of	CROSBY  CROSBY  NOVA  Of Work DROP AND	N56964-10-0033 N56964-10-0096 HT # 49419 107 Pid not	Board No.  906  850  NIA  replace	N/A N/A	Built 83	REPLAC D REPLAC MENT REPLACI MENT

APP. V PG 16 OF 196

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 <u>replacement</u> conforms to the repair or replacement
reβair or replacement rules of the ASME Code, Section XI.
•
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
Signed Gallin Maint Specialist Date 11/22 20 46 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 Teuressee and employed by HSB-CT
mspectors and the state of Florinee of Attacked and employed by Trans
of
of
of HarTford CT. have inspected the components described in this  Owner's Report during the period 1/31/56 to 1/3/57 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described
of
of <u>HarTford CT.</u> have inspected the components described in this Owner's Report during the period $1/31/56$ to $1/3/57$ and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described
of HarTford CT. have inspected the components described in this Owner's Report during the period 1/31/56 to 1/2/57 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.
of HarTford CT. have inspected the components described in this Owner's Report during the period 1/31/56 to 1/3/07 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,
of HarTford ET. have inspected the components described in this Owner's Report during the period 1/31/36 to 1/3/07 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
of
of
have inspected the components described in this  Owner's Report during the period
of
have inspected the components described in this  Owner's Report during the period

APP. V PG-17 OF 196

		NER'S REPORT FOR I by the Provisions of			***********	3	
1. Owner <b>TENN</b>	IESSEE VALLEY A	UTHORITY	Date _	12-	7-06		
1101 Ma	Name urket St., Chattanoo	oga, TN 37402	Sheet _	of			
2. Plant Watts	Addréss Bar Nuclear Plant		Unit L	Init 1			
P. O. Bo	Name ox 2000, Spring City	y, TN 37381	W/O 06-	813430-000			
3. Work Performe	Address d by MECHANICAL	MAINTENANCE		Repair Organization F le Symbol Stam <sub>l</sub>			
P.O. BOX 2000 S	PRING CITY, TN 37	Name 381	Authoriza	tion No N/A			
	Address		Expiratio	n Date N/A			
4. Identification of	system 001 – MA	AIN STEAM					
(b) Applicable E	Edition of Section XI	SECTION III 19 74  Utilized for Repairs or Replaced and F	- r Replacer	nents 1989	a, 	N/A Code	e Case
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe d (Yes or No)
1-SFV-001-0526 RELIEF VALVE	DRESSER CONSOLIDATED	BS06215	N/A	N/A	77	REPLACE D	Υ
1-SFV-001-0526 RELIEF VALVE	DRESSER CONSOLIDATED	BS0 #218	N/A	N/A	MA	REPLACE MENT	Υ
-		ge ulasla		$\mathcal{L}$	Rela	rbished	
					<del>d</del> te	1.4	
7. Description of V	Vork REMOVE/RE	PLACED COMPLET	E SAFETY	VALVE			
8. Tests Conducte	•	neumatic Nomina sure psi	l Operatino Test Te		F		
11 in., (2	) information in item	of lists, sketches, or one of the state of the sketches of sheets is recorded	eport is inc	cluded on each s			

APP. V PG 18 OF 196

FORM NIS-2 (Back)
9. Remarks TRACKING NO. RR-02-052 CODE CASE N/A WO 06-813430-000 Applicable Manufacturer's Data Reports to be Atlached
, pp. 10000 mail (10000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this $\frac{Replacement}{L}$ conforms to the
repair or replacement rules of the ASME Code, Section XI.
Tules of the Advice Gode, Geotion XI.
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
Signed Warnt 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 <u>Texnessee</u> and employed by <u>HSB-cT</u>
of 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.
Inspector's Signature Commissions Tw 2534  National Board, State, Province, and Endorsements
Inspector's Signature U National Board, State, Province, and Endorsements
Date

APP. V PG 19 0= 196

		NER'S REPORT FOR I by the Provisions of I				3	
1. Owner TENNESSEE VALLEY AUTHORITY			Date	11/30/06	,		
1101 Ma	Name rket St., Chattanoo	oga, TN 37402	Sheet	$\bigcup$ of $\mathcal X$	2	g1212-7	-06
2. Plant Watts	Address Bar Nuclear Plant		Unit <b>U</b>	nit 1			
Name P. O. Box 2000, Spring City, TN 37381			W/O 05-8	321540-000			
3. Work Performed	Address d by MECHANICAL	MAINTENANCE		Repair Organization P e Symbol Stamp			
P.O. BOX 2000 SPRING CITY,TN 37381			Authorizat	tion No <b>N/A</b>			
	Address		Expiration	Date N/A		·····	
4. Identification of	system062 - C\	/cs					
5. (a) Applicable C	Construction Code	SECTION III 19 71	Edition, S	372 Addenda	a,	N/A Code	e Case
(b) Applicable E	dition of Section XI	Utilized for Repairs or	Replacem	ents 1989		<del></del>	
6. Identification of	Components Repai	red or Replaced and F	Replaceme	nt Components			
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe d (Yes or No)
1-RFV-062- 0662-S RELIEF VALVE	CROSBY	N56903-00-0006	N/A	N/A	71	REPLACE D	Υ
1-RFV-062- 0662-S RELIEF VALVE	CROSBY	N56903-00-0010	N/A	N/A	71	REPLACE MENT	Υ
7. Description of W	/ork REMOVE/RE	PLACED COMPLETE	SAFETY		//	LRT DEN	
8. Tests Conducted	•	neumatic Nominal sure psi	Operating Test Ter	Pressure D	7 06 F	LRT per -822409- # RI-68-90	-000
11 in., (2)	information in item	of lists, sketches, or d s 1 through 6 on this r of sheets is recorded	eport is inc	luded on each sl	ided ( heet,	(1) size is 81/2	in. x sheet

APP. V PG 20 OF 196

FORM NIS-2 (Back)
9. Remarks TRACKING NO. PA-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 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 Walli Maint Specialist Date 11/30 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 Texuessee and employed by HSB-CT
of HarT Ford 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.
Inspector's Signature Commissions 7N 2534  National Board, State, Province, and Endorsements
·
Date
•

APP. V PG 21 OF 196

209 NO.

"中国 医胃蛋白 地名美国美国西班牙 医神经病 医皮肤皮肤皮肤 医腹膜皮肤 医腹腔皮肤 医腹腔皮肤 医腹腔 医腹腔 医腹腔 医皮肤 医皮肤 医皮肤 医皮肤 医皮肤 医皮肤皮肤 医皮肤皮肤 医皮肤皮肤 医皮肤皮肤 医皮肤皮肤 医皮肤皮肤 医皮肤皮肤 医皮肤皮肤 医皮肤皮肤 医皮肤皮肤

## CHOSBY

	DRM NV-1 FOR SAPELY AND SAFET AS required by the Provisions of the	Y RELIEF VALLA S	u.C443
	PATA REPORT		
	Safety and Safety Rever	islves.	NP-164
Promote Brown Ve	The & Sage Company, 43 Ke	omrick Street Wrenth	am. Ma 02093
	BADE AND ACTION		
del no 3-35-10-68	Order No. N-302049	Contract Cate	3-30-73
	house Electriz Corp., Nic Systems, Pittsburgh, Pa		and the second of the second o
	Native and Address		
Tennessee Vall	ev Authority, Watts Bar &	uclear Power Station.	Unit 72
	Name and Address		
Come of Plan Beer Spi	ing City. Tennessee 3738	1	
9V-2-91	17 WBT South No 1556903-90	=0010 mann v.DS -C A-	6903 Rev. A
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Season Companies or Person	ter Resining Confidents		
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	j <del>er</del> etification	Including Typ ASTM-A351-72 Cr	
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	<b>N90452-35-</b> 0010	ASTM-A216-70 Gr ASME-5A316 Gr.	. WC8: American WC3 American
Macet			
Bir Stock and Forzings			
Reggert Rods			
Hotsle	<b>\$90137-42-60:</b> 5	ASNE-SA-79 ]	vpe 316
Dise Insert	190448-32-COL	ASME-SA 3	
Spring Bashers Bottom	3-614043-61-	ASME-SA193 Cr	
Adjusting Bolt	N88615-41-0157	ASTA-17-17-17-17-17-17-17-17-17-17-17-17-17-	5: <sup>3</sup> ?
	N88674-39-G037	ASTM-A195-73 Gr ASME-SA193 Gr	35 •
50 220			
REG. NO. 5411	4-1		1-0-1
			App. V PG 22 OF 1
630.4	2102 4		D- 27 OF 16
209 NO. 77	5693-A		16~一つでも続き

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			etoria: Specification	3//
	Ser al po or levatification		Grade	
	<b>10</b> 7-2600-004		638 C÷. 560	
r. Spring				
d. Bolting				
Bonnet Stud	The back that the same of the	ASTE	TEO Grange	
Bonnet Stud Vit	89293	ASTINA	N193 CP. 35	
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	And the second s			
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We contry that the statemen	ta made in this report are con-			
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W 2220 W 21	ba nulac		TO CHART	
Considerate of Authorization	No. <u>926</u>			J. Company
	CERTIFICATE OF	SHOP INSPECTION		
], the underni	rned, holding a valid commiss	Massed Notes Salamat Bo	re 2 Briser and	
Factory Mutu	d laspecture and the State of al Systeman. Norwood			
esase that to the	quipment described in this De r best of my knowledge and M	tipe the Usualattorer tax em	Salara Com P	
and the second of the second o	nce with the applicable Subsets certificate, nerther the Insp	RESIDENCE OF A CONTROL OF A CON		
messed or impl	ed concerning the equipment	described in this Data Report	Carberrace senter	
the inspector of	or his employer shall be lighted or of any bind arising from bill	mirected Subjects in special		
Date				40.5
100	Consider	16.7		0929
(napec)	r. Manufacturers Mutua	Na man Board, Nates		DATE
Boiler & Machiner				
	NEC NO. 54 18	-1	N 7/	
	ITEM NO: 54		Y APT	), V
	209 NO. 76	93-4	P- 23	OF 196

		NER'S REPORT FOR d by the Provisions of				TS	
1. Owner TENN	IESSEE VALLEY AU	JTHORITY	Date	lov. 3, 7	200	6	
1101 Ma	Name arket St., Chattanoog	ja , TN 37402	Sheet	of		-	
2. Plant Watts	Address Bar Nuclear Plant		Unit Ur	nit 1			
P. O. Bo	x 2000, Spring City,	TN, 37381		er 05-816597	•	,	
3. Work Performed by TVA Modifications				epair Organization Symbol Stai		No Job No etc I/A	i.
   Watts Bar Nuclea		lame	Authorizat	ion No N/A			
	Address		Expiration	Date N/A			
4. Identification of	system 003 FEE	DWATER					
(b) Applicable E		ASME III 19 71 Utilized for Repairs or red or Replaced and R	•	ents 198		N/A Cod	le Case
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
						`	
						,	
	· · · · · · · · · · · · · · · · · · ·		·				14
7. Description of V	Vork Remove pipir	ng, valves and add cap	s per DCN	51724	l		<u> </u>
	Other Press ental sheets in form	of lists, sketches, or d	Test Terr	np ny be used, pr	°F ovided		o ½ in. x
		s 1 through 6 on this re of sheets is recorded			sneet	, and (3) each	n sneet

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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-07-054 Applicable Manufacturers 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 <u>replacement</u> conforms to the
repair or replacement rules of the ASME Code, Section XI.
K / /A
Type Code Symbol Stamp //A
Certificate of Authorization No. N/A
Signed Certificate of Authorization No. N/A  Signed Control of Superior Owner's Designee. Title  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 <u>Tennessee</u> and employed by <u>HSB-CT</u>
of 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. Earnief, Commissions TN2534  Inspector's Signature National Board, State, Province, and Endorsements
Date
App. V

		NER'S REPORT FOR I by the Provisions of t	***********			rs	
1. Owner TENN	IESSEE VALLEY AL	JTHORITY	Date	11/9/06			
1101 Ma	Name rket St., Chattanoog	ја , TN 37402	Sheet	of			
2. Plant Watts	Address Bar Nuclear Plant		Unit Ur	nit 1			
P. O. Bo:	Name x 2000, Spring City,	, TN, 37381	Work Ord	ler : 05-816597	-003		
3. Work Performed	Address d by TVA Modificat	tions	Type Code	Repair Organization I e Symbol Stam	P.O. N p N	lo Job No etc /A	
Watts Bar Nuclea		Name	Authorizat	tion No N/A			
	Address		Expiration	Date N/A			
4. Identification of	system 003 FEE	DWATER	•				
(b) Applicable E	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		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	
1-03A-583	N/A	N/A	N/A	N/A		DELETED	
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 W	/ork Remove pipir	ng, valves and support	ts and add o	caps per DCN 5	51724	1	
8. Tests Conducted	8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure (See WO 56-816597-008) Other Pressure psi Test Temp °F 97-19-6						
11 in., (2)							

APP. V PG 26 OF 196

		NER'S REPORT FOR I by the Provisions of				īS	
1. Owner TENN	IESSEE VALLEY A	Date	11/9/06	2			
1101 Ma	Name rket St., Chattanoo	ga, TN 37402	Sheet	of			
Address 2. Plant Watts Bar Nuclear Plant			Unit U	 nit 1			
Name P. O. Box 2000, Spring City, TN, 37381			WORK OF	RDER: 05-816	597-0	003	
3. Work Performe	Address d by TVA MODIFIC	CATIONS	Type Code	Repair Organization Symbol Stam	P.O. No p N//	o Job No etc.	
WATTS BAR NUC	CLEAR PLANT	Name	Authorizat	ion No N/A		-	
	Address		Expiration	Date N/A			
4. Identification of	system 003 FEEI	DWATER					
' ' ' '	Construction Code $\bar{X}$	ASME III 19 71 Utilized for Repairs of	Edition, S - or Replacer			/A Cod	de Case
, , , , ,		red or Replaced and	•	<u></u>			
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	NA	DELETED	NO
1-DRV-3-525	NA 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
,							
			·		-		
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APP, V PG 27 0= 196

### 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 05-816597-0	
	CERTIFICATE OF COMPLIANCE
We certify that th	e statements made in the report are correct and this <u>replacement</u> conforms to the
rules of the ASM	repair or replacement IE Code, Section XI.
	,,
Type Code Symb	ool Stamp N/A
Certificate of Aut	horization No
Signed	bol susm Eng. Date 11/9/06 20 06
	Owner or Owner's Designee. Title
	CERTIFICATE OF INSERVICE INSPECTION
l	d, holding a valid commission issued by the National Board of Boiler and Pressure Vessel
Inspectors and th	e State or Province of Jeunessee and employed by HSB-CT
	HART FOR d CT. have inspected the components described in this
	uring the period $\frac{2/(9/\sigma 6)}{}$ to $\frac{11/(1.0/\sigma 6)}{}$ and state that to the best
-	and belief, the Owner has performed examinations and taken corrective measures described
	eport in accordance with the requirements of the ASME Code, Section XI.  Partificate neither the inspector nor his employer makes any warranty, expressed or implied,
	caminations and corrective measures described in this Owner's Report. Furthermore, neither
	his employer shall be liable in any manner for any personal injury or property damage or a
·	rising from or connected with this inspection.
Bruce	M. Emmes Commissions TN2534
Inspector	M. Eumissions TN2534 's Signature National Board, State, Province, and Endorsements
Date	2006

APP. V PG 28 OF 196

Dalibera and all income and and	SEODIA NICAZOWI	VEDIC DEDODE FOR	DEDA(DC		AE NIT	O STATE OF THE STATE OF	er en
		NER'S REPORT FOR I by the Provisions of				<b>S</b>	
1. Owner TENN	ESSEE VALLEY AL	THORITY	Date /	1/9/2000	2		
Name 1101 Market St., Chattanooga , TN 37402			Sheet	/ of 3			
Address  2. Plant Watts Bar Nuclear Plant			Unit U	nit 1			
P. O. Box	Name ( 2000, Spring City,	TN, 37381	Work Ord	ler 05-816597-0	000		
3. Work Performed	Address I by TVA Modificat	ions		Repair Organization le Symbol Stam			<b>C</b> .
Watts Bar Nuclea		lame	Authoriza	tion No N/A			
*****	Address		Expiration	Date N/A			
4. Identification of system 003 FEEDWATER							
5. (a) Applicable C	onstruction Code	ASME III 19 71	Edition,	S73 Addend	da, N	I/A Cod	de Case
(b) Applicable E	dition of Section XI	Utilized for Repairs or	Replacem	ents 1989			
6. Identification of	Components Repair	ed or Replaced and R	eplacemer	nt Components			
							ASME Code
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification		Repaired, Replaced, or Replacement	Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	NA	Replacement	
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 W	ork Remove pipin	g, valves and supports	s and add	caps per DCN 5	1724	•	
3. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure (See WO.50-816597-008) Other Pressure psi Test Temp °F							
11 in., (2)	information in items	of lists, sketches, or di s 1 through 6 on this re of sheets is recorded:	port is incl	uded on each s			

APP. V PG 29 OF 196

		NER'S REPORT FOI d by the Provisions of				TS	
1. Owner TEN	NESSEE VALLEY A	UTHORITY	Date	11/9/2006			
1101 Ma	Name arket St., Chattanoo	ga, TN 37402	Sheet	2 of 3			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Bo	Name ox 2000, Spring City	, TN, 37381		RDER 05-8165			
3. Work Performe	Address ed by TVA MODIFIC	CATIONS	Type Cod	Repair Organization e Symbol Stam	P.O. N p N/.	o Job No etc. A	
WATTS BAR NU	CLEAR PLANT	Name	Authoriza	tion No N/A			
	Address		Expiration	Date N/A			
4. Identification of	f system 003 FEEI	DWATER			_		
1 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Construction Code		Edition, S		· <u>-</u>	/A Co	de Case
		Utilized for Repairs	•				
6. Identification of	Components Repai	red or Replaced and	Replaceme	ent Component	s	· · · · · · · · · · · · · · · · · · ·	T ASME
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or
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

APP. V PG 30 OF 196 NIS-2 FORM SHEET 2 OF 2 07006

FORM NIS-2 (Back)	
9. Remarks CODE CASE: N-416-3 Tracking No. 22-07-056 Applicable Manufacturer's Data Reports to be Attached	
WO 05-816597-000	
OFFICIOATE OF COMPLIANCE	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the repair or replacement	
rules of the ASME Code, Section XI.	
7 0 1 0 1 10 1 1/4	
Type Code Symbol Stamp  N/A	
Certificate of Authorization No.	
Signed Machael Coust. EVGL. Date 11/9 20 0	6
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 <u>Texnessee</u> and employed by <u>HSB-CT</u> of <u>HARTFORD CT.</u> have inspected the components described in this	
Owner's Report during the period $\frac{7/20/06}{}$ to $\frac{11/10/06}{}$ and state that to the be	et of
my knowledge and belief, the Owner has performed examinations and taken corrective measures described	
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, neith	ner
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	
Transferred a signature realization and state, reconsider and Endorsements	
Date	

APP. V PG 31 OF 196

		NER'S REPORT FOR d by the Provisions of				īS	
1. Owner TENN	NESSEE VALLEY A	UTHORITY	Date	11-8-06	<b></b>		
1101 Ma	Name arket St., Chattanoog	ga , TN 37402		/ of 3			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Bo	Name ox 2000, Spring City,	, TN, 37381	Work Ord	ler 05-816597 <b>-</b> 0	001		
3. Work Performe	Address d by TVA Modificat	tions		Repair Organization e Symbol Stam			
Watts Bar Nuclea	ır Plant	Name	Authoriza	tion No N/A			
	Address		Expiration	Date N/A			
4. Identification of	system 003 FEE	DWATER		<u> </u>			
1	_	ASME III 19 71			ia, N	V/A Cod	de Case
(b) Applicable E	dition of Section XI	Utilized for Repairs or	r Replacem	nents 1989			
6. Identification of	Components Repai	ired or Replaced and F	Replaceme	nt Components			
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	1 '	ASME Code Stamped (Yes or No)
1-PIPE-003-B	N/A	N/A	N/A	N/A	·	Replaced	No
1-03A-540	N/A	N/A	N/A	N/A		DELETED	
1-03A-543	N/A	N/A	N/A	N/A		DELETED	
1-03A-544	N/A	N/A	N/A	N/A		DELETED	
1-03A-546	N/A	N/A	N/A	N/A		DELETED	
1-03A-547							
	N/A	N/A	N/A	N/A		DELETED	
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		DELETED	NO
7. Description of W	/ork Remove pipin	ng, valves and support	is and add	caps per DCN 5	51724 		
8. Tests Conducted	8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure (See WO 56-816597-008)  Other Pressure psi Test Temp °F						
11 in., (2)	information in items	of lists, sketches, or d s 1 through 6 on this re of sheets is recorded	eport is inc	luded on each s			

APP. V PG 320F 196

		NER'S REPORT FOI d by the Provisions of				TS.	
1. Owner TENN	IESSEE VALLEY A	UTHORITY	Date	11-8-06	>		
1101 Ma	Name arket St., Chattanoo	ga, TN 37402	Sheet	2 of 3			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	 nit 1			
P. O. Bo	Name x 2000, Spring City	, TN, 37381	WORK O	RDER :05-816	597-00	01	
3. Work Performe	d by TVA MODIFIC	CATIONS		Repair Organization e Symbol Stam			
WATTS BAR NUC	CLEAR PLANT	Name	Authorizat	tion No N/A			<del></del>
-	Address		Expiration	Date N/A			
4. Identification of	system 003 FEEI	DWATER		<del></del>			
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 Repai	red or Replaced and	Replaceme	ent Component	s T	γ	1 40145
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
		,					
					:		
					<u> </u>		
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### 3 3 NIS-2 FORM SHEET 2 OF 2 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 <u>replacement</u> conforms to the
repair or replacement rules of the ASME Code, Section XI.
Type Code Symbol Stamp
Certificate of Authorization No
Certificate of Authorization No. N/A  Signed Shullowis, 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 <u>Temessec</u> and employed by <u>HSB-CT</u>
of <u>HarTford cT</u> have inspected the components described in this  Owner's Report during the period <u>7/20/06</u> to <u>11/8/56</u> 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
Inspector's Signature Ivational Board, State, Province, and Endorsements
Date
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App. V

		**************************	NER'S REPORT FOR I by the Provisions of				TS	
	1. Owner TENN	IESSEE VALLEY A	UTHORITY	Date	11/9/2006			
	1101 Ma	Name arket St., Chattanoog	ga , TN 37402	Sheet	1 of 3			
	2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
	P. O. Bo	Name ox 2000, Spring City,	, TN, 37381	Work Ord	ier : 05-816597	-002		
·	3. Work Performe	Address ed by TVA Modifica	tions	Type Cod	Repair Organization e Symbol Stam	P.O. N p N	lo., Job No., etc /A	
	Watts Bar Nuclea	ar Plant	Name	Authoriza	tion No N/A			
		Address		Expiration	Date N/A			
	4. Identification of	system 003 FEE	DWATER					
	5. (a) Applicable Construction Code ASME III 19 71 Edition, S73 Addenda, N/A Code Case							
			Utilized for Repairs of	•				
	6. Identification of	Components Repai	red or Replaced and F	Replaceme	nt Components	<del></del>	1	ASME
	Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	1 '	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
uno_ 11/9/06	1-03A-569	N/A	N/A	N/A	N/A	NΔ	DELETED	<del>N</del> e
11/4/06	1-FCV-3-187	N/A	N/A	N/A	N/A	NA	DELETED	NO
•	7. Description of V	Vork Remove pipir	ng, valves and support	s and add	caps per DCN 5	51724	ļ	
	8. Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure (See WO 56-816597-008) 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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		NER'S REPORT FOI d by the Provisions of				TS.	
1. Owner TENN	IESSEE VALLEY A	UTHORITY	Date	1/9/2006			
1101 Ma	ga, TN 37402	Sheet	2 of 3		-		
2. Plant Watts	Address Bar Nuclear Plant		Unit Ur	 nit 1			
P. O. Bo	Name ox 2000, Spring City	, TN, 37381	WORK OF	RDER: 05-816	597-0	002	
3. Work Performe	Address d by TVA MODIFIC	CATIONS		Repair Organization Symbol Stam			
WATTS BAR NUC	CLEAR PLANT	Name	Authorizat	ion No N/A			
	Address		Expiration	Date N/A			
4. Identification of	system 003 FEEI	OWATER	-				
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	NA	DELETED	NO
					,		
			,				
-							

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FORM NIS-2 (Back)
9. Remarks CODE CASE: N-416-3 Tracking No. RR-07-058 Applicable Manufacturer's Data Hepons to be Attached
WO 05-816597-002
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the repair or replacement
rules of the ASME Code, Section XI.
Type Code Symbol Stamp
Certificate of Authorization No. N/A  Signed
Signed Mk Codd, Const. Engl. 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 <u>Tennessee</u> and employed by <u>HSB-cT</u>
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. Earningh Commissions TN 2534 Inspector's Signature National Board, State, Province, and Endorsements
Date
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APP V
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and the second s		NER'S REPORT FOR d by the Provisions of				TS:	
1. Owner TEN	INESSEE VALLEY AU	JTHORITY	Date	11/4/0	16		
1101 N	Name Narket St., Chattanoog	ja , TN 37402	Sheet	1 of 2			:
2. Plant Wat	Address tts Bar Nuclear Plant		Unit Ur	nit 1			
P. O. E	P. O. Box 2000, Spring City, TN, 37381 Work Order 05-816597-006						
3. Work Perform	Address ned by TVA Modificat	ions		epair Organizatio e Symbol Star			
Watts Bar Nucle		Name	Authorizat	ion No N/A			
	Address		Expiration	Date N/A			
4. Identification of	of system 003 FEE	DWATER	·	·			
(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 Compone	nt 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 pipir	ng, valves and add cap	os per DCN	51724			
8. Tests Conduc	•	neumatic Nominal sure psi	Operating Test Ten	Pressure (S	See W °F	05 10.50-816597 97-20-66	-009)
11 in., (	(2) information in items	of lists, sketches, or d s 1 through 6 on this re of sheets is recorded	eport is incl	uded on each			

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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-07-059 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 <u>replacement</u> conforms to the repair or replacement
rules of the ASME Code, Section XI.
Type Code Symbol Stamp
Certificate of Authorization No. N/A
Signed Start Town ISI PROGRAMS ENGR. Date Nov. 4 2006 Owner of 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 <u>Tennessee</u> and employed by <u>HSB-CT</u>
of Hartford CT. have inspected the components described in this
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.
Sum M. Earnigh   Commissions   TN 253 4
Date

APP. V PG 39 of 196

	2000年1月2日 1月1日 1月1日 1月1日 1月1日 1日 1	NER'S REPORT FOR d by the Provisions of t	5年,11年2月4日 1月20日 1月1日 1月1日 1月1日 1月1日 1月1日 1月1日 1月1日 1月	A second of the tent of the second second	200	TS	
1. Owner TENN	ESSEE VALLEY AL	JTHORITY	Date	11/10/0	6		
1101 Ma	Name rket St., Chattanoog	a , TN 37402	Sheet	of			
2. Plant Watts	Address Bar Nuclear Plant	_	Unit U	Init 1			
P. O. Box	Name x 2000, Spring City,	TN, 37381	Work Ord	ler 05-816597	-007		
3. Work Performed	Address d by TVA Modificat	ions		Repair Organization le Symbol Sta		No Job No etc NA	
Watts Bar Nuclea		lame	Authoriza	tion No N/A	_		
	Address		Expiration	Date N/A		······································	
4. Identification of	system 003 FEE	DWATER	·				
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
				,			
<u>.</u>							
		<u> </u>					
7. Description of W		ng, valves and add cap			L		
NOTE: Suppleme	ental sheets in form	neumatic Nominal sure psi of lists, sketches, or described as 1 through 6 on this re-	rawings m	ay be used, pr	ovided	d (1) size is 8!	∕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.							

APP. V PG-40 OF 196

#### NIS-2 FORM SHEET 2 OF 2

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 <u>replacement</u> conforms to the
repair or replacement
rules of the ASME Code, Section XI.
Type Code Symbol Stamp
Certificate of Authorization No.
Signed ACC BOP 55m in 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 <u>Jewessee</u> and employed by <u>HSB-CT</u>
of 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.
of any kind ansing from or connected with this inspection.
Ban M. En il commission 10/2534
Brue M. Earningh   Commissions   TN 2 53 4       Inspector's Signature   National Board, State, Province, and Endorsements     Date   11/10   20 66
Date 1//10 20 06
· · · · · · · · · · · · · · · · · · ·
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PG-41 OF 196

		NER'S REPORT FOR I by the Provisions of t				rs .	
1. Owner TENN	ESSEE VALLEY AL	JTHORITY	Date	11/8/00	Ġ		
1101 Mai	Name rket St., Chattanoog	a , TN 37402	Sheet	1 of 2	-		
2. Plant Watts	Address Bar Nuclear Plant		Unit Ur	nit 1			:
P. O. Box	Name 2000, Spring City,	TN, 37381	Work Orde	er 05-816597-	022		
3. Work Performed	Address I by TVA Modificat	ions	Repair Organization P.O. No., Job No., etc. Type Code Symbol Stamp N/A				
Watts Bar Nuclear	Plant	lame	Authorization No N/A				
	Address		Expiration	Date N/A			
4. Identification of	system 003 FEE	DWATER					
5. (a) Applicable C	onstruction Code	ASME III 19 71	Edition, S	73 Adder	nda,	N/A Cod	e Case
(b) Applicable E	dition of Section XI	Utilized for Repairs or	Replaceme	nts 198	9	· · · · · · · · · · · · · · · · · · ·	
6. Identification of 0	Components Repair	ed or Replaced and R	eplacemen	t Components	3		
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 W	/ork Rework supp	ort 03B-1AFW-R221 p	er DCN 51	724			
8. Tests Conducted	. •		Operating   Test Tem		°F.		
11 in., (2)	information in items	of lists, sketches, or d s 1 through 6 on this re of sheets is recorded	port is incli	ided on each			

APP. V PG 42 0F 196

#### NIS-2 FORM SHEET 2 OF 2

FORM NIS-2 (Back)
9. Remarks Tracking No. RR - 07 - 06   Applicable Manufacturers 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 <u>replacement</u> conforms to the
repair or replacement rules of the ASME Code, Section XI.
Type Code Symbol Stamp N/A
Certificate of Authorization No. NA
Certificate of Authorization No. N/A  Signed
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 HATFord CT: have inspected the components described in this Owner's Report during the period $\frac{7/28/06}{}$ to $\frac{11/8/06}{}$ 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. Emiss Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements
Bruce M. Earningh   Commissions   Th 2534     Inspector's Signature   National Board, State, Province, and Endorsements     Date   11/8   20_06

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	Carlo Car	NER'S REPORT FOR d by the Provisions of I	the thirty . The saves of the bushes	to the state of the state of the	2	TS	
1. Owner TENN	ESSEE VALLEY AU	JTHORITY	Date /	11/8/2006	· >		
1101 Ma	Name rket St., Chattanoog	a , TN 37402	Sheet	1 of 2			
2. Plant Watts	Address Bar Nuclear Plant		Unit Ur	nit 1			
P. O. Box	Name x 2000, Spring City,	TN, 37381	Work Ord	er 05-816597	-005		
3. Work Performed	Address d by TVA Modificat	ions		epair Organizatio e Symbol Star		No Job No etc N/A	
Watts Bar Nuclea		lame	Authorizat	ion No N/A			
	Address		Expiration	Date N/A			
4. Identification of	system 003 FEE	DWATER					
(b) Applicable E		Utilized for Repairs or	•	ents 198	9	N/A Cod	e Case
		ed or Replaced and R  Manufacturer Serial No.	eplacemen  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	н/д	и/д	N/A		DELETED	NO
7. Description of V  8. Tests Conducte	<u></u>	ng, valves and add car			See W	05 VO. <b>50</b> -816597	7-009)
NOTE: Supplem	Other Press ental sheets in form information in items	of lists, sketches, or described the state of the state of sheets is recorded	Test Ten Irawings ma eport is incl	np ay be used, pr uded on each	°F ovide	912 7-20-06 d (1) size is 81	⁄₂ in. x

APP. XV PG 440F196

#### NIS-2 FORM SHEET 2 OF 2

	FORM NIS-2 (Back)
9. Remarks	CODE CASE: N-416-3 Tracking No. 22 -07 -062 Applicable Manufacturer's Data Reports to be Attached
WO 05-816597	
	<del></del>
	CERTIFICATE OF COMPLIANCE
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
	the statements made in the report are correct and this <u>replacement</u> conforms to the repair or replacement
rules of the AS	ME Code, Section XI.
Type Code Sym	nbol Stamp
Certificate of Au	uthorization No.
Signed M	Codd, CONST. ENGR. Date 11/8 20 06
oigned <u>v o</u> j	Owner or Owner's Designee. Title
	CERTIFICATE OF INSERVICE INSPECTION
I, the undersign	ed, 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 <u>Ha</u>	have inspected the components described in this
	during the period $\frac{7/20/6L}{}$ to $\frac{11/10/6}{}$ and state that to the best of
_	and belief, the Owner has performed examinations and taken corrective measures described in
	port in accordance with the requirements of the ASME Code, Section XI.
_	certificate neither the inspector nor his employer makes any warranty, expressed or implied, examinations and corrective measures described in this Owner's Report. Furthermore, neither
i	or his employer shall be liable in any manner for any personal injury or property damage or a loss
•	ng from or connected with this inspection.
Bruce m	7 Earning Commissions 7 × 2534 Or's Signature National Board, State, Province, and Endorsements
Date	20 <u>06</u>

APP. V PG 45 OF 196

1. Owner TENN	ESSEE VALLEY A	UTHORITY	Date	08-01-2006			
1101 Ma	Name rket St., Chattanoo	ga, TN 37402	Sheet	of			
2. Plant <b>Watts</b>	Address Bar Nuclear Plant		Unit	Unit 1			
F. O. Bo	Name x 2000, Spring City	v. TN 37381	W/O	06-817678-000			
	Address d by MECHANICAL		Type C	Repair Organization ode Symbol Stam			
	·	lame		zation No N/A			
	Address			***************************************			
4. Identification of	system <b>063- S.I.</b>	S	Expirat	ion Date N/A			
	<u>-</u>						
		SECTION III 19 71			la, —–	N/A Cod	de Case
(b) Applicable E	dition of Section XI	Utilized for Repairs of	r Replac	ements 1989			•
6. Identification of	Components Repai	red or Replaced and I	Replacer	ment Components			
		, i	h1=6:			Repaired,	ASME Code Stamped
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Nationa Board N	ł .	Year Built	Replaced, or Replacemen t	(Yes or No)
1-063B-T058- 44	TVA	N/A		SIF-B-T058- 44_N/A-	N/A	repaired	N
1-063B-T058-	TV.A	N/A		N/A8-16-0	N/A	Replace ment	N
1-068 B 7058	TVA	N/A		N/A	N/A	Replace ment	N
1-003B-T0586	TVA	N/A		N/A	N/A	Replace ment	N
1/063B-1058- 44A	TVA	N/A		N/A	N/A	Replace ment	N
	2						
					<del>                                     </del>		
			<u> </u>		<u> </u>		
7. Description of V	A <b>YT7</b>	D 44 AND IF NEEDE	D REPL	ACE WELDS 02,	04, 43,	& 44A	
	ga	38-T058-					
8. Tests Conducted	•	neumatic Nomina surepsi		ing Pressure Temp	°F		

APP. V PG 46 0F 196

FORM NIS-2 (Back)
9. Remarks TRACKING NO. RR: 07-07 CODE CASE N-416-13  Applicable Manufacturer's Data Reports to be Attached
Applicable Wallulacturer's Data Reports to be Attached
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> 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 Coordinator Date 8/4 20 06  Owner or Owner's Designee. Title
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 HarT Ford 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.
Brue M. Esmish Commissions TN 2534
Inspector's Signature National Board, State, Province, and Endorsements
Bruce M. Earnigh Commissions TN 2534 Inspector's Signature National Board, State, Province, and Endorsements  Date8/1620_66

1. Owner TEN	NESSEE VALLEY A	UTHORITY	Date	12-12-06			
	Name larket St., Chattanoo		Sheet of				<del></del>
	Address	ga, 114 37 402	_		· · · · · · · · · · · · · · · · · · ·		
	s Bar Nuclear Plant			Init 1			····
P. O. B	ox 2000, Spring City Address	, TN 37381		-817773-001 Repair Organization F	P.O. No	Job No. etc.	····
3. Work Perform	ed by Bechtel Const	ruction Company Name		e Symbol Stamp			-
P. O. B	ox 549, Soddy-Daisy		Authoriza	tion No N/A			
	Address		Expiration	Date N/A		. <u></u>	
4. Identification o	f system HOT/CO	LD BLOWDOWN PIP	ING				
5. (a) Applicable	Construction Code	ASME SECT. III 19 71	Edition S	S73 Addenda	a, N/A	4	
(b) Applicable	Edition of Section XI	Utilized for Repairs o	r Replacem	nents 1989			
6. Identification o	f Components Repai	red or Replaced and I	Replaceme	nt Components			
Name of Componer	nt Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe d (Yes or No)
WBN-1-MISC-01	5 N/A	N/A	N/A	N/A	N/A	Replacement	NO
	ę						
. Description of	Work REMOVAL AI	ND RESINTALLATION	N OF HOT/	COLD BLOWDO	WN F	PIPING	
I <b>OTE</b> : Supplen	nental sheets in form	neumatic  Nominal psi psi of lists, sketches, or o	drawings m	ay be used, prov	ided (	1) size is 8½	in. x
		s 1 through 6 on this r of sheets is recorded			ieet, a	nd (3) each :	sheet
		•				Ann V	,

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FORMiNIS-2:(Back): #F	
9. Remarks Tracking Number: 12R-07-072 WO Number: 05-817773-001  Applicable Manufacturers 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 <u>replacement</u> conforms to the	
repair or replacement rules of the ASME Code, Section XI.	
Tales of the Asime Code, Section XI.	
Type Code Symbol Stamp N/A	
Certificate of Authorization No. N/A	
Signed Kannel Date 12-5 20 C	16
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 MSB-CT	
of have inspected the components described in this	
Owner's Report during the period 8/1/06 to 12/12/06 and state that to the bes	
my knowledge and belief, the Owner has performed examinations and taken corrective measures described this Owner's Report in accordance with the requirements of the ASME Code, Section XI.	ın
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, neith	er
the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a	
of any kind arising from or connected with this inspection.	•
Bruce M. Eurigh   Commissions   TN 2534     Inspector's Signature   National Board, State, Province, and Endorsements	
Date 12/12 20 06	

1. Owner TENNE	SSEE VALLEY A	UTHORITY	Date	12-12-06			
1101 Mari	Name ket St., Chattanoo	ga, TN 37402	Sheet	of			
. Plant Watts B	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Box	Name 2000, Spring City,	TN 37381	WO #: 05	-817773-002		,	
3. Work Performed	Address by Bechtel Const	ruction Company		Repair Organization P e Symbol Stamp			
P. O. Box	549, Soddy-Daisy	Name , TN 37384	Authorizat	tion No N/A			
	Address		Expiration	Date N/A			
. Identification of s	ystem HOT/COI	D BLOWDOWN PIP	•				
		ASME SECT. III 19 71 Utilized for Repairs of			n, <u>N/</u>	4	
3. Identification of C	omponents Repail	red or Replaced and f	Replaceme	nt Components			
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamp ed (Yes or No)
WBN-1-MISC-015	N/A	N/A	N/A	N/A	N/A	Replacement	NO
			1				
			i				_
Description of Wo	rk REMOVALAN	ID RESINTALLATION	OF HOT/	COLD BLOWDO	WN P	IPING	L
				· · · · · · · · · · · · · · · · · · ·			
Tests Conducted:	Hydrostatic  Prost	neumatic   Nominal psi	Operating Test Ten	Pressure P	-TR] (W	64.902 0405-82	6759
OTE: Supplemen	tal sheets in form	of lists, sketches, or c 1 through 6 on this re	trawings m	ay be used, provi	ded (1	l) size is 8½ i	n. x

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9. Remarks	Tracking Number: RR-07-073 WO Number: 05-817773-002
CODE CASE	
·	<del></del>
	CERTIFICATE OF COMPLIANCE
We certify tha	t the statements made in the report are correct and this replacement conforms to the
rules of the A	repair or replacement SME Code, Section XI.
Type Code Sy	mbol Stamp N/A
Certificate of A	Authorization No. N/A
Signed X	enverte L Field Engineer Date 12-5 20 06
	Owner or Owner's Designee. Title
	CERTIFICATE OF INSERVICE INSPECTION
I, the undersig	ned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel
Inspectors and	the State or Province of Texasses and employed by HSB-CT
of	Hartford ct. have inspected the components described in this
Owner's Repor	rt during the period $8/4/36$ to $12/12/36$ and state that to the best of
my knowledge	and belief, the Owner has performed examinations and taken corrective measures described in
	eport in accordance with the requirements of the ASME Code, Section XI.
	certificate neither the inspector nor his employer makes any warranty, expressed or implied,
_	examinations and corrective measures described in this Owner's Report. Furthermore, neither
	or his employer shall be liable in any manner for any personal injury or property damage or a loss
л ану кио анѕ	sing from or connected with this inspection.
B	20 5 · 1 2 · 1 · 20 · 1 · 20 · 1
Inspec	tor's Signature Commissions FN 3 53 4  National Board, State, Province, and Endorsements  12 20 06
	112 20 06
late 17	

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	からないになっているからなって、これがなっていた。これは神経にかったいとなっていただけです。	NER'S REPORT FOR	Carried Court to his Property and the Court of the Court	<ul><li>(4) おおところと、当年では、新元を大力に、「大利金」の公式のできません。</li></ul>	2.2.3 (2.0.0.20)		
1. Owner TENNI	ESSEE VALLEY A	UTHORITY	Date	December	//.	2006	
1101 Mar	Name ket St., Chattanoo	ga, TN 37402	Sheet	of	<del></del>		1
2. Plant Watts	Address Watts Bar Nuclear Plant			 Init 1			
P O Box	Name 2000, Spring City,	TN 37381	 WO #∙ 05	-817773-003			<del></del>
3. Work Performed	Address		F	Repair Organization F le Symbol Stamp		Job No etc.	
	<u> </u>	Name					
P. O. Box	549, Soddy-Daisy Address	, IN 37384		tion No N/A	· • · •		
4. Identification of s	vetem HOT/COI	LD BLOWDOWN PIP	Expiration	Date N/A	<del></del>		
5. (a) Applicable Co	onstruction Code	ASME SECT. III 19 71	Edition S		a, N/A	1	
6. Identification of C	Components Repai	red or Replaced and I	Replaceme	nt Components			
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamp ed (Yes or No)
				}			
WBN-1-MISC-015	N/A	N/A	N/A	N/A	N/A	Replacement	NO
						<u> </u>	
		ì					
					_		
				<u> </u>			<u></u>
7. Description of Wo	ork REMOVAL AN	ND RESINTALLATION	OF HOT/	COLD BLOWDO	WN P	PIPING	
8. Tests Conducted:	Hydrostatic □ P Other □ Press	neumatic    Nominal ure psi	Operating Test Ter	Pressure 7-7	RI-1	- 902	
11 in., (2) i	nformation in items	of lists, sketches, or os 1 through 6 on this roof sheets is recorded	eport is inc	luded on each sh			

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FORM NIS-2 (Back)
9. Remarks Tracking Number: RR-07-074 WO Number: 05-817773-003
CODE CASE N-416-3
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the repair or replacement
rules of the ASME Code, Section XI.
Type Code Symbol Stamp N/A
Certificate of Authorization No. 10/A
Signed Roger A. Landis Field Engineer Date December 1, 20 Of 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 Tennessec and employed by HSB-CT
of have inspected the components described in this
Owner's Report during the period $\frac{8/4/06}{}$ to $\frac{12/12/06}{}$ and state that to the best
my knowledge and belief, the Owner has performed examinations and taken corrective measures described i
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 lo
of any kind arising from or connected with this inspection.
Inspector's Signature Commissions TN2534  National Board, State, Province, and Endorsements
Date

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1. Owner TENNE	SSEE VALLEY AL	JTHORITY	Date	12-12-0	3 G		was was was
1101 Mark	Name cet St., Chattanoog	ga, TN 37402	Sheet	of			
2. Plant Watts E	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Box	Name 2000, Spring City,	TN 37381	WO #: 05	-817773-004			
3. Work Performed	Address by Bechtel Consti	ruction Company	Type Cod	Repair Organizat e Symbol Sta	ion P.O. No Imp N/A		
P. O. Box	549, Soddy-Daisy,	Name TN 37384	Authorizal	ion No N/A			
3 (1)	Address		Expiration	Date N/A			
4. Identification of sy	ystem HOT/COL	D BLOWDOWN PIP	•				
5. (a) Applicable Co	nstruction Code	ASME SECT. III 19 71	Edition S	S73 Adde	enda, N/A	4	
(b) Applicable Ed	ition of Section XI	Utilized for Repairs o	r Replacem	ents 19	89		
3. Identification of C	omponents Repair	red or Replaced and	Replaceme	nt Componer	nts		
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identifica	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe d (Yes or No)
WBN-1-MISC-015	N/A	N/A	N/A	N/A	N/A	Replacement	NO
	T.				Ţ.		
. Description of Wo	rk REMOVAL AN	ID RESINTALLATION	OF HOT/	COLD BLOW	DOWN F	PIPING SG	#4
. Tests Conducted:	Hydrostatic Prother Pressi	neumatic □ Nominal ure psi	Operating Test Ten	Pressure 🖅	°F (4	7RI-1-	902
IOTE: Supplemen	tal sheets in form	of lists, sketches, or o	drawings m eport is inc	ay be used, p	provided (	1) size is 8½	in. x

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FORM NIS-2 (Back)
9. Remarks Tracking Number: RR-67-675 WO Number: 05-817773-004
CODE CASE N-416-3
·
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> 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 Field Engineer Date 12-5 20 66 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-eT
of have inspected the components described in this
Owner's Report during the period 8/4/56 to 12/12/56 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
Bruce M. Earnings Commissions TN 2534 Inspector's Signature National Board, State, Province, and Endorsements  Date 12/12 20 06

APP. V PGSS OF 196

### DUPLICATE ORIGINAL

		NER'S REPORT FOR a bytthe Provisions of					
1. Owner TENN	ESSEE VALLEY AU	JTHORITY	Date	12-8-0	6		
Name 1101 Market St., Chattanooga, TN 37402				of			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Box	Name P. O. Box 2000, Spring City, TN 37381						
Address				lepair Organization P e Symbol Stamp	.O. No. N/A	. Job No., etc.	
P. O. Box	Authorizat	ion No N/A					
	Address		Expiration	Date N/A			
4. Identification of	system AUX FEE	DWATER 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							
6. Identification of	Components Repair	ed or Replaced and F	kepiaceme	nt Components		<u> </u>	ASME
			National		Year	Repaired, Replaced, or	Code Stamped (Yes or
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Board No.	Other Identification	Built	Replacement	No)
WBN-1-PIPE- 003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO T
		-					
W							
· · · · · · · · · · · · · · · · · · ·			<del></del>				
<del></del>			·				
			<del></del>				
7. Description of W		einstallation of Aux Fe				(	
	d: Hydrostatic □ P Other □ Press	neumatic D Nominal ure psi secondary side to an	Operating Test Ten	Pressure ov /	WOI	-3-903 <del>1</del> 05-820!	796-00
		•		-			( :-
11 in., (2)	information in items	of lists, sketches, or on the state of sheets is recorded.	eport is inc	luded on each sh			

App. V Pr56 of 196

FORM NIS-2 (Back)
9. Remarks Tracking Number: RR-07-076 WO Number: 05-819015-001  Applicable Manufacturers 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.
Tules of the Asivic Code, Section At.
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 <u>Tennessee</u> and employed by <u>MSB - CT</u>
of Hart Ford CT. have inspected the components described in this
Owner's Report during the period 8/8/0 4 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.
of any kind arising from or connected with this inspection.
Brus M Famial Commissions TN2534
Inspector's Signature Commissions TN2534  National Board, State, Province, and Endorsements
Date 12/8 20 06

APP, V PG 57 0F 1.96

1. Owner TEN	NESSEE VALLEY A	UTHORITY	Date	12/5/0	6		
1101 M	Name arket St., Chattanoo	ga, TN 37402	Sheet	of			
Plant Watt	Address s Bar Nuclear Plant		Unit U	lnit 1			
P. O. B	ox 2000, Spring City.	TN 37381	WO #: 05	-819015-002			
. Work Performe	Address ad by Bechtel Const	ruction Company	Type Cod	Repair Organization F e Symbol Stamp	2.0. No N/A		
P.O.Bo	ox 549, Soddy-Daisy	Name TN 37384	Authoriza	tion No N/A		,	
	Address		Expiration	Date N/A			
. Identification of	system AUX FEE	DWATER PIPING					
. (a) Applicable (	Construction Code	ASME SECT. III 19 71	Edition S	373 Addenda	a, N/A	A Co	de Case
(b) Applicable I	Edition of Section X	Utilized for Repairs of	r Replacen	nents 1989			
Identification of	Components Repair	ed or Replaced and I	Replaceme	nt Components			
			National		Year	Repaired, Replaced, or	ASME Code Stamped (Yes or
vame of Component	Name of Manufacturer	Manufacturer Serial No.	Board No.	Other Identification	Built	Replacement	No)
WBN-1-PIPE- 003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO
	1 !						
				1 .			
Description of M	(ork. Romoval & Ro					-2	
Description of V	/ork Removal & Re	installation of Aux Fe	edwater Pip	Ding STM. G	eu‡	12	
	RE-14	installation of Aux Fe	TING	PIPING		I-3-90	3

APP. V PG 58 OF 196

# DUPLICATE ORIGINAL

10.38	L. Park	all Winds	PIESVEIKS JEST TO THE STATE OF
9. Remarks	Tracking Number:	RR-07-07	WO Number: 05-819015-002
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 AS	SME Code, Section XI	<b>)</b> .	
Type Code Syr	mbol Stamp N/A		
		/A	
Signed K	Owner or Ov	vner's Designee, Title	Engineer Dale <u>December 5,</u> 2006
	CE	RTIFICATE OF IN	SERVICE INSPECTION
I, the undersign	ned, holding a valid co	mmission issued	by the National Board of Boiler and Pressure Vessel
Inspectors and	the State of Province	of Tennessee	and employed by HSB-CT
of	HATFord CT.	have	e inspected the components described in this
Owner's Repor	t 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 ex	xaminations and taken corrective measures described in
this Owner's Re	eport in accordance w	ith the requiremen	nts of the ASME Code, Section XI.
By signing this	certificate neither the	inspector nor his o	employer makes any warranty, expressed or implied,
concerning the	examinations and cor	rective measures	described in this Owner's Report. Furthermore, neither
the inspector no	or hi <b>s employ</b> er shall t	e liable in any ma	anner for any personal injury or property damage or a loss
of any kind aris	ing from or connected	with this inspection	on.
		,	
15ru	u M. Earnigh	Commissions _	TN 2534 National Board, State, Province, and Endorsements
			National Board, State, Province, and Endorsements
Date/3/	1/12 20 06	-	

APP. V. PG-59 OF 196

# DUPLICATE ORIGINAL

Owner TENI	NESSEE VALLEY A	UTHORITY	Date	12	16/06	,	·	
1101 M	Name arket St., Chattanoo	ga, TN 37402	Sheet	C	of ,			
Plant Watts	Address s Bar Nuclear Plant		Unit <b>U</b>	nit 1				
P. O. Bo	Name ox 2000, Spring City,	TN 37381	WO #: 05	81901	5-003		71	
	Address ed by Bechtel Consti		Type Code				. Job No., etc	
	ox 549, Soddy-Daisy	Name	Authorizat	ion No	N/A			
	Address		Expiration	Date	N/A			
Identification of	system AUX FEE	DWATER PIPING					*	
(a) Applicable (	Construction Code	ASME SECT. III 19 71	Edition S	<b>373</b>	Addenda	a, N/A	Co-	de Case
(b) Applicable (	Edition of Section XI	Utilized for Repairs of	Replacem	ents	1989			
dentification of	Components Repair	red or Replaced and f	Replaceme	nt Com	ponents			
ame of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Id	lentification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
VBN-1-PIPE- 003-B	N/A	N/A	N/A	,	N/A	N/A	Replacement	NO
•			ļ	} _				
	<del>                                     </del>							
				<b> </b>				
escription of V	Vork Removal & Re	einstallation of Aux Fe	edwater Pi	ping .	STM.	GEN	#3	
					٠ , ،	TNT	2-903	
	ed: Hydrostatic 🗆 P	neumatic D Nominal	Operating Test Ten	Pressu	re @ /-	wo	# 05-82	20596
Tests Conducte	Other IT Press	ille usi						
Tests Conducte	Other iii Press k of all welds at fill of	f secondary side to an	nd indicated	narrow	range le	vel of a	at least 307	o.

App. V P& 60 of 196

9. Remarks	Tracking Number:	RR-07-07	78 WO Number: 05-819015-003
CODE CASE		мррисвоте магиласти	ilers Data Reports to be Artached
			,
		CERTIFICATE	E OF COMPLIANCE
			e correct and this <u>replacement</u> conforms to the repair or replacement
rules of the AS	SME Code. Section X	<b>l</b> .	
Type Code Syn	nbol Stamp N/A	-	
Certificate of A	uthorization No. N	I/A	
Signed A	gera. Landis Owner or Oi	Field End wher's Deslance Tiffe	gineer Date <u>December 6,</u> 20 06
	CE	RTIFICATE OF I	INSERVICE INSPECTION
l, the undersign	ed, holding a valid co	ommission issued	d by the National Board of Boiler and Pressure Vessel
			and employed by H3B · CT
of <u>HA</u>	rtford ct.	hav	ve inspected the components described in this
Owner's Report	during the period	8/8/06	to 12/8/6 and state that to the best o
ny kn <mark>owledge</mark> a	and belief, the Owner	has performed e	examinations and taken corrective measures described in
his Owner's Re	port in accordance w	ith the requireme	ents of the ASME Code, Section XI.
By signing this o	ertificate neither the	inspector nor his	s employer makes any warranty, expressed or implied,
concerning the	examinations and cor	rective measures	s described in this Owner's Report. Furthermore, neither
•	· -	_	nanner for any personal injury or property damage or a loss
of any kind arisi	ng from or connected	with this inspect	tion.
Bruce	M. Earnigh	Commissions	TN 2534 National Board, State, Province, and Endorsements
Inspecto	or's Signature		National Board, State, Province, and Endorsements
Dete /2/	₹ 20 <u>06</u>		
· - ·			

App. V PG610F196

		NER'S REPORT FOR debythe Provisions of						
1. Owner TENN	ESSEE VALLEY AL	JTHORITY	Date	12-8-06				
1101 Mai	Name rket St., Chattanoog	ja, TN 37402	Sheet	of				
2. Plant Watts	Address Bar Nuclear Plant		Unit Ur	nit 1				
P. O. Box	Name x 2000, Spring City,	TN 37381	WO #: 05-	819015-004				
3. Work Performed	Address d by Bechtel Constr	ruction Company		tepair Organization P e Symbol Stamp		. Job No etc.		
		Name	Authorization No N/A					
	Address	***************************************	Expiration	Date N/A		·		
4. Identification of s	system AUX FEE	DWATER PIPING						
		ASME SECT. III 19 71 Utilized for Repairs or			i, N/A	Coc	de Case	
6. Identification of (	Components Repair	red or Replaced and F	Replacemer	nt Components				
Name of Company	Name of Manufacturer	Manufacturar Sprint No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)	
Name of Component	Name of Manufacturer	Manufacturer Serial No.	board ivo.	Other Identification	Dun	Replacement	<u>NO)</u>	
WBN-1-PIPE- 003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO	
					-			
	!							
			:					
							<u> </u>	
							i	
7. Description of W	ork Removal & Re	einstallation of Aux Fe	edwater Pir	ping STMC	€00:	#4		
* *	Ke-	INSTALL EXIST	7NG 17171	NG 1/180 11/291	156 TOT	-2-963		
	Other D Pressi	neumatic   Nominal ure psi	lest lem	np *F	CACIA	F 05-8 40,	596-000	
* Visual leak check	of all welds at fill of	secondary side to an	indicated n	arrow range of a	t least	30%.		
		of lists, sketches, or os 1 through 6 on this r						

APP. V PG 62 OF 196

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
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 <u>Texnessec</u> and employed by <u>HSB-CT</u>
of HarTford cf. have inspected the components described in this
Owner's Report during the period $8/8/36$ to $12/8/36$ 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.
or any kind ansing from or connected with this inspection.
Bonn M. En il
Some Will Earnigh   Commissions   TN 2534   National Board, State, Province, and Endorsements
Date 12/8 20 06
20.00

APP. V PG 63 OF 196

1. Owner TENN	TENNESSEE VALLEY AUTHORITY			12/1/06					
1101 Market St., Chattanooga, TN 37402			Sheet of						
2. Plant Watts	Address Plant Watts Bar Nuclear Plant			nit 1		_			
P. O. Box 2000, Spring City, TN 37381  Address  Work Performed by Bechtel Construction Company			WO #: 05	-818887-001					
				Repair Organization P e Symbol Stamp		. Job No., etc.			
P. O. Bo	ox 549, Soddy-Daisy	Name , TN 37384	Authorizat	tion No N/A					
	Address	·	Expiration	Date N/A					
. Identification of	system FEEDWA	TER PIPING							
(b) Applicable E	Edition of Section XI	Utilized for Repairs of	or Replacer	ments 1989	a, <u>N//</u>	A Coc	ie Case		
Name of Component	Name of Manufacturer	red or Replaced and  Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)		
IMPN 4 PIDE	N/A	<b>N/A</b>	N/A	N/A	NUA		NO		
WBN-1-PIPE- 003-B	N/A	N/A	IN/A	IV/A	N/A	Replacement	NO		
							·····		
	. 1			ATED DIDING		S-1 (5	·#/		
. Description of V	Vork REMOVAL &	REINSTALLATION C	JF FEEDW	ATEN FIFING	ro K	JTM, GE	J. • • • •		

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		FORM	NS-2 (Ba	ack).
9. Remarks	Tracking Number:	RR-07-C	280	WO Number: 05-818887-001
CODE CASE	N-416-3	Applicable Manufactures	3 Data (Cepo	·
				<u></u>
			· · · · · · · · · · · · · · · · · · ·	
		CERTIFICATE	OF COM	<b>IPLIANCE</b>
We certify that	t the statements made i	n the report are o	correct a	nd this replacement conforms to the
rules of the A	SME Code, Section XI.			repair or replacement
raios or the 7t	SINE GOOG, GOODIN 741.			
Type Code Sy	mbol Stamp N/A			
Certificate of A	Authorization No. N/A	4		
	Dage 1	La dia Si	CR Cia	an aringto Date / / 20 of
Signed	Owner or Own	er's Designee. Title	SIC PIC	20 OVGR, Date December 1, 20 06
				E INSPECTION
1 the undersia	ned bolding a valid con	nmission issued	hv the N	ational Board of Boiler and Pressure Vessel
_	-		•	nployed by HSB-CT
of				ted the components described in this
				and state that to the best of
				ons and taken corrective measures described in
this Owner's R	eport in accordance wit	h the requiremer	nts of the	e ASME Code, Section XI.
By signing this	certificate neither the in	spector nor his e	employe	r makes any warranty, expressed or implied,
concerning the	examinations and corr	ective measures	describe	ed in this Owner's Report. Furthermore, neither
the inspector n	ior his employer shall be	e liable in any ma	anner for	any personal injury or property damage or a loss
of any kind aris	sing from or connected v	with this inspection	on.	
				·
Br	me M. Ennigh	_ Commissions _	TNA	534 al Board, State, Province, and Endorsements
	_		Nationa	al Board, State, Province, and Endorsements
Date/ス	112 20 08	_		

1. Owner TENN	IESSEE VALLEY A	JTHORITY	Date 12/1/06					
1101 Ma	Name arket St., Chattanoog	ga, TN 37402	Sheet of					
. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1				
P. O. Bo	Name ox 2000, Spring City,	TN 37381	WO #: 05	-818887-002				
. Work Performe	Address d by Bechtel Constr	ruction Company		Repair Organization P e Symbol Stamp		. Job No., etc.		
P. O. Bo	x 549, Soddy-Daisy	lame , TN 37384	Authorizat	tion No N/A				
	Address		Expiration	Date N/A				
I. Identification of	system FEEDWA	TER PIPING					<del> </del>	
	Construction Code / Edition of Section XI				a, N/A	Cod	de Case	
3. Identification of	Components Repai	red or Replaced and	d Replaceme	ent Components	_		-	
			National		Year	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or	
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Board No.	Other Identification	Built		No)	
WBN-1-PIPE- 003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO	
							· · · · ·	
<del></del>								
Description of V	Vork REMOVAL & I	REINSTALLATION	OF FEEDW	ATER PIPING	STM	Gen #	2	
Tests Conducted	d: Hydrostatic □ P Other □ Pressi	neumatic □ Nomin ure p	al Operating si Test Te	Pressure 🗹 °ı	1-Τ) F (Ú	LI-3-99 WO#65-8	03 20596	
OTE: Suppleme	ental sheets in form information in item	of lists, sketches, o	r drawings m	nay be used, prov	/ided	(1) size is 8	½ in. x	

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		FORMINIS	6-2 (Back)
9. Remarks	Tracking Number:	RR-07-81 Applicable Manufacturer's D	WO Number: 05-818887-002
CODE CASE I	N-416-3		
	······································		
		CERTIFICATE OF	F COMPLIANCE
		n the report are cor	rrect and this <u>replacement</u> conforms to the repair or replacement
rules of the AS	SME Code, Section XI.		
Type Code Syr	mbol Stamp N/A		·
	.uthorization No. N/A	^	
			5-22-150 D / /
Signed	Owner or Own	andus, 551 per's Designee. Title	FIED ENGLDate December 1, 20 06
	CER	TIFICATE OF INSE	ERVICE INSPECTION
I. the undersiar	sed, holding a valid con	nmission issued by	the National Board of Boiler and Pressure Vessel
_	=	•	and employed by
			nspected the components described in this
			and state that to the best of
my knowledge	and belief, the Owner h	as performed exan	ninations and taken corrective measures described in
this Owner's Re	eport in accordance wit	h the requirements	of the ASME Code, Section XI.
			ployer makes any warranty, expressed or implied,
•			escribed in this Owner's Report. Furthermore, neither
•		•	ner for any personal injury or property damage or a loss
of any kind aris	ing from or connected t	with this inspection.	
0	200		
<u>Druce</u> Inspect	or's Signature	Commissions	Tw 2539 ational Board, State, Province, and Endorsements
	and digitature	IN.	ational Board, State, 1 Toyince, and Endorsements
Date	2 20.06	<del></del>	

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		NER'S REPORT FOR d by the Provisions'o				S	
1. Owner TENN	Owner TENNESSEE VALLEY AUTHORITY			12-	8.00	(2)	
1101 Ma	Name rket St., Chattanoog	ga, TN 37402	Sheet	( of 2			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05	-819015-005			
3. Work Performed	Address d by Bechtel Constr	ruction Company		Repair Organization F e Symbol Stamp		. Job No etc.	
	1	Name	• •	·			
Р. О. Во	x 549, Soddy-Daisy, Address	1N 3/384	,	ion No N/A			
4 14-48	ALLY EEE	DWATER RIDING OF	Expiration	Date N/A	<del> </del>		
(SUPPORTS) 5. (a) Applicable C	DESIGN CR construction Code	DWATER PIPING SUNTER ASMESECT. III 19 71 Utilized for Repairs of	Edition S	S73 Addenda	C 7	THED CO	no心 de Case
		red or Replaced and f					
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	12 -8	-06 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 B	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
7. Description of W	ork REMOVAL & I	REINSTALLATION O	F AUX FEE	EDWATER SUPF	PORT	S STAGE	۸#/
8. Tests Conducted		neumatic   Nominal psi					
11 in., (2)	information in items	of lists, sketches, or o s 1 through 6 on this r of sheets is recorded	eport is inc	luded on each sh			

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*FORM NIS-2 (Back))#
9. Remarks Tracking Number: RR-07-082 WO Number: 05-819015-005  Applicable Manufacturers Data Reports to be Attached
-CODE-CASE N-416-3- 97Z 8-17-06
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> 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 De Total Signed De Comparis Designee Title De Comparis Designee Title
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel
1, 11   1   1   1   1   1   1   1   1
Inspectors and the State or Province of Tennessee and employed by WSB-CT
Inspectors and the State or Province of Tennessee and employed by WSB-CT
Inspectors and the State or Province of Tennessee and employed by HSB-CT
Inspectors and the State or Province of Tennessee and employed by #58-CT  of #ArTFord CT. have inspected the components described in this
Inspectors and the State or Province of Tennessee and employed by #58-CT  of #ArTFord 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
Inspectors and the State or Province of Texassec and employed by #58-c.T  of #ANTFORD CT. have inspected the components described in this  Owner's Report during the period
Inspectors and the State or Province of Tennessee and employed by WSB-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.
Inspectors and the State or Province of Tennessee and employed by #58-c.T  of #Artford 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,
Inspectors and the State or Province of Tennessee and employed by WSB-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
Inspectors and the State or Province of Texassec and employed by
Inspectors and the State or Province of Texassec and employed by
Inspectors and the State or Province of Tennessee and employed by WSB-CT  of Wartford C. 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.  Brue M. Earness Commissions The 2534 National Board, State, Province, and Endorsements
Inspectors and the State or Province of Texassec and employed by
Inspectors and the State or Province of Tennessee and employed by WSB-CT  of Wartford C. 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.  Brue M. Earness Commissions The 2534 National Board, State, Province, and Endorsements

APP. V PG 69 OF 196

1. Owner TENN	NESSEE VALLEY AL	JTHORITY	Date DEC. 8, 2006					
1101 Ma	Name arket St., Chattanoog	ga, TN 37402	Sheet	( of Z				
2. Plant Watts	Address Bar Nuclear Plant		Unit U	 nit 1		,		
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05	-819015-006				
	Address d by Bechtel Constr			Repair Organization F e Symbol Stamp				
P. O. Bo	x 549, Soddy-Daisy,	Name TN 37384	Authorizat	ion No N/A				
	Address		Expiration	Date N/A				
		DWATER PIPING SU	JPPORTS	<del></del>				
(SUPPORTS	DESIGN CRIT	ERIA WB-DC-40 ASME SECT. III 19 71	9 -31.9 \$	AISC 7±	E N/	No Chi	de Case	
	_	Utilized for Repairs or					ac Case	
		·	·		_			
6. Identification of	•	red or Replaced and f	Replaceme	nt Components	· · · · ·	<u></u>	ASME	
	12 3-17-06					Repaired,	Code	
Name of Component	120	Manufactures Carial Na	National		Year	Replaced, or	Stamped (Yes or	
1-03A-408/3	N/A	Manufacturer Serial No. N/A	Board No.	Other Identification N/A	Built N/A	Replacement Replacement	No) NO	
1-03A-409	N/A	N/A	N/A	N/A N/A		Replacement	NO	
1-03A-41ØZ	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 CAL	DEN/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	MA	N/A	N/A	Replacement	NO	
17A427-6-1	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	
17A427-5-3	N/A	N/A	N/A	N/A	N/A	Replacement	NO	
I-03A-402	N/A	N/A	N/A	N/A	N/A	Replacement	_NO	
7 Description of M	/ork DEMOVAL 8.5	REINSTALLATION O			OPT	s STINGER	u# 2	
. Description of W	TENOVAL & I	TEINSTALLATION O	- AUX FEE	DWATER SUFF	OKI	3 VIMGEN	<del></del>	
R. Tests Conducted	d: Hydrostatic □ Pr	neumatic □ Nominal	Operating	Proceuro □				
. Tosts Contactor	-	re psi						

PG 70 0F 196

(1) The state of t	FORMINIS 2 (Back)
9. Remarks Tra	cking Number: RR-07-083 WO Number: 05-819015-006 Applicable Manufacturer's Data Reports to be Atlached
- <del>CODE CASE N-416</del>	3 27 8-17-06
	·
	CERTIFICATE OF COMPLIANCE
We certify that the s	tatements made in the report are correct and this replacement conforms to the
rules of the ASME (	repair or replacement
Tules of the Asivic C	Jode, Section At.
Type Code Symbol :	Stamp N/A
Certificate of Author	ization No N/A
	$-\varphi \cdot TST \cap F \cap Q \cap G$
Signed	Owner or Owner's Designee. Title
	CERTIFICATE OF INSERVICE INSPECTION
/ Al	
	iolding a valid commission issued by the National Board of Boiler and Pressure Vessel state or Province of Tennessee and employed by HSB-CT
	have inspected the components described in this
	ng the period $8/16/36$ to $12/8/36$ and state that to the best of
	elief, the Owner has performed examinations and taken corrective measures described in
,	in accordance with the requirements of the ASME Code, Section XI.
By signing this certific	cate neither the inspector nor his employer makes any warranty, expressed or implied,
concerning the exam	ninations 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 fro	om or connected with this inspection.
4	
Brucen	N. Earnigh Commissions TN 2534  National Board, State, Province, and Endorsements  20_86
Inspector's S	ignature V National Board, State, Province, and Endorsements
Date /2/8	20_86

	2012 Marie Caralle Contract Co	NER'S REPORT FOR d by the Provisions of	2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	\$2000 Berlin 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CONTRACTOR OF THE PARTY OF THE	State of the state	
1. Owner TENN	1. Owner TENNESSEE VALLEY AUTHORITY						,
1101 Ma	Name irket St., Chattanoog	ja, TN 37402	Sheet	of			
2. Plant Watts	Address Bar Nuclear Plant	<del>-</del>	Unit U	nit 1			
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05-	819015-007	٠		
	Address d by Bechtel Constr		R	tepair Organization F e Symbol Stamp		Job No etc.	
	<u> </u>	lame	,,	ion No N/A	14//		
1 . 0. 80.	Address						
4. Identification of	evetom ALIV EEE	DWATER PIPING SU	Expiration	Date N/A	<del></del>		
		WB-740-31.9 30 NB-740-31.9 31.9 31.9 31.9 31.9 31.9 31.9 31.9		7th EDIO	حری		
					a, N/A	Co.	de Case
(b) Applicable E	dition of Section XI	Utilized for Repairs or	Replacem	ents 1989			
6. Identification of	Components Repair	ed or Replaced and F	Replaceme	nt Components			
9128-17	06		National	,	Voor	Repaired, Replaced,	ASME Code Stamped
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	or Replacement	(Yes or No)
1-03A 458'4'7	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 OX	N/A	N/A	N/A	Replacement	NO
1-03A-452	N/A	NA OX	7 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	NA	N/A	Replacement	NO
1-03A-449	N/A	N/A	N/A	N/A	NA	Replacement	NO
1-03A-450	N/A	N/A	N/A	N/A	N/A	Replacement	NO
7. Description of W	ork REMOVAL & I	REINSTALLATION O	F AUX FEE	DWATER SUPP	PORT	s SomGe	v#3
	Other Press	neumatic  Nominal	Test Ten	np°F	idod (	1) pize io 01	(in v
11 in., (2)	information in items	of lists, sketches, or o 1 through 6 on this r of sheets is recorded	eport is incl	luded on each sh			

App. V PG720=196

FORM:NIS-2 (Back).
9. Remarks Tracking Number: RR-07-08 + WO Number: 05-819015-007 Applicable Manufacturer's Data Reports to be Attached
CODE CASE N-418-3 9728-17-06
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.
Tules of the Asime Code, Section XI.
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
Signed Chart. Lowis, ISI PROG. EVER 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 WSB-cT
of <u>HarTfor of cT</u> have inspected the components described in this
Owner's Report during the period 9/1/56 to 12/8/56 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

APP. V Pc 73 OF 196

1. Owner	TENNESSEE VALLEY AUTHORITY			Date _	12-1-0	6		
1	101 Mai	Name rket St., Chattanoo	oga, TN 37402	Sheet	of			
2. Plant	Watts	Address Bar Nuclear Plant		Unit <b>U</b>	nit 1			
	P. O. Bo	Name x 2000, Spring Cit	y, TN 37381	W/O 05-	323976-000			
3. Work P	erformed	Address d by MECHANICAL	MAINTENANCE		Repair Organization P le Symbol Stamp			
P.O. BOX	2000 SF	PRING CITY,TN 37	Name <b>381</b>	Authoriza	tion No N/A			
		Address		Expiration	Date N/A			
4. Identific	ation of	system 062 – CV	/cs	406				
5. (a) App	licable C	onstruction Code	74 SECTION III 19 74	Edition,	<b>ル74</b> 3 <b>72</b> Addend	а,	N/A Code	e C
(b) App	licable E	dition of Section XI	Utilized for Repairs or	Replacen	nents 1989	-	<del> </del>	
6. Identific	ation of	Components Repai	red or Replaced and R	Replaceme	nt Components			
Name of Co	mponent	Name of Manufacturer	Manufacturer Seriał No. <i>≽</i>	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	S
1-ISV-062 0547-S MANUAL		KEROTEST	Value S/W HX3-7	N/A	N/A	71	REPLACE D	
1-REV-062-9 RELIEF V		KEROTEST	5[N 8	N/A	N/A	<sub>રિ</sub> લ્લમ	REPLACE MENT	\
7. Descrip	tion of W	/ork REPLACED	VALVE DISC		Pressure D	,		<u> </u>

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		FORM	л NIS-2 (Back)			
9. Remarks	TRACKING NO.	RR-07-086	CODE CASE urer's Data Reports to be	N/A	WO	05-823976-000
		Applicable Manufacti	diei 3 Data Neports to be			
	, , , , , , , , , , , , , , , , , , , ,					
		CERTIFICA	TE OF COMPLIA	NCE		
We certify tha	t the statements ma	nde in the report a	ire correct and th			Γ conforms to the
rules of the A	SME Code, Section	XI.		repair	or replacem	ent
Type Code Sy					<u></u>	
Certificate of	Authorization No.	$\frac{N/A}{200}$		· · · · · · · · · · · · · · · · · · ·		1 :
Signed (	COCUL Owner or	Owner's Designee. The	pecialist	Date	11/30	20 <u>06</u>
	C	ERTIFICATE OF	INSERVICE INS	PECTIC	N	
I, the undersig	ned, holding a valic	l commission issu	ed by the Nation	al Board	of Boiler an	d Pressure Vessel
Inspectors and	the State or Provin					
of		T.				
•	_					d state that to the best re measures described
	s Report in accorda	•				
	•	•				pressed or implied,
concerning the	e examinations and	corrective measu	res described in	this Own	er's Report.	Furthermore, neither
the inspector r	nor his employer sh	all be liable in any	manner for any	personal	injury or pr	operty damage or a
loss of any kin	d arising from or co	nnected with this	inspection.			
R	000 6 4			· .		
Inspe	ctor's Signature	Commissi	ons 7 <i>N233</i> National Bo	ard, Sta	te, Province	, and Endorsements
Date/2_	// 20 <i>0</i>	6-				, and Endorsements
						1-2-1/

App. V PG 75 OF 196

		NER'S REPORT FOR I by the Provisions of				3	
1. Owner TENN	ESSEE VALLEY A	UTHORITY	Date	11/14/06			
1101 Mar	rket St., Chattanoo	oga, TN 37402	Sheet				
2. Plant Watts	Bar Nuclear Plant		Unit <u>U</u>	nit 1			
P. O. Bo	x 2000, Spring City	y, TN 37381		# 06-810069-000			······
3. Work Performed	d by MECHANICAL			Repair Organization P e Symbol Stamp			
WATTS BAR NUCLEA SPRING CITY, TN 3738	R PLANT,PO BOX 2000	Name	Authorizat	tion No N/A			
	Address		Expiration	Date <b>N/A</b>			
4. Identification of	system 062, Cher	mical Volume Contr	ol System	(CVCS)			
` ′ ' ' ' ' '		SECT III 19 71	-		a, <b>N/</b>	A Cod	de Case
(b) Applicable E	dition of Section XI	Utilized for Repairs of	r Replacer	ments 1989			
6. Identification of	Components Repair	red or Replaced and	Replaceme	ent Components			
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	, ,
WBN-1-PMP-62-104 -B Inboard Mechanical Seal Housing	Pacific Pump	N/A	N/A	HT# 59525-38-AA	74	Replaced	
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
٥-							
7. Description of W		oard mechanical Seal Pump, SN 48590, WBI			Centrif	liugal Chargi	ng
8. Tests Conducted	d: Hydrostatic P Other Pressu	neumatic Nomina ure psi	al Operatin Test Ter	g Pressure D			
11 in., (2)	) information in item	of lists, sketches, or is 1 through 6 on this of sheets is recorded	report is in	cluded on each s			

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200 e/24/06 FORM NIS-2 (Back)
9. Remarks Teaching # RR - 07 - 087 Code Case; H/W Walt 06-8/0069-000  Applicable Manufacturer's Data Reports to be Atlached
y spinotic mandatari s bala reports to be Attached
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <b>Ziplace rest</b> 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 Walli Maint Specialist Date 11/14 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 HarT ford c7. 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.
Brue M. Emish Commissions TN2534
Inspector's Signature Commissions TN2534  National Board, State, Province, and Endorsements
Date

App. V PG77 OF 196

JAJUS COAPC	P
Contract Na & /////	•
R.D. or S.T. No. CSAPET	
209 No. 82-1576	

FORM NPV-1 MANUFACTUR			
	ERS' DATA BEPOI	IT FOR SUCLEAR	PLAIPS ON VALVES
As Required	by the Provisions u	t the ASME Code Ru	1119
	<u>/</u>		
PACIFIC PUMPS		ť	and the second
HUNTINGTON PA	ARK, CAL. 90	0255	n40-532 ·
	dress of Manufacturers		
WESTINGHOUSE MUCLEAR ENTR			ACOUT TOOLEC
NUCLEAR ENERG	AT SISTEMIS	OHAYA,	16-CAL 169456
PITTSBURGH, i	PA.		
TENNESSEE VAI	LLEY AUTHORIT		
TENNICOCE	E - WATTS BAR	112	360724K
etiun of Pioni IENNESSEL	- WALLS BAR	1/2	Y 000/ 741
PUMP	S/N 48591 7 N	AT'L. BO. NO.	. 15
			T C. Turning the best and the second
CHAF	RGING SAFETY	INJECTION PU	Under the territory and the second se
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FC 48590 REV	7. 1 Property by	PACIFIC PUR	ing division
			207.07 (89.7) (Charles 12 0.07) (Mac Larent House)
ten Conditions 2840	عال <u></u>	* p	
			•
material, design, constitution, and workmans	thip complies with ASMS (	ude Arction III, tileta utik	arrana a sa
material, design, construction, and workmans  1971  Address Date	WINTER 71	Car Ho NONE	anni i sana a
			CONTRACTOR OF STREET,
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Mark Hu  Certings  Personal (PIMP S/N 48591)	Material Spec Na	Manufacture.	Home A to a construction of the construction o
Mark No.  Certings  Personal (PIMP S/N 48591)  MP CASE 55373-13AG		CAMERON INO	Home A to a construction of the construction o
1971 Addinds Date	Material Reco Na  SA182F307	CAMERON INO	Home A to a construction of the construction o
1971 Addings Date	Material Records  SA182F307	CAMERON INO	Home A to a construction of the construction o
1971  Mark No.  Servings  PAGE 1971  Mark No.  Servings  PAGE 1971  PAGE 1971	SAI82F30%	CAMERON INO	Monable Company of the Company of th
1971  Mark No.  Comments  (PIMP S/N 48591)  MP CASE 55373-13AG  SC. HEAD 63988-B1-AC  SC. NOZZLE 63893-10-A  UCTION NOZZLE 6468-27  CAL HSG. RAD. 63893-26	SAI82F30%	CAMERON INO	Monardo Companyo Comp
1971  Mark No.  Serving:  PAGE 1971  Address Date 1971  Mark No.  Serving:  PAGE 1971  P	SA182F305  SA182F305  LAA  LAA  LAB  21-AC	CAMERON INOI LORGENSIN	Home A to a construction of the construction o
1971  Mark No.  Serving:  PAGE 1971  MARK NO.  SERVING:  PAGE 1971  NP CASE 55373-13AG  SC. HEAD 63988-B1-AC  SC. NOZZLE 63893-10-A  POTION NOZZLE 6468-27  AL HSG. RAD. 63893-26  AL HSG. THRUST 63893-	SA182F30%  SA182F30%  LAA  LAA  LAA  LAA  LAA  LAA  LAA  L	CAMERON INO	Howards Advantage of the second of the secon

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APP. V

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#### FORM NPV-1 - (bank)

Mark No.	Motorial Spec, Na,	American	Rossetta
(e) Betting (PUNIP S/N 48591)			
CASE STUDS - 6069444  CASE NUTS - 93366	SA-193 B SA-194	PACIFIC PUMP COART IND	5
(d) Other Parts			
4960 HPE		And the second s	

CERTIFICATION OF BESIGN PACIFIC PUMPS DIVISION
PACIFIC PIMPS DIVISION
A. J. WETTLAUFER
W. O. SHEPHEND PACIFIC PULLS NIM. Janel Frieis
Q.A. MANAGER Constitute of Authorization No. 493 espece ALIGUST 7 ... 1975

and the second s
CERTIFICATE OF SHOP INTREGION
the understand, bolding a valid commission tasked by the National Board of Mallist and Pressure Vessel based for and or the State  of CALIFORNIA and employed by DIVISION OF IMPOSTRIAL SAFETY of  CALIFORNIA  Lett perpected the equipment described in this Date
Report on 19 19 19 and state that to the best of me 5 tagliging and belief, the Manufacturer has construct-
ed this aguipment in accordance with the applicable Subsections of ARMS Code, \$175,128 fft.
By signing this certificate, neither the Inspector nor his ampleyer makes one Particle Signstand or implied, concerning the equipment described in this Data Report, Furthermore, neither the Inspector our his employing 1821 fit liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
040
1/1.2- M. (Completion N. H. 3656 (Inspection) No. (Inspection) No. (Inspection) No. (Inspection)

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	FORM NIS-210W As Require	NER'S REPORT F d by the Provision	157 . S. W. W. W.	The second secon	The Court of the Court	AN CONTRACTOR SECURITION	Programme Control	S	1. j
1. Owner TENN	IESSEE VALLEY AL	JTHORITY		Date	12	/1/06			
-	Name arket St., Chattanoog		-	Sheet		of			
2. Plant Watts	Address Bar Nuclear Plant		-	Unit U	nit 1				
P O Bo	Name x 2000, Spring City,	TN 37381	-	WO #: 05-	81891	S-001			
	Address d by Bechtel Constr				lepair Or	ganization P		. Job No., etc.	
		Name	-		-	·			
P. O. Bo	x 549, Soddy-Daisy, Address	TN 37384	-	Authorizat					
I. Identification of	system MAIN ST	EAM PIPING		Expiration	Date	N/A			
(b) Applicable E	Construction Code  Edition of Section XI  Components Repair	Utilized for Repairs	s or	Replacem	ents	Addenda 1989 ponents		DDE CASE	
Name of Component	Name of Manufacturer	Manufacturer Serial N	No.	National Board No.	Other lo	dentification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
1-PIPE-001-B	N/A	N/A		N/A		V/A	N/A	Replaced	NO
			_						
			-	· :					
					<u> </u>				
. Description of W	Vork <u>Reinsta</u>	11 Piping	for	repla	cem e	nt Ste	am .	Generation (2)	Dr-#1,
. Tests Conducte	d: Hydrostatic Pi Other Press	neumatic 🗆 Nomi ure p	inal ( osi	Operating Test Ten	Pressu	re 🗹 °F	1-T	RI-X-9 10#66-8	01
OTE: Suppleme	ental sheets in form information in items red and the number	of lists, sketches, s 1 through 6 on th	or d	rawings m eport is inc	ay be u luded o	ised, prov on each sh	ided (	1) size is 8½	∕₂ in. x

APP. V PG80 OF 196

	18 (18 miles)   18 miles   18 mil	FORM	NIS-2 (Bac	k):		
9. Remarks _1	racking Number:	RR-07-0	091	WO Number:	05-818916-001	Paragraphic Control of the Control o
CODE CASE N-4	16-3	Applicable Malidiacturer	is Data Reports	to be Attached		
	MARK AND TO SERVICE AND THE SE					
			<del> </del>			
		CERTIFICATE	OF COMP	LIANCE	<b>\</b>	•
We certify that the	e statements made	in the report are o	correct and		ent conforms to the	
rules of the ASM	E Code, Section XI.			repair or re	piacement	
				,		
Type Code Symb	ol Stamp N/A					
Certificate of Auth	orization No. N/	Α				
Signed	Roses Q.	Landis S	R FIELD	ENGR Date	December 1,	20 66
J	Owner or Ow	ner's Designee. Title				
	CER	RTIFICATE OF IN	ISERVICE	INSPECTION		
I, the undersigned	, holding a valid cor	mmission issued l	by the Nati	onal Board of	Boiler and Pressure	Vessel
Inspectors and the	e State or Province	of Tennessee	_ and emp	loyed by	SB-CT	
of HA	strond ct.	have	e inspected	the compone	nts described in this	;
Owner's Report do	uring the period	8/24/06	_ to _ <i>12/1</i>	4/06	and state that t	to the best of
my knowledge and	belief, the Owner	has performed ex	kaminations	s and taken co	rrective measures o	described in
this Owner's Repo	rt in accordance wi	th the requiremen	nts of the A	SME Code, Se	ection XI.	· ·
By signing this cer	tificate neither the i	nspector nor his e	employer m	nakes any wari	anty, expressed or	implied,
concerning the ex	aminations and corr	ective measures	described	in this Owner's	Report. Furthermo	ore, neither
the inspector nor h	is employer shall b	e liable in any ma	anner for ar	ny personal inju	ury or property dam	age or a loss
of any kind arising	from or connected	with this inspection	on.			
2						
Bruce 2	7. Earnigh,	_ Commissions _	TN 25	34		
Inspector's	s Signature		National E	Board, State, P	rovince, and Endors	sements
Date	20 06					
•						

	RECTORISCO CONSTILO ASCIDIO E SALETONI DE SALETONI DE CONSTILO DE SALETONI DE SALETONI DE SALETONI DE SALETON	NER'S REPORT FOR d by the Provisions o	TORREST AND THE PARTY OF THE PA		* 1 4 X 1 5 7 7	S Replication	
1. Owner TENN	NESSEE VALLEY AL	JTHORITY	Date	12/1/06			
1101 Ma	Name arket St., Chattanoog	ga, TN 37402	Sheet 1	of			
. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Bo	Name ox 2000, Spring City,	TN 37381	WO #: 05	-818916-002	***	·	
. Work Performe	Address d by Bechtel Consti	ruction Company		Repair Organization F e Symbol Stamp			
P. O. Bo	x 549, Soddy-Daisy	Name TN 37384	Authorizat	ion No N/A		·	
	Address		Expiration	Date N/A			
I. Identification of	system MAIN ST	EAM PIPING	<b>-</b> //p// 4//00//				
i. (a) Applicable (	Construction Code	ASME SECT. III 19 71	Edition S	373 Addenda	a, N/A	4	
(b) Applicable E	Edition of Section XI	Utilized for Repairs or	Replacem	ents 1989		DE CASE I	N-416-3
. Identification of	Components Repair	red or Replaced and F	Replaceme	nt 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
. Description of W	Vork Repla	aced Steam	Gen	erator No	, 2	7	
. Tests Conducte	d: Hydrostatic 🗅 Pi	neumatic □ Nominal ure psi	Operating	Pressurë 🗘	$l \le U$	KI-/-	70/
11 in., (2)	information in items	of lists, sketches, or os 1 through 6 on this rof sheets is recorded	eport is inc	luded on each sh			

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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.	FORM NIS-2 (Back)
CERTIFICATE OF COMPLIANCE  We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp N/A  Certificate of Authorization No.  Signed Age Age Age Section XI.  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 Temessee and employed by HSB CT of Martifact CT, have inspected the components described in this Owner's Report during the period 8/24/26 to 12/14/66 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.  Sum Bernal Commissions The 2534 National Board, State, Province, and Endorsements	
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 Agge Aggregation State of 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 Temessee and employed by HSS-CT of HATTGS 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.  Brue M. Employer Signature  Commissions Thu 2.334  National Board, State, Province, and Endorsements	
We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.  Type Code Symbol Stamp N/A  Certificate of Authorization No. N/A  Signed Royer A. Follow 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 Temessee and employed by HSB-CT of HATT for 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.  Brue M. Employer Signature  Commissions TN2334  National Board, State, Province, and Endorsements	
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 Agge Aggregation State of 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 Temessee and employed by HSS-CT of HATTGS 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.  Brue M. Employer Signature  Commissions Thu 2.334  National Board, State, Province, and Endorsements	
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 Agge Aggregation State of 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 Temessee and employed by HSS-CT of HATTGS 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.  Brue M. Employer Signature  Commissions Thu 2.334  National Board, State, Province, and Endorsements	
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 Agge Aggregation State of 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 Temessee and employed by HSS-CT of HATTGS 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.  Brue M. Employer Signature  Commissions Thu 2.334  National Board, State, Province, and Endorsements	
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 Agge Aggregation State of 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 Temessee and employed by HSS-CT of HATTGS 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.  Brue M. Employer Signature  Commissions Thu 2.334  National Board, State, Province, and Endorsements	CERTIFICATE OF COMPLIANCE
repair or replacement  Tules of the ASME Code, Section XI.  Type Code Symbol Stamp N/A  Certificate of Authorization No. N/A  Signed Age A Fands SCR 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 Tenessee and employed by MS-CT  of MATTON 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.  Brus M. Employer  Commissions The 2534  National Board, State, Province, and Endorsements	
Type Code Symbol Stamp N/A  Certificate of Authorization No. N/A  Signed Roger A. Fandra, SGC FIELD EDGC 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 Texassee and employed by HSB-CT of Hart For CT, have inspected the components described in this  Owner's Report during the period S/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.  Brue M. Emily Commissions The 2534 National Board, State, Province, and Endorsements	
Signed Roger A. Farris, SGR FIELD EDGR Date December 1, 20 06  Owner or Owner's Designée. 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 HATTGOLD 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.  Brue M. Earnish Commissions The 2534 National Board, State, Province, and Endorsements	
Signed Roger A. Farria, SGR FIELD EDGR Date December 1, 20 06  Owner or Owner's Designée. 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 Texassee and employed by HSB-CT of HATTFORD 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.  Brue M. Earnigh Commissions The 2534 National Board, State, Province, and Endorsements	Type Code Symbol Stamp N/A
Signed Roger A. Fandra, SGR FIELD ENGR Date December 1, 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 Temessee and employed by HSB-CT of HATT for 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.  Brue M. Earney Commissions TN 2534 National Board, State, Province, and Endorsements	
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 Teuristice and employed by HSB-CT of HATTOT 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.  Brue M. Earneyh Commissions TN 2534  National Board, State, Province, and Endorsements	Certificate of Authorization No. N/A
Inspectors and the State or Province of Tennessee and employed by HSB-CT of HATTGAT 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.  Brue M. Lamy Commissions TN 2534  National Board, State, Province, and Endorsements	Signed Roger G. Fandes, SGR FIELD ENGR Date December 1, 20 06  Owner or Owner's Designee. Title
Inspectors and the State or Province of Texnessee 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.  Commissions TN2534  National Board, State, Province, and Endorsements	CERTIFICATE OF INSERVICE INSPECTION
Inspectors and the State or Province of Texnessee 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.  Commissions TN2534  National Board, State, Province, and Endorsements	I the undersigned, holding a valid commission issued by the National Board of Roiler and Pressure Vessel
of	·
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.  Brue M. Eamist Commissions TN 2534 National Board, State, Province, and Endorsements	Inspectors and the State or Province of Tennessee and employed by HSB-CT
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.  Brue M. Eamed Commissions TN 2.534  Inspector's Signature Commissions National Board, State, Province, and Endorsements	
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.  Brue M. Eamigh Commissions TN 2534  Inspector's Signature Commissions National Board, State, Province, and Endorsements	of HATTFORD CT. have inspected the components described in this
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.    Sum M. Eamigh   Commissions   TN 2.534     Inspector's Signature   National Board, State, Province, and Endorsements	of HATTFORD 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
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.	of HATTFORD 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
of any kind arising from or connected with this inspection.  Bruce M. Earnie Commissions TN 2534  Inspector's Signature National Board, State, Province, and Endorsements	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.
Bruce M. Earnigh Commissions TN 2534  Inspector's Signature National Board, State, Province, and Endorsements	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.
	of HATTFORD 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,
	of
	of
Date	of
·	of
	of

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. Owner TEN	NESSEE VALLEY A	UTHORITY	Date	12/1/06	2		
1101 M	Name larket St., Chattanoo	ga, TN 37402	Sheet	of			
. Plant Wat	Address Is Bar Nuclear Plant		Unit U	Init 1			
P. O. B	Name ox 2000, Spring City,	TN 37381	WO #: 05	-818916-003			
. Work Perform	Address ed by Bechtel Const	ruction Company	Type Cod	Repair Organization F e Symbol Stamp	P.O. No N/A		
P. O. B	ox 549, Soddy-Daisy	Name , TN 37384	Authorizat	tion No N/A		·	
	Address		Expiration	Date N/A		<del></del>	
. Identification o	f system MAIN ST	EAM PIPING					
. (a) Applicable	Construction Code	ASME SECT. III 19 71	Edition S	S73 Addenda	a, N/	4	
(b) Applicable	Edition of Section XI	Utilized for Repairs o	r Replacem	ents 1989	CC	DE CASE I	N-416-3
. Identification o	f Components Repai	red or Replaced and I	Replaceme	nt Components			
	Name of Manufacturer		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
<del></del>							
Description of V	Vork Reinstall	piping for rep	lacemen	it Steam G	che	rator#:	3.
Tests Conducte	ed: Hydrostatic 🗆 Pr	neumatiç 🗆 Nominal ure psi	Operating F	Pressure 🗹	T-1	RT-V-	901
11 in., (2	) information in items	of lists, sketches, or d 1 through 6 on this ro of sheets is recorded	eport is incl	uded on each sh	ded (1 eet, a	l) size is 8½ nd (3) each	ź in. x sheet

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FORM NIS-2 (Back)
9. Remarks Tracking Number: RR-07-093 WO Number: 05-818916-003
CODE CASE N-416-3
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> 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. Fardis SGR Francis Date December 1, 20 06
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
of
Owner's Report during the period $\frac{8/24/56}{}$ to $\frac{12/14/56}{}$ 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.
Inspector's Signature Commissions TN 2534  National Board, State, Province, and Endorsements
· · · · · · · · · · · · · · · · · · ·
Date 12/14 20 06

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1. Owner TENN	NESSEE VALLEY A	UTHORITY	Date	12/1/06			
1101 Ma	Name arket St., Chattanoo	ga, TN 37402	Sheet	of			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	Init 1			
P. O. Bo	Name ox 2000, Spring City,	TN 37381	WO #: 05	-818916-004			
	Address ed by Bechtel Consti		F	Repair Organization F e Symbol Stamp			
		Vame	• •	tion No N/A			
1 . O. Bo	Address		Expiration				
I. Identification of	system MAIN ST	EAM PIPING	Expiration	- NA			
(b) Applicable E	Edition of Section XI	ASME SECT. III 19 71 Utilized for Repairs of	r Replacem	nents 1989		DDE CASE I	V-416-3
	Name of Manufacturer		National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
			i				
1-PIPE-001-B	. N/A	N/A	N/A	N/A	N/A	Replaced	NO
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO
1-PIPE-001-B	N/A	N/A	N/A	N/A	N/A	Replaced	NO
		N/A  Diping For replanted Nominal psi					

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FORM NIS-2 (Back)	
9. Remarks Tracking Number: RR-07-09+ WO Number: 05-818916-004	1
CODE CASE N-416-3	· 
	<del></del>
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to repair or replacement	the
rules of the ASME Code, Section XI.	
Type Code Symbol Stamp N/A	
Certificate of Authorization No. N/A	
Signed Roger A. Landia SGR FIRD ENGR. Date December 1  Owner or Owner's Designee. Title	1, 20 06
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressi	ura Vascal
Inspectors and the State or Province of Temessee and employed by HSB-CT	310 403301
of have inspected the components described in t	this
Owner's Report during the period 8/24/06 to 12/14/06 and state this	at to the best of
my knowledge and belief, the Owner has performed examinations and taken corrective measure	
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. Further	rmore, neither
the inspector nor his employer shall be liable in any manner for any personal injury or property da	amage or a loss
of any kind arising from or connected with this inspection.	
Bruc M. Earnigh Commissions TN 2534 Inspector's Signature National Board, State, Province, and End  Date 12/14 20 06	Jorsements
Date 12/14 20 56	

APP. V PG 87 & 196

		NER'S REPORT FOR d by the Provisions of	and the second second	and the second s		S	
1. Owner TENN	ESSEE VALLEY A	UTHORITY	Date	6/12/06	)		
1101 <b>M</b> a	Name rket St., Chattanoo	ga, TN 37402	Sheet	1 of 2			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05-	818916-005			
	Address d by Bechtel Consti	- <del> </del>		Repair Organization F Symbol Stamp		. Job No., etc.	
	<u> </u>	Name	•	ion No N/A			
	Address	<u>,</u>	Expiration	Date N/A			<del> </del>
4. Identification of	system MAIN ST	EAM PIPING SUPPO	RTS			('	
Support 5. (a) Applicable C	Construction Code	RITERÍA WB-DC ASME SECT. III 19 71	-46-31. Edition S	十られ上SC 673 Addenda	_	Coo	<del>ہن</del> de Case
l .	_	Utilized for Repairs of			·		
6. Identification of	Components Repai	red or Replaced and	Replaceme	ent 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)
		10 crivit	4 -8-				<u></u>
1-01A-302	N/A No	REK NIA JAZ	12 <sub>N/A</sub>	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	D & RIVIA	N/A	N/A	N/A	Replacement	NO
1-01A-319	N/A A	TVITTA OTT	- ONLO	N/A	N/A	Replacement	NO
		, , J,					
7. Description of W	Vork REMOVAL &	REINSTALLATION C	F MAIN'S	TEAM PIPING S	UPPC	RTS	
NOTE: Suppleme	Other □ Press ental sheets in form	neumatic □ Nomina ure psi of lists, sketches, or	Test Te	mp° nay be used, pro			
		is 1 through 6 on this of sheets is recorded			sheet,	and (3) eac	h sheet

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			S-2 (Back)
9. Remarks	Tracking Number: R	R-07-09	WO Number: 05-818916-005
	N-410-3- 982 9-0		Data Reports to be Atlanticu
	712	<u> </u>	
	C	ERTIFICATE O	OF COMPLIANCE
We certify that	the statements made in	the report are co	orrect and this replacement conforms to the
•		Manager	repair or replacement
rules of the A	SME Code, Section XI.		
Type Code Sv	mbol Stamp N/A		
	Authorization No. N/A		
Signed	lut Zewa,	ISI PROG.	ENGR. Date Dec 8 20 06
	Owner or Owner	's Designee. Title	
	CERTI	FICATE OF INS	SERVICE INSPECTION
I, the undersign	ned, holding a valid comi	mission issued b	by the National Board of Boiler and Pressure Vessel
Inspectors and	the State or Province of	Tenvesser	and employed by <u>HSB-CT</u>
of	HARTFORD CT.	hav	re inspected the components described in this
			to 12/8/06 and state that to the best
of my knowled	ge and belief, the Owner	has performed e	examinations and taken corrective measures described
in this Owner's	Report in accordance wi	th the requireme	ents of the ASME Code, Section XI.
By signing this	certificate neither the ins	spector nor his e	mployer makes any warranty, expressed or implied,
concerning the	examinations and correct	ctive measures o	described in this Owner's Report. Furthermore, neither
the inspector n	or his employer shall be	liable in any mar	nner for any personal injury or property damage or a
loss of any kind	d arising from or connecte	ed with this insp	ection.
Bru	w. M Earnist	Commissions	TN 2524
Inspec	tor's Signature	_ COHHIHOSIOHS _	TN 2534  National Board, State, Province, and Endorsements
Date 12	18 20 06		
Date	20_0-	-	

App. V PG89 of 196

1. Owner TEN	NESSEE VALLEY		Date	12.7-06	•		
1101 M	Name larket St., Chattanoo	oga, TN 37402	Sheet	of			
2. Plant Watt	s Bar Nuclear Plant		Unit (	 Jnit 1			
P. O. B	Name ox 2000, Spring City	TN 37381	WØ #: 0!	5-816062-001			<del></del>
3. Work Performe	Address Bechtel Cons	truction Company	Type Cod	Repair Organization   de Symbol Stamp	P.O. No N/A		
P. O. Bo	ox 549, Soddy-Daisy	Name , TN 37384		ition No N/A			
	Address		Expiration	Date N/A			
. Identification of	system RCS			-			<del>-</del>
. (a) Applicable (	Construction Code	ASME SECT. III 19 71	Edition	S73 Addenda	a, N//	A Co	de Case
(b) Applicable E	Edition of Section XI	Utilized for Repairs of	r Replacen	nents 1989			
. Identification of	Components Repair	red or Replaced and f	Replaceme	ent Components			
			National		Year	Repaired, Replaced, or	ASME Code Stamped (Yes or
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Board No.	Other Identification	Built	Replacement	No)
	1	i	į			1	
(31" ID) /BN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO
	N/A	N/A	N/A	N/A	N/A	Replacement	NO
	N/A	N/A	N/A	N/A	N/A	Replacement	NO
	N/A	N/A	N/A	N/A	N/A	Replacement	NO
	N/A	N/A	N/A	N/A	N/A	Replacement	NO
	N/A	N/A	N/A	N/A	N/A	Replacement	NO
(31" ID) VBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO
	N/A	N/A	N/A	N/A	N/A	Replacement	NO
/BN-1-MISC-068							NO
/BN-1-MISC-068	Vork REMOVAL & CRO	REINSTALLATION O	F RCS PIP	ING STMGEN MAIN LOOP U	*/	D5	
VBN-1-MISC-068  Description of W	Vork REMOVAL & CROS		F RCS PIP T LEG Operating	ING STMGEN MAIN LOOP L Pressure D	*/ -7R	DS I-68-9	26/

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The surface of the su
9. Remarks Tracking Number: RR-07-099 WO Number: 05-816062-001
CODE CASE NAIL-3
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the repair or <u>replacement</u>
rules of the ASME Code, Section XI.
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
Signed Kon Pield Engineer Date 12-5 20 06
Owner or Owner's Designee. Title
CERTIFICATE OF INSERVICE INSPECTION
CERTIFICATE OF INSERVICE INSPECTION  I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texnessee and employed by HSB-CT  of HAYTFORD CT. have inspected the components described in this
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texnessee and employed by HSB-CT
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texnessee and employed by HSB-CT  of HAYTFORD CT. have inspected the components described in this
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 HSE-CT  of HATTFORD CT. have inspected the components described in this  Owner's Report during the period 9/6/06 to 12/8/56 and state that to the best of
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 HATTord CT. have inspected the components described in this  Owner's Report during the period 9/6/06 to 12/8/56 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,
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 Hart Ford 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.
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 12/8/56 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,
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
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texnessee 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.
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texnessee and employed by HSE-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.
Inspectors and the State or Province of Tennessee and employed by HSB-CT  of HATTFORD CT. have inspected the components described in this  Owner's Report during the period 9/6/06 to 12/8/66 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
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texnessee and employed by HSE-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.
Inspectors and the State or Province of Texessee 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 12/8/36 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.  Brue M. Eamyl Commissions To 234 National Board, State, Province, and Endorsements
Inspectors and the State or Province of Texessee 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 12/8/36 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.  Brue M. Eamyl Commissions To 234 National Board, State, Province, and Endorsements

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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

Pg. 1 of 4

1 Manufac	ctured and certified	by West	inghouse El	ectric Com	pany LLC, 4			roeville Pennsyl	vania 15146	
2. Manufac	dured for Ten	nessee Valley	Authority (T	VA), Watts I	Bar Nuclear		address of N Cerlif t 1, 1260 NUC		łgwy 68, Spring	City Tennessee 3738
							ess of Purchaser)			
3. Location	n of installation <sup>Ten</sup>	nessee Valley	Authority (T	VA), Watts I	Bar Nuclear			lear Plant Road, I	igwy 68, Spring	City Tennessee 3738
4. Type	Vertical	Ht. Exch. (Ste	am Generat	or) WE	B1-RSG-A	(nar	ne and address) N/A	10010E01, Rev.	3 85	2005
ч. турс	horiz, or vert.)	(tank, jacketed	i, heat ex.)	(Cert.	Holder's serial no	D.)	(CRN)	(drawing no.)	(Natil. Bd. no.	) (year built)
5. ASME C	ode, Section III, D	ivision 1:		1989		No Adden	nda	Class 1		N-20-3
	inclusive to be co		•	edition)	ate of lacked	(addenda da		(class)		(Code Case no.)
			•		-			_		54 ft . 575 ln
6. Shell:	SA-508 Class 3a	D(tensile st		See Page 3			age 3, Sect 6	See Page 3		54 ft 6.75 in  length (overall) (ft & in.)
7. Seams:	Seamless	N/A	• .	N/A	10		ouble butt w		Full	5
7. Seams:	(long.)	(HTr)		(RT)	(eff.		(girth)	(HT1)	(RT)	(no. of courses)
8. Heads:	SA-508 Cla	ass 3a		90 K	sl		N/	A		N/A
	(a) mat	1 spec no.)		(lensile s	trength)		(t) mat	1 spec no.]	(1	iensile 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)	Тор	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
removable 9. Jacket o	bolts used		(ma	N/A stl. spec. no., siz		N/A	re dimensions, des	Other fastenin		N/A ofibe or attach sketch)
0. Design	Pressure <sup>2</sup> 11	al max	. temp		Min. pressu		70*		or comb. test p	ressure 1481
ems 11 an	d 12 to be comple	ited for tube se	ctions.	( F)			(**)	$\sim$		(Iso)
1. Tubesh		A-508 Class 3a		.88 In. (S si	de) / 125.62	In. (P side)	) ;	22.00 in.		Welded
i. Gooda		nary, mat1 spec. no.)			ubject to press.)			ickness (in.)]	jattac	hment (welded, bolted)]
		N/A			N/A			<b>√</b> A		N/A
	(floati	ng, mat'l spec. no.)			[dia. (in.)]		(this	ckness (in.)]		(attachment)
2. Tubes:		3 UNS N06690	)		0.750 in.		0.043 lr		5128	U-Bend Tubes
		matī. spec. no.)			[(.ni) do]		nicturess (inches or		(no.)	(type (straight or U))
ems 13 to	16 inclusive to be	completed for		bers of jack		is, or chan		-		
3. Shell:	(mat1, spec. no.)		N/A site strength)	lana	N/A n. thickness (in.)	- Imin	N/A design thickness		V/A D (ft & in.))	N/A (length (overall) (ft & In.))
	N/A	(izii	N/A	•		•	Double but			
4. Seams:	[long. (welded. dbi., s	single)] [H	IT' (yes or no)]	N/A	<del>`</del> — —	N/A (eff. %)	(girth)	t weld Yes	(RT)	
5. Heads:	SA-508 Class		90 Ksi		N/A	(4)	N/A		<b>\/</b> A	N/A
J. 110205.	I(a) mat'l spec. no		sile strength)		b) ma(1 spec. no.	.]	(tensile strength		atī spec. no.]	(lensile strength)
			Crown	Knuckle	Elliptica	1	onical	Hemispherical	Flat	Side to Pressure
/21 To	p, bottom, ends	Thickness	Radius	Radius	Ratio		x Angle	Radius	Diameter	(convex or concave)
(b) Ch		N/A	N/A	N/A	N/A		V/A	N/A	N/A	N/A Conesivo
(c) Flo		6.19 in. N/A	N/A N/A	N/A N/A	N/A N/A		N/A	62.81 in. (ID) N/A	N/A N/A	Concave N/A
(0)110		14/4	IN/A	<del></del>	I/A		V/A			N/A N/A
rem ovable	, bolts used -				no., size, quantin	y)		Ot	her fastening	(describe or attach sketch)
6. Design p		2485 at	650°		ressure-test		70°	Pneu., (hydro)	, or comb. test pr	2447

(7/98

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<sup>&</sup>lt;sup>3</sup> If postweld heat treated, 2 List other internal or external pressure with coincident temperature when applicable.

<sup>\*</sup> 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.

#### DOOSAN TVA Watts Bar Unit=1 RSG Contract # 16346

or a loss of any kind arising from or connected with this inspection.

Date N/A Signed N/A

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

WB1-RSG-A Certificate Holder's Serial No. 17. Nozzles, inspection and safety valve openings: Purpose Reinforcement (iniet, outlet, drain, etc.) Dia. or Size Thickness (See pages 3 and 4 of this Data Report for complete table of nozzle, inspection and safety valve openings) 4 Support Pads 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** Bruce A. Beli Design specification certified by P.E. State Reg. no. James R. Schwali Design report certified by P.F. State Reg. no. 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-1149 November 24, 2007 N Certificate of Authorization No. Expires Date August 17, 2005 Name Westinghouse Electric Company LLC Signed Terry L. Casteel (N Certificate Holder) 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 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 ansing from or connected with this inspection. Date August 17, 2005 Signed James R. Myhan and M. Myhan Commissions NB 10822 N [Nat1, 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. \_\_ Signed \_ (N Certificate Holder) 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 and employed by \_ N/A of \_ have compared the statements in this Data Report with the described component and state that parts referred to as data items \_ ,not included in the certificate of shop N/A and that to the best of my knowledge and belief the Certificate Holder has inspection, have been inspected by me on \_\_\_\_ 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

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[Nat'l Bd. (ind endorsements) and state or prov. and no.]

05-0002

(Authorized Nuclear Inspector)

Commissions

#### DOOSAN VA 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

Pg. 3 of 4

1.	Manufac	ctured and cert									
			•		(na	me and address of N Cer	tificate Holder)				
2.	Manufac	clured for	Tennessee	Valley Authority (TVA)	, Watts Bar Nuclear Pla	nt, Unit 1, 1260 Nu	uclear Plant Road, Hg	wy 68, Spring Cit	y Tennessee 37381		
		-			(name a	nd address of Purchaser	)				
3.	Location	n of installation	Tennessee	Valley Authority (TVA)	, Watts Bar Nuclear Pla	nt, Unit 1, 1260 Nu	uclear Plant Road, Hg	wy 68, Spring City	y Tennessee 37381		
						(name and address)					
4.	Туре	Vertical	Ht. Exc	n. (Steam Generator)	WB1-RSG-A	N/A	10010E01, Rev. 3	85	2005		
		hortz, or vert.)	(Lank,	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	Nominat 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 Ksl	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 Ksl	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	Туре	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 (Oullet)	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. 1D	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	Tubesheel
Hot Leg Blowdown Nozzle	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Weld build-up	Tubesheet

#### Section 17, Table Notes:

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

	gnouse Electric Con	npany LLC N Certificate of	Authorization No.:	N-1149	Expires	: November 24, 2007
Authorized Representative	Terry L. Casteel	Sely Pla	38		Date	August 17, 2005
		30.19-7				
Authorized Nuclear Inspector	James R. Myhan	tamo M. M. Kron	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

APP. V PG94 FF 196

#### DOOSAN TVA Watts Bar Unit=1 RSG Intract # 16346

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

Pg. 4 of 4

			(name	and address of N C	ertificate Holder)						
2. Manul	actured 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)								
		ennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37									
3. Locali	on of installation	Tennessee Valley Authority (TVA	N), Watts Bar Nuclear Plant	Unit 1, 1260 N	luclear Plant Road, Hg	wy 68, Spring City	Tennessee 373				
3. Locati	on of installation	Tennessee Valley Authority (TVA	N), Watts Bar Nuclear Plant	Unit 1, 1260 N		wy 68, Spring City	Tennessee 373				
3. Locati	on of installation  Vertical	Tennessee Valley Authority (TVA  Ht. Exch. (Steam Generator)				wy 68, Spring City 85	7 Tennessee 373				

17. Nozzles, inspection and safety valve openings:

(Continuation - Closure hardware table)

Purpose (inlet, outlet, drain, etc.)	Qty.	Dia. or Size	Туре	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	NA	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: Westin	ighouse Electric Comp	any LLC N Certificate of Au	thorization No.:	N-1149	Expires:	November 24, 2007
Authorized Representative	Terry L. Casteel	Jeun Pla	sto		Date	August 17, 2005
Authorized Nuclear Inspector	James R. Myhan	Jump N. Molin	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005
	( )					

APP. V PG 950F A6

#### DOOSAN TVA Watts Bar Unit-1 RSG Contract # 16346

F-8.4-2 Rev. 0



#### **CODE SYMBOL STAMPING REVIEW LIST**

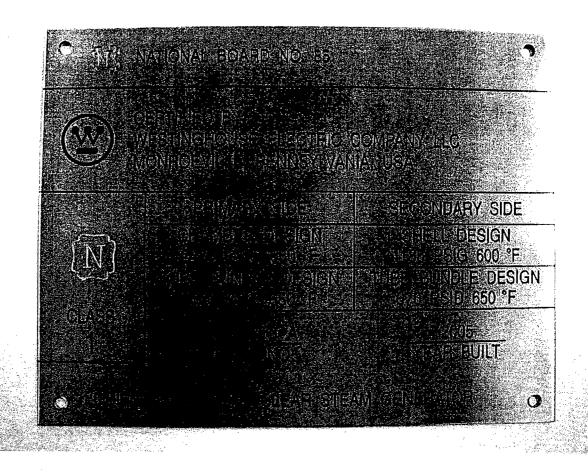
Cust	omer:	Tennessee Valley Authorit	Westinghouse PO N	o.: 45001039	901		
Item	R	eplacement Steam Generator	Mfr. Ser. No.: <u>N02</u> 6	018M01-01			
Supp	olier:	Doosan Heavy Ind. & Const. Co. Ltd.	Natl. Board No.: 8	5			
Code	e Secti	on: III - Div. 1 Class: 1	Edition: 1989	Addenda:	None		
					ok N/A		
1.	Desid	gn Specification		Ŭ 			
 2.		gn Report		<u>≥</u>			
<b>2</b> . 3.		lier Traveler:			я Ц		
0.	а.	All operations have been completed and	t accepted by Quality an	nd ANI. 🔯	a (1		
4.		ostatic, pneumatic or structural integrity to		u ANI. <u>P</u>	я П		
→.		Proper procedure available and in use;	<b>35</b> 1.	ĸ	a —		
	a.	,		<u>⊠</u>			
	b.	Pressure gage properly calibrated;		[ <u>S</u>			
	c.	Pressure, holding time;		<b>\S</b>	_		
_	d.	Fluid quality, temperature.		· 🗵			
5.		pletion of Data Report Form for fabrication		×			
6.	Code Symbol stamping by supplier for fabrication.						
7.	Comp	oletion of Data Report form by Westingho	use and ANI.		3 <b></b>		
8.	ANI a	authorization for Westinghouse to apply C	ode Symbol stamp.	×	3 🗆		
Comi	ments:						
		1					
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Terry Quali	L. Cas	steel ally frashu		August 1 Date	7, 2005		
<u> </u>	•,	1 2000		Date			
	s Myh		ey	August 1	7, 2005		
-uinc	onzea I	Nuclear Inspector		Date	4.0.0		

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

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05-0005

DOOSAN
TVA Watts Bar Unit-1 RSG
Contract # 16346



App. V PG 97 OF 196

## 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

Pg. 1 of 3

1. Manufactured and certified by	Doosan Heavy Industries & Const	truction Co.,Ltd. 555,Guygok- (name and address of NPT Certifi		, Kyung-Nam, Ko	orea.	
2 Manufactured for Westingh	ouse Electric Company LLC Ene			ville PA 15146	IISA	
z. Mandractured for	odse Electric Company ELC Elle	(name and address of purcha		me, 7 A 13140,	00/	
3. Location of installation Tenno	essee Valley Authority Watts Bar Nucle	ar Power Plant, Unit 1, 1260 Nu	idear Plant Road, Ho	awy 68. Spring City	v. TN 37381 USA.	
		(name and address)				
4. Type: 10010E01 Rev.	3 SA508 CL.3a	90 ksi	N/A		2005	
(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)		(year built)	
5.ASME Code,Section III,Divisio	n 1 · 1989	No Addenda	1		N-20-3	
0 101112 0000,00011011 111,D111010	(edition)	(addenda data)		dass)	(Code Case no )	
6.Fabricated in accordance with	Const. Spec. (Div. 2 only)	N/A Revision	N/A	Date	N/A	
		(no.)		•		
7.Remarks : 1. Item Nar	ne : Watts Bar Unit 1 Replaceme	nt Steam Generator "1A" s	et		·-··	
2. ( )*:1	DOOSAN No.					
B.Nom. thickness (in.) See Pag	ge 3 Min. design thickness (in.) Se	e Page 3 Dia. ID (ft & in.) Se	ee Page 3 Length	overall (ft & in.)	54 ft 6.75 in.	
				_		
9.When applicable, Certificate H	older' Data Reports are attached for e	each item of this report:				
Dad as Assurance	National	D-4A-		Nat	tional	
Part or Appurtenance Serial Number	Board No.		purtenance Number	Boa	Board No.	
	In Numerical Order	1 100		In Nume	rical Order	
(1) N02018M01-0	01 N/A(DN-1304)*	(26)		<del> </del>		
(3)		(28)				
(4)		(29)				
(5)		(30)				
(7)		(32)				
(8)		(33)				
(9)		(34)				
(10)		(35)		-		
(12)		(37)				
(13)		(38)		<u> </u>		
(14)		(39)		<del>-</del>		
(16)		(41)				
	(17)					
(18)	-	(43)		<del> </del>		
(20)		/46		-		
(21)		(46)				
(22)		(47)		<del> </del>		
(23)		(48)		-		
(25)		(50)				

\*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 % 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.

10.Design pressure 1185 (S side)/2485 (P side) psi. Temp. 600 / 650 F.

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

Hydro, test pressure 1481(S side)psi/3107(P side)psi at temp. \*F 70 \*F/ 70 \*F

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#### DOOSAN TVA Watts Bar Unit-1 RSG Contract # 16346

#### FORM N-2 (Back - Pg. 2 of 3)

	Certificate Holder's S	Serial Nos. N02018M	01-01 th	rough	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, Div	ision 1.			
NPT Certificate of Authorization No.	N-2767	Exp	oires	IANUARY, 8	. 2006
Date 8/12/of Name Doosan H	eavy Industries & Constructi (NPT Certificate Holder)	on Co. Ltd. Signed	(autho	orized representati	ve)
	CERTIFICATE OF SH	OP INSPECTION		<u>,, v. 188</u>	
I, the undersigned, holding a valid commiss	sion issued by the National Boar	d of Boiler and Pressure	Vessel Inspect	ors and the S	tate or Province
of OHIO and employed	by The Hartford Steam	Boiler Inspection and	Insurance Co		
of <u>CT.</u> hav	e inspected these items describ	ed in this Data Report o	8/12/0	25_ , and	state that to the
best of my knowledge and belief, the Certific	cate Holder has fabricated these	parts or appurtenances	in accordance	with the ASME	E Code, Section
III, Division 1. Each part listed has been aut	norized for stamping on the date	shown àbove.			
By signing this certificate, neither the inspe	ector nor his employer makes ar	ny warranty, expressed o	r implied, conce	eming the equ	ipment describe
in this Data Report. Furthermore, neither the	inspector nor his employer sha	Il be liable in any manne	r for any persor	nal injury or pr	operty damage
or a loss of any kind arising from or connect		•		• • • •	. , •
Date 8/12/05 Signed CR	<u>'</u>	Commissions <u>O A</u>	10 169		

tpp V Pc 99 of 196

# 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

Pg. 3 of <u>3</u>

1.	. Manufac	ctured and certified by _	Doosan Heavy Industries & Con	struction Co.,Ltd. 555,Guygo	ok-Dong, Chang-Won, Kyui	ng-Nam, Korea.			
		_		(name and address of NPT Co	ertificate Holder)				
2.	Manufac	tured for Westingho	use Electric Company LLC En	ergy Center Site 4350 No	rthern Pike Monroeville, f	PA 15146, USA			
			(name and address of purchaser)						
3.	Location	of installation Tennes	see Valley Authority Watts Bar Nuc	dear Power Plant, Unit 1, 1260	nuclear Plant Road, Hgwy 68	, Spring City, TN 37381 USA.			
				(name and addre	ss)				
4.	Type:	10010E01 Rev.3	SA508 CL.3a	90 ksi	N/A	2005			
		(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)	(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	Ф 168.50*	5'-2.41"
Upper Shell #2	SA508 CL3a	90 Ksi	3.92"	3.72	Ф 168.50*	13'-5.09"
Shell Cone	SA508 CL3a	90 Ksi	3.92"/ 3.90"/ 3.19"	3.72"/ 3.73"/ 3.11"	Ф 129.88"/Ф 168.50"	7'-8.09"
Lower Shell #1	SA508 CL3a	90 Ksi	4.13"/ 3.19"	4.06"/ 3.11"	Ф 129.88*	14'-1.58"
Lower Shell #2	SA508 CL3a	90 Ksi	3.19"	3.11"	Ф 129.88"	14'-1.58"

Purpose	Q't y	Dia.or Size	Туре	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 Nozzie	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
Coid Leg Blowdown Nozzie	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

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DOOSAN NO.	
CERTIFIED BY	THE SAME SAME DESCRIPTION OF THE SAME SAME SAME SAME SAME SAME SAME SAM
SERIAL NO.	
EQUIPMENT NAME	
The Ambrilan Company of the Company	Company Care Company
DESIGN PRESSURE	
HYDRO TEST PRESSURE	
APPLICABLE CODE	
WATTS BAR NUCLEAF	R POWER PLANT. UNIT 1
	Doosan Heavy Industries & Construction Co., Ltd.

. Owner TFN	NESSEE VALLEY AU	ITHORITY	Date	j2-	8-06			
	Name arket St., Chattanoog		Sheet		of			
2. Plant Watt	Address s Bar Nuclear Plant		Unit U	nit 1				
P. O. B	Name ox 2000, Spring City,	TN 37381	WO #: 05	-81606	2-002			
. Work Perform	Address ed by Bechtel Const	ruction Company	Type Cod			.O. No. N/A	. Job No., etc.	
P. O. B	ox 549, Soddy-Daisy,	Name , TN 37384	Authoriza	tion No	N/A			
	Address		Expiration	Date	N/A			
. Identification o	f system RCS		<del> </del>					
(b) Applicable	Edition of Section XI	ASME SECT. III 19 71 Utilized for Repairs o	r Replacen	nents	Addenda 1989	n, N/A —	Cod	de Case
. Identification o	T Components Repai	red or Replaced and I	Replaceme	ent Com	iponents		Γ	ASME
Name of Componer	t Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other I	dentification	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)
				<u>.</u>				
VBN-1-MISC-06	8 N/A	N/A	N/A		N/A	N/A	Replacement	NO
. Description of	Work REMOVAL &	REINSTALLATION C	OF RCS PI	PING				
. Tests Conduct	red: Hydrostatic □ F Other □ Press	Pneumatic □ Nomina sure psi	l Operating Test Te	Pressump	ure 🗹 (	-TR	I-68- co#06-8	901
IOTE: Suppler 11 in., (	mental sheets in form 2) information in item	of lists, sketches, or s 1 through 6 on this r of sheets is recorde	drawings r report is in	nay be cluded	used, prov on each sl	vided (	1) size is 8	/₂ in. x

App. V PG 102 OF 196

9. Remarks	Tracking Number:	PR-07-100	WO Number: 05-816062-002
		Applicable Manufacturers V	ns reports to be Artschool
CODEC	SEN416-3		
		······	
		CERTIFICATE OF	COMPLIANCE
100 100 100			
We certify tha	t the statements mad	ie in the report are cor	rect and this replacement conforms to the repair or replacement
rules of the A	SME Code, Section >	KI.	, .
Type Code Sy	mbol Stamp N/A		
Certificate of	Authorization No.	N/A	
Signed (	De Call	Field	Engineer Date 12-5 2006
Signed	Owner or	Owner's Designee. Title	Main en 20 - C
	CI	ERTIFICATE OF INSE	RVICE INSPECTION
t the content	mad huldless susid a	naminaian inguad by	the National Board of Boiler and Pressure Vessel
-	•		nd employed by <u>#SB-CT</u>
			spected the components described in this
			o 12/8/56 and state that to the best of
		•	
			ninations and taken corrective measures described in
	•		of the ASME Code, Section XI.
		•	ployer makes any warranty, expressed or implied,
_			scribed in this Owner's Report. Furthermore, neither
•	, ,	•	er for any personal injury or property damage or a loss
or any kind an:	sing from or connecte	ed with this inspection.	
0			
13rue	tor's Signature	Commissions	ational Board, State, Province, and Endorsements
•			Board, State, Province, and Endorsements
Date	18 2006	· ·	
Date			
Date			

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

Pg. 1 of 4

	Manulac	ctured and certified	. Бу	sungilouse E	iecore com	pany LLC, 4			peville Pennsylva	nia 15146	<u></u>
2. 1	Manufac	clured for Ten	nessee Valley	Authority (	ſVA), Watts		Plant, Un	address of N Certifica It 1, 1260 Nucle ress of Purchaser)		wy 68, Spring	City Tennessee 37381
3. 1	Location	n of installation <sup>Ten</sup>	nessee Valley	Authority (	IVA), Watts		Plant, Un	it 1, 1260 Nucle	ar Plant Road, Ho	wy 68, Spring	City Tennessee 37381
		14 - 441	W E . I . (0)				(na	me and address)			. 5005
4.	Type	Vertical	Ht. Exch. (St			31-RSG-B Holder's serial no		N/A (CRN)	(drawing no.)	86 (Nat1, 8d. no.)	2005 ) (year built)
		•		eu, near ex.)	1989	HOUSE S SCHOOL IN	∘, No Adde	• •		(14817, 00. 110.	N-20-3
5. /	ASME C	Code, Section III, D	ivision 1:		(edition)		(addenda		Class 1		(Code Case no.)
tem:	s 6 - 10	Inclusive to be co	ompleted for s			ts of jacket					10000 000000.
6.	Shell:	SA-508 Class 3	a 90 F	(si	See Page 3	, Sect 6	See P	age 3, Sect 6	See Page 3,	Sect 6	54 ft 6.75 in
•	<b></b>	(mat'i spec. no.)	D(tensile	strength)	nom, thickne	ss (in.))	(min. de	sign thickness (in.)	[dia. 80 (ft.	in.)) [	length (oversit) (it & in.)]
7. :	Seams:	Seamless	N/	Ά	N/A	10	0 1	Double butt wel	d Yes	Full	5
		(long.)	(нт	·1)	(RT)	(eff.	%)	(girth)	(HT1)	(RT)	(no. of courses)
8. 1	Heads:	SA-508 Cla	ass 3a		90 K	si		N/A			N/A
		(a) mat	"I spec no.]		(lensile s	lrength)		(b) ma(1 :	pec no.)	(1	iensile strength)
	ſ	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)	Тор	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
lf con	noveble	holtoured	<u> </u>		N/A			•	Other fastening		N/A
ıı ren	HOVADIE	, bolts used _		(n	natī. spec. no., siz	e, quantity)			_ Other lastering	(desc	ribe or attach sketch)
0	Jacket c	elocura:					N/A				
Item	-	d 12 to be comple	psi)	ections.	(°F) 9.88 In. (S si	Min. pressui		(°F)	Pneu., (hydro.)	or comb. test p	ressure 1481 (psi)
•••	T GDC3/A		mary, mat1 spec. no.					e) 22			Welded
				-)	(dla. in. (s	ubject to press.)]		·	vness (in.)]	[attac	Welded thment (welded, boiled)]
				.,	(dla. in. (s			(thic	viess (in.)]	[attac	hment (welded, bolled)]
		(float	N/A ling, mart spec. no.)	·,		N/A (dia. (in.))		(thick	viess (in.)]	(attac	
12	Tubes:		N/A			N/A		(thick	(ness (in.)) (A (ness (in.))	[attac	hment (welded, bolted)] N/A
12.	Tubes:	SB-10	N/A ling, mat1 spec, no.)			N/A (dla. (in.))		(thick	vness (in.)] /A ness (in.)]		hment (welded, boiled)]  N/A (attachment)
		SB-10	N/A ting, matt spec. no.) 63 UNS N0669 (matt. spec. no.)	90		N/A (dia. (in.)) 0.750 in. (00 (in.))		(thick N (thick 0.043 in. (thickness (hohes or g	vness (n.)]  /A ness (n.)]	5128	hment (welded, boilted)] N/A (attachment) U-Bend Tubes
Item	ıs 13 to	SB-10	N/A ting, matt spec. no.) 63 UNS N0669 (matt. spec. no.)	90		N/A (dia. (in.)) 0.750 in. (00 (in.))		(thick N (thick 0.043 in. (thickness (hohes or g	vness (n.)]  /A ness (n.)]	5128 (no.)	hment (welded, boilted)] N/A (attachment) U-Bend Tubes
Item		SB-10	N/A bing, mart spec. no.) 63 UNS N0669 (mart, spec. no.) e completed for	90 or inner char	nbers of jack	N/A (dia. (in.)) 0.750 in. (OD (in.)) keted vesse	ls, or chai	(thick No. (thick 0.043 in. (thickness (Inches or g nnels of heat ex	viess (n.)]  A ness (n.)]  ageij  rchangers.	5128 (no.)	hment (welded, bolled))  N/A (attachment)  U-Bend Tubes [type (straight or U)]
<i>Item</i> 13.	ıs 13 to	SB-10 16 Inclusive to be N/A (mat1. spec. no.)	N/A bing, mart spec. no.) 63 UNS N0669 (mart, spec. no.) e completed for	90 or Inner char N/A	nbers of jack	N/A (dia. (in.)) 0.750 in. (00 (in.)) keted vesse N/A n. thickness (in.))	ls, or chai	(mick No. (blick 0.043 in. (mickness (Inches or g nnels of heat ex	ness (n.)]  /A ness (n.)]  segel]  rchangers.  N. (da. 10	5128 (no.)	hment (welded, boiled))  N/A (attachment)  U-Bend Tubes [type (swaight or U)]  N/A [tength (oversit) (ft & in.)]
<i>Item</i> 13.	s <b>13 t</b> o Shell:	SB-10 16 Inclusive to be N/A (mat1. spec. no.)	N/A ing, matl spec. no.) 63 UNS N0669 (matl. spec. no.) 9 completed fo	90 or inner char N/A ensile strength)	mbers of jaci	N/A (da. (in.)) 0.750 in. (00 (in.)) keted vesse N/A n. thickness (in.))	is, or chai	(thick (t	ness (n.)]  /A ness (n.)]  segel]  rchangers.  N. (da. 10	5128 (no.) (A (fi & in.))	hment (welded, boiled))  N/A (attachment)  U-Bend Tubes [hype (straight or U)]  N/A  [tength (overall) (ft & in.)]
<i>Item</i> 13. 14.	s <b>13 t</b> o Shell:	SB-10 16 Inclusive to be N/A (mat1. spec. no.)	N/A ling, matl spec. no.) 63 UNS N0669 (matl. spec. no.) e completed for (to	90 or Inner char N/A ensão Strength) N/A	nbers of Jaci	N/A (da. (in.)) 0.750 in. (00 (in.)) keted vesse N/A n. thickness (in.))	is, or cha	(thick N (thick 0.043 in. dhickness (Inches or g nnels of heat ex N/A In. design thickness (if	ness (n.)]  /A ness (n.)]  age)]  rchangers.  N.  (da. 10 weld Yes	5128 (no.) (A (R & in.)) Full	hment (welded, boiled))  N/A (attachment)  U-Bend Tubes [hype (straight or U)]  N/A  Flength (overall) (ft & in.)]
<i>Item</i> 13. 14.	s 13 to Shell: Seams:	SB-10 16 Inclusive to be N/A (matt. spec. no.) N/A [long. (welded. dbi.,	N/A  sing, mari spec. no.)  63 UNS N066! (mari. spec. no.)  6 completed for  (in  single))  3a	90  or inner char  N/A  ensae strength)  N/A  (HT' (yes or no))	nbers of jack	N/A (da. (in.)) 0.750 in. (00 (in.)) keted vesse N/A n. thickness (in.))	Is, or chai	(thick No. 10,043 in. 10,043 in. 10,043 in. 10,043 in. 10,045 or genels of heat expenses of heat expenses in the thickness (in. 10,045 in. 10,0	ness (n.)]  (A ness (n.)]  (age))  (changers.  N.  (da. 10  weld Yes  (HT')  N.	5128 (no.) (A (R & in.)) Full	htment (welded, boiled))  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [length (overall) (ft & in.)]  I N/A (no. of courses)
<i>Item</i> 13. 14.	s 13 to Shell: Seams:	SB-10 16 Inclusive to be N/A (mat1. spec. no.) N/A [long. (welded. dbl., SA-508 Class	N/A  sing, mari spec. no.)  63 UNS N066! (mari. spec. no.)  6 completed for  (in  single))  3a	90 or inner char N/A ensile strength) N/A (HT' (yes or no)) 90 Ksi	nbers of jack	N/A (dia, (in.)) 0.750 in. (00 (in.)) (ceted vesse N/A in. thickness (in.)) A N/A (b) mal1 spec. no	Is, or chai	(trici)  N  (trici)  0.043 in.  (trickness (Inches or g  nnels of heat ex  N/A  In. design trickness (ir  (girth)  N/A  (tensite strength)	ness (n.)]  (A ness (n.)]  (age))  (changers.  N.  (da. 10  weld Yes  (HT')  N.	5128 (no.) (A (n & in.)) Full (RT	hment (welded, boiled))  N/A  (attachment)  U-Bend Tubes  [hype (straight or U)]  N/A  [length (overall) (ft & in.)]  I N/A  (no. of courses)  N/A
<i>Item</i> 13. 14.	s 13 to Shell: Seams: Heads:	SB-1(  16 Inclusive to be N/A (matt. spec. no.)  N/A [long. (welded. dbi., SA-508 Class ((a) matt spec. no.)	N/A  sing, mari spec. no.)  63 UNS N066! (mari. spec. no.)  6 completed for  (in  single))  3a	90 or inner char N/A N/A ensile strength) N/A [HT' (yes or no)] 90 Ksi ensile strength) Crown	nbers of jaci (noi N/, (RT)	N/A (dia, (in.)) 0.750 in. (00 (in.)) (eeted vesse N/A in. thickness (in.)) A N/A (b) mal1 spec. no	Is, or chai	(trici)  N  (trici)  0.043 in.  (trickness (Inches or g  nnels of heat ex  N/A  In. design trickness (ir  (girth)  N/A  (tensite strength)	ness (n.)]  /A ness (n.)]  spel]  (changers.  N. 1.]  (sta. 10 weld Yes  (+11')  N. ((c) mai	5128 (no.)  A (ñ & in.))  Full (RT	htment (welded, boiled))  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [flength (overall) (ft & in.)]  N/A (no. of courses)  N/A (tensile strength)
<i>Item</i> 13. 14.	s 13 to Shell: Seams: Heads:	SB-1( 16 Inclusive to be N/A (matt. spec. no.) N/A [long. (welded. dbi., SA-508 Class ((a) matt spec. no.) Location op, bottom, ends	N/A ling, mat1 spec. no.) 63 UNS N0669 (mat1. spec. no.) e completed for (in single)) 3a (in	90 or inner char N/A N/A ensile strength) N/A [HT' (yes or no)] 90 Ksi ensile strength) Crown	nbers of Jack	N/A (dia. (in.)) 0.750 in. (00 (in.)) keted vesse N/A n. thickness (in.)) A  N/A b) mall spec. no	Is, or chai	(trici N. (prick of the state o	ness (n.)]  /A ness (n.)]  sqei)  cchangers.  N, 1,] (da. 10  weld Yes	5128 (no.)  (A (f(& in.))  Full  (RT  (A (1 spec. no.)	thment (welded, boiled))  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [length (overall) (ft & in.)]  N/A ((no. of courses)  N/A ((lensile strength))  Side to Pressure (convex or concave)  N/A
<i>Item</i> 13. 14.	s 13 to Shell: Seams: Heads:	SB-10 16 Inclusive to be N/A (matt. spec. no.) N/A [long. (welded. dbi., SA-508 Class ((a) matt spec. no.) Location pp, bottom, ends	N/A sing, matt spec. no.) 63 UNS N0669 (matt. spec. no.) 6 completed for (in single)) 3a o.) (t) Thickness	or inner chan N/A  N/A  ensile strength) N/A  (HT' (yes or no)) 90 Ksi  ensile strength)  Crown Radius N/A	nbers of jack (not) (N/) (RT)	N/A (dia. (in.)) 0.750 in. (00 (in.)) (keted vesse N/A n. thickness (in.)) A N/A (b) mall spec. no	Is, or chai	(trici N) (trick)  0.043 in. (trickness (Inches or ginnels of heat exit N/A) In. design trickness (if (girth))  N/A ((tensile strength)  Conical ex Angle N/A	ress (n.]]  /A  ress (n.])  sqei)  (changers.  N.  I.]  (da. IO  weld  Yes  (HT')  N.  ((c) mail  Radius	5128 (no.)  A (ft & in.))  Full (RT  A Tispec. no.)	thment (welded, boiled))  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [length (overall) (ft & in.)]  N/A ((no. of courses)  N/A ((lensile strength))  Side to Pressure (convex or concave)  N/A Concave
<i>Item</i> 13. 14.	s 13 to Shell: Seams: Heads:	SB-1( 16 Inclusive to be N/A (matt. spec. no.) N/A [long. (welded. dbi., SA-508 Class ((a) matt spec. no.) Location op, bottom, ends	N/A sing, mat1 spec. no.) 63 UNS N0669 (mat1. spec. no.) 6 completed for (in single)) 3a o.) (i) Thickness	or inner chan N/A  N/A  ensile strength) N/A  (HT' (yes or no)) 90 Ksi  ensile strength)  Crown Radius N/A	(RT)	N/A (dia. (in.)) 0.750 in. (00 (in.)) (keted vesse N/A n. thickness (in.)) A  N/A (b) mall spec. no	Is, or chai	(trici N) (trick)  0.043 in. (trickness (Inches or ginnels of heat exit N/A) In. design trickness (if (girth))  N/A ((tensile strength)  Conical ex Angle N/A	ress (n.)]  /A  ress (n.)]  sqei)  (changers.  N.  I.]  (da. IO  weld  Yes  (HT')  N.  ((c) mail  Hemispherical  Radius  N/A	5128 (no.)  A (ñ & in.))  Full (RT  A Tispec. no.)  Flat Diameter N/A	thment (welded, boiled))  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [length (overall) (ft & in.)]  N/A ((no. of courses)  N/A ((lensile strength))  Side to Pressure (convex or concave)  N/A
13. 14. 15.	s 13 to Shell: Seams: Heads: (a) To (b) Cr (c) Flo	SB-16  16 Inclusive to be N/A  (mat1. spec. no.)  N/A  [long. (welded. dbi., SA-508 Class ((a) mat1 spec. no.)  Location  op, bottom, ends name!	N/A  ing, mat1 spec. no.)  63 UNS N0669  (mat1. spec. no.)  e completed for  single))  3a  Thickness  N/A  6.19 in.	or inner chan N/A ensile strength) N/A (HT' (yes or no)) 90 Ksi ensile strength) Crown Radius N/A N/A	mbers of jack [not N// (RT)  Knuckle Radius N/A N/A N/A	N/A (dia. (in.)) 0.750 in. (00 (in.)) (keted vesse N/A n. thickness (in.)) A  N/A (b) mall spec. no Elliptics Ratio N/A N/A N/A N/A	Is, or chair [m N/A (eff. %)	(trici N) (trickness (inches or gennels of heat ex N/A) In. design trickness (in design trickness (glirth))  N/A ((tensile strength)  Conical ex Angle N/A N/A	mess (n.)]  A  mess (n.)]  (changers.  N.  (da.10  weld Yes  (HT')  N.  ((c) mall  Hemispherical Radius  N/A  62.81 in. (ID)  N/A	5128 (no.)  (A (n & in.))  Full (RT (A Tispec. no.)  Flat Diameter N/A N/A	thment (welded, boiled))  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [flength (oversit) (ft & in.)]  N/A (no. of courses)  N/A (lensile strength)  Side to Pressure (convex or concave)  N/A  Concave  N/A  N/A
13. 14. 15.	Shell: Seams: Heads: (a) To (b) CF (c) Flo	SB-10 16 Inclusive to be N/A (matt. spec. no.) N/A [long. (welded. dbi., SA-508 Class ((a) matt spec. no.) Location pp, bottom, ends	N/A  ing, mat1 spec. no.)  63 UNS N0669  (mat1. spec. no.)  e completed for  single))  3a  Thickness  N/A  6.19 in.	or inner chan N/A ensile strength) N/A (HT' (yes or no)) 90 Ksi ensile strength) Crown Radius N/A N/A	mbers of jack [not N// (RT)  Knuckle Radius N/A N/A N/A	N/A (dia, (in.)) 0.750 in. (00 (in.)) (keted vesse N/A in. thickness (in.)) A  N/A (b) mall spec. no Elliptica Ratio N/A N/A N/A N/A	Is, or chair [m N/A (eff. %)	(trici N) (trickness (inches or gennels of heat ex N/A) In. design trickness (in design trickness (glirth))  N/A ((tensile strength)  Conical ex Angle N/A N/A	mess (n.)]  A  mess (n.)]  (changers.  N.  (da.10  weld Yes  (HT')  N.  ((c) mall  Hemispherical Radius  N/A  62.81 in. (ID)  N/A	5128 (no.)  A (ñ & in.))  Full (RT  /A  Tispec. no.)  Flat Diameter N/A N/A N/A	htment (welded, boiled))  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [flength (overall) (ft & in.)]  N/A (no. of courses)  N/A (lensile strength)  Side to Pressure (convex or concave)  N/A  Concave  N/A

(7/98)

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<sup>&</sup>lt;sup>1</sup> If postweld heat treated. <sup>2</sup> List other internal or external pressure with coincident temperature when applicable.

<sup>\*</sup> 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.

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

						Certi	ficate Holder's S	erial No. W	B1-RSG-B
17	Nazzies, inspection and safety v	mbe coosinar							
٠,		isine openings:		·					<del></del>
	Purpose (intet, outlet, drain, etc.)	Quantity	Dia. or Size	Туре	How Altached	Mat1	Thickness	Reinforcement Material	Location
	(See pages 3 an	4 of this Date	Report for com	pieto table	of nozzle, insp	ection and	safety valve op	enings)	<del></del>
	<u> </u>	<b></b>							<del>                                     </del>
i		<del>                                     </del>							+
1	<del></del>	<del>                                     </del>					<u> </u>	<del> </del>	<del></del>
!									<del></del>
18.	Supports: Skirt No	Lugs N/A	Legs N/A		4 Suppor	t Pads	Attacher	d Channel head /	Integral forged
19.	(vis or no) Remarks: 1.) This assembly	manufactured	(quantity inspected and (	-	• • • •	idio) ndustries ā	Construction	(where and t Co. Ltd. under NP	
								Report for S/N -N	
2	Unit received full PWHT a	nd RT examina	tion with full MT	/PT after hy	drostatic test.				
3	.) The Primary Side of the tu	be plate and c	nannel head inte	rior, Includ	ing nozzles an	d manway:	overlaid with	weld-deposited Ni	Cr-Fe alloy.
	.) One (1) tube weld plugged								
	i.) Line 10 - Max. Pressure Di	Merential acros					e Differential ac	cross tubes = 1600	PSID at 650 F
D-	sign specification certified by	Bruce /		RTIFICATIO	ON OF DESIGN		0.5	TN Ren on	102034
	sign report certified by		R. Schwall		<del></del>		_ 1.4.000	TN	10121
	angit report certained by						- P.E. State -	Reg. no.	
					HOP COMPLIA				
	e certify that the statements	made in this	report are corre	ct and that	this nuclear v	ressel confo	omns to the rule	es for construction	of the ASME
	ide, Section III, Division 1. Certificate of Authorization No.		N-11	149			November 24	2007	DA S
	tle August 17, 2005		stinghouse Elect			xpires Signed 1	erry L. Casteel		Jacky V
			(N Certifica	ste Holder)	···	0.3	(au	shortzed representative)	
			CEPTE	CATE OC	SHOP INSPEC	704			
			CERTIF	ICATE OF	DUCK WOLEC	INON			
I, 1	the undersigned, holding a		on issued by the	National B	loard of Boiler	and Pressu			e or Province
I, i		layed by Th	on issued by the ne Hartford Stear	National B	loard of Boiler	and Pressu			e or Province
I, i	Tennessee and emp	loyed byTh Hartford	on issued by the ne Hartford Steam , Connecticut	National B m Boiler ins	oard of Boiler spection and Ir have	and Pressu surance Co Inspected the	ompany of Con ne component of	necticut described in this Da	ala Report on
of	Tennessee and emp of	loyed by Th  Hartford, tate that to the b	on issued by the ne Hartford Steam , Connecticut	National B m Boiler ins	oard of Boiler spection and Ir have	and Pressu surance Co Inspected the	ompany of Con ne component of	necticut	ala Report on
of ————————————————————————————————————	B-17-05 and emp of and s th the ASME Code, Section III,	Hartford, tate that to the b	on issued by the ne Hartford Stear , Connecticut pest of my knowled	National B m Boiler ins	loard of Boiler opection and Ir have ef, the Certification	and Pressu surance Co Inspected the site Holder I	ne component of constructed	necticut described in this Da this component in	ala Report on accordance
of with By In I	Tennessee and emp of of and s  B-17-05 and s  th the ASME Code, Section III, signing this certificate neith this Data Report, Furthermore	Hartford, tate that to the b Division 1. er the inspectoe, neither the in	on issued by the te Hartford Steam, Connecticut pest of my knowled or nor his employenspector nor his	National B m Boller Ins dge and bell er makes a employer s	oard of Boiler pection and Ir have ef, the Certificatory warranty, e	and Pressu surance Co Inspected the Ite Holder I	ompany of Con ne component c nas constructed or Implied, conce	necticut  described in this Da  this component in  eming the compon	ala Report on accordance
of with By In I	Tennessee and emp of of and s  B-17-05 and s  In the ASME Code, Section III, signing this certificate neith this Data Report. Furthermore a loss of any kind arising the section of the se	Hartford Hartford tate that to the b Division 1. er the inspecto e, neither the i from or connect	on issued by the the Hartford Stear Connecticut the best of my knowled or nor his employe nspector nor his called with this ins.	National B m Boller Ins dge and bell er makes a employer s	loard of Boiler spection and Ir have ef, the Certifical my warranty, eshall be liable	and Pressur surance Country of the Inspected the suppressed of the suppressed of in any man	ompany of Con ne component of nas constructed or Implied, conce ner for any pers	necticut  described in this Da  this component in  eming the compon  sonal injury or propi	ala Report on accordance ent described erty damage
of with By In I	Tennessee and emp of of and signing this certificate neithin the above a loss of any kind arising the august 17, 2005	Hartford.  tate that to the b. Division 1. er the inspectoe, neither the infrom or connect	on issued by the the Hartford Stear Connecticut Dest of my knowled or nor his employenspector nor his cited with this insumption.	Mational B m Boiler ins dge and bell er makes a employer s epection.	oard of Boiler pection and Ir have ef, the Certificatory warranty, e	and Pressur surance Country of the Inspected the suppressed of the suppressed of in any man	ompany of Con ne component of nas constructed or Implied, conce ner for any pers NB 10822 N	necticut  described in this Da  this component in  eming the component injury or propional injury or propi	ala Report on accordance ent described erty damage
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### FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS\* As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 3 of 4

1. M	lanufactured and certi	fied by Westinghouse Electri	c Company LLC, 4350 N	orthern Pike, M	onroeville Pennsylvani	ia 15146	
		-	(nan)	e and address of N Co	ertificate Holder)		
2. M	lanufactured for	Tennessee Valley Authority (TVA),	, Watts Bar Nuclear Plan	t, Unit 1, 1260 N	luclear Plant Road, Hg	wy 68, Spring City	y Tennessee 37381
	-		(name en	d address of Purchase	o)		`
3. Lo	ocation of installation	Tennessee Valley Authority (TVA)	, Watts Bar Nuclear Plan	t, Unit 1, 1260 N	luclear Plant Road, Hg	wy 68, Spring Cit	y Tenness <b>ee 37381</b>
				(name and eddress	)		
4. Ty	vpe 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.)	(Natl. Bd. no.)	(year bull!)

#### 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 Ksl	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 Ksl	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 Ksl	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.	Dla. or Size	Туре	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 Shelf
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: Westin	ighouse Electric Com	pany LLC NCertificate of Aut	norization No.:	N-1149	Expires	: November 24, 2007
Authorized Representative	Terry L. Casteel	July flas	La )		Date	August 17, 2005
		John John John John John John John John				
Authorized Nuclear Inspector	James R. Myhan	tamp n. Molrans	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

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Ht. Exch. (Steam Generator)

1. Manufactured and certified by

Vertical

8" Secondary Handhole Studs

8" Secondary Handhole Nuts

2. Manufactured for

3. Location of installation

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

WB1-RSG-B

1.000-8UN-2A

1.000-8UNC-2B

Westinghouse Electric Company LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146

Tennessee Valley Authority (TVA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessee 37381

(name and address)

NΑ

SA-193 Grade B7

SA-194 Grade 7

10010E01, Rev. 3

N/A

86

N/A

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

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2005

Lower Shell

36 2005	86	0010E01, Rev. 3	N/A 1	SG-B	stor) WB1-R	team Generator	xch. (St	<sub>pe</sub> Vertical Ht. 8	4. Type
ri, Bd. no.) (year built)	(Nath, Bd. no.)	(drawing no.)	(CRN)	's senal no.)	(Cert. Holder	led, heat ex.)	tank, jacket		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			e hardware table)	ation - Closu	(Continu	penings:	valve op	łozzies, inspection and safety	17. Nozzk
einforcement Location	Reinforcement Material	Thickness	Material	How Attached	Туре	Dia. or Size	Qty.	Purpose (inlet, outlet, drain, etc.)	(inle
A Upper Shell	N/A	1.778"	SA-508 Class 3a	Bolted	Forged	9.625° For	1	circulation Nozzle Cover	Recircu
A Upper Shell	N/A	N/A	SA-193 Grade B7	Thread	1.000-8UN-2A	1" 1.0	8	ecirculation Nozzle Studs	Recircu
A Upper Shell	N/A	N/A	SA-194 Grade 7	Thread	1.000-8UNC-2B	1" 1.0	8	ecirculation Nozzle Nuts	Recircu
A Primary Head	N/A	4.230*	SA-508 Class 3a	Bolted	Forged	26.75 For	2	imary Manway Cover	Primary
A Primary Head	N/A	N/A	SA-193 Grade B7	Thread	1.875-8UN-2A	1.875 1.8	32	imary Manway Studs	Primary
A Primary Head	N/A	N/A	SA-194 Grade 7	Thread	1.875-8UNC-2B	1.875 1.8	32	imary Manway Nuts	Primary
	N/A	3.158	SA-508 Class 3a	Boiled	Forged	23° For	2	econdary Manway Cover	Second
	N/A	N/A	SA-193 Grade B7	Thread	1.25-8UN-2A	1.25* 1.2	40	econdary Manway Studs	Second
	N/A	N/A	SA-194 Grade 7	Thread	1.25-8UNC-2B	1.25" 1.2	40	econdary Manway Nuts	Second
	N/A	1.778*	SA-508 Class 3a	Bolted	Forged	11.62 For	2	Secondary Handhole Cover	6" Seco
A Lower Shell	N/A	N/A	SA-193 Grade B7	Thread	1.000-8UN-2A	1 1.0	16	Secondary Handhole Studs	6" Seco
	N/A	N/A	SA-194 Grade 7	Thread	1.000-8UNC-2B	1" 1.0	16	Secondary Handhole Nuts	6" Seco
A Lower Shell	N/A	1.87*	SA-508 Class 3a	Boited	Forged	11.62" For	2	Secondary Handhole Cover	8" Seco
AAAAAAAAAA	N/A N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A 4.230° N/A N/A 3.158 N/A N/A 1.778° N/A N/A	SA-193 Grade B7 SA-194 Grade 7 SA-508 Class 3a SA-193 Grade B7 SA-194 Grade 7 SA-508 Class 3a SA-193 Grade B7 SA-194 Grade 7 SA-508 Class 3a SA-193 Grade B7 SA-194 Grade 7	Bolled Thread Thread Bolled Thread Bolled Thread Bolled Thread Bolled Thread Bolled Thread Thread Thread	1.000-8UN-2A 1.000-8UNC-2B Forged 1.875-8UN-2A 1.875-8UNC-2B Forged 1.25-8UNC-2B Forged 1.25-8UNC-2B Forged 1.000-8UNC-2B	Size   9.625'   For   1.0	8 8 2 32 32 2 40 40 2 16	ecirculation Nozzle Cover ecirculation Nozzle Studs ecirculation Nozzle Nuts imary Manway Cover imary Manway Studs imary Manway Nuts econdary Manway Cover econdary Manway Studs econdary Manway Nuts Secondary Handhole Cover Secondary Handhole Studs Secondary Handhole Nuts	Recircu Recircu Priman Priman Priman Second Second Second 6° Second 6° Second 6° Second

Thread

November 24, 2007 Expires: Westinghouse Electric Company LLC N Certificate Holder: Terry L. Casteel August 17, 2005 Authorized Representative August 17, 2005 NB 10822 N Date Authorized Nuclear Inspector James R. Myhan **TENN 2693** 

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F-8.4-2 Rev. 0



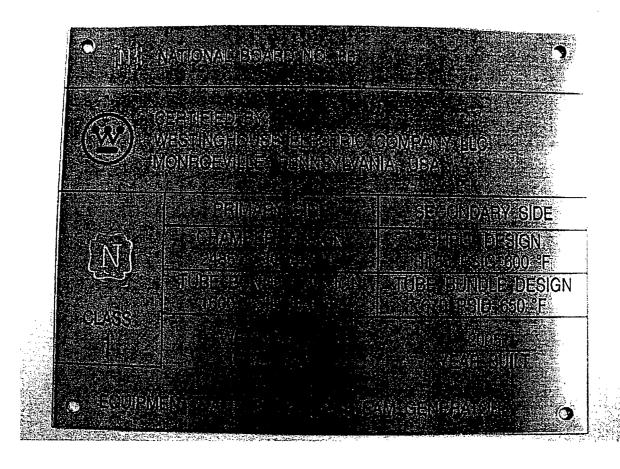
### **CODE SYMBOL STAMPING REVIEW LIST**

Cust	omer: Tennessee Valley Authorit	Westinghouse PO No.: 45	00103901	
ltem:	Replacement Steam Generator	Mfr. Ser. No.: N02018M01	-02	
Supp	lier: Doosan Heavy Ind. & Const. Co. Ltd.	Natl. Board No.: 86		
Code	Section: III - Div. 1 Class: 1	Edition: 1989 Add	lenda: No	ne
			ОК	N/A
1.	Design Specification		$\boxtimes$	
2.	Design Report		$\boxtimes$	
3.	Supplier Traveler:			
	a. All operations have been completed and	accepted by Quality and ANI.	$\boxtimes$	
4.	Hydrostatic, pneumatic or structural integrity te	est:		•
	a. Proper procedure available and in use;		$\boxtimes$	
	b. Pressure gage properly calibrated;		$\boxtimes$	
	c. Pressure, holding time;		$\boxtimes$	
	d. Fluid quality, temperature.	•	$\boxtimes$	
5.	Completion of Data Report Form for fabrication	n.	$\boxtimes$	
6.	Code Symbol stamping by supplier for fabricat	ion.	$\boxtimes$	
7.	Completion of Data Report form by Westingho	use and ANI.	$\boxtimes$	
8.	ANI authorization for Westinghouse to apply C	ode Symbol stamp.	$\boxtimes$	
Com	ments:			
	·			
	1			
	// Dx			
Torn	L. Casteel Costu	<u>'</u>	ugust 17, 2	005
Qual			ate	
la	A M W. C.	,	ugust 47 O	005
	orized Nyclear Inspector		lugust 17, 2 Date	000
			10	o 1/

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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## FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES\* As Required by the Provisions of the ASME Code, Section III

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

Not to Exceed One Day's Production

Pg. 1 of 3

•		(name and address of NPT Certificate	Holder)	
Manufactured for Westinghouse E	lectric Company LLC Energy		Pike Monroeville	, PA 15146, USA
		(name and address of purchaser)		
ocation of installation Tennessee V	alley Authority Watts Bar Nuclear P		r Plant Road, Hgwy	68, Spring City, TN 37381 L
		(name and address)		
ype: 10010E01 Rev.3	SA508 CL.3a	90 ksi	N/A	2005
(drawing no.)	(mat'l, spec, no.)	(tensile strength)	(CRN)	(year built)
SME Code,Section III,Division 1 :	1080	No Addenda	1	N-20-3
SINE COUC, OCCURN III, DIVISION 1 .	(edition)	(addenda data)	(dass	
•		·		
abricated in accordance with Const.	Spec. (Div. 2 only) N/A		N/A	DateN/A
•	(no.)			
emarks: 1. Item Name : Wa	atts Bar Unit 1 Replacement S	Steam Generator "1B" set		,
		Acam Conclutor 15 3ct		· · · · · · · · · · · · · · · · · · ·
2. ( )* : DOOSA	AN No.			
hen applicable, Certificate Holder' D	T	Them of this report :		
Part or Appurtenance	National	Part or Appur	tenance	National
			lenance	Donald Ma
Serial Number	Board No.	Serial Nun	<b>,</b>	Board No.
	In Numerical Order	Serial Nun	<b>,</b>	Board No. In Numerical Order
(1) N02018M01-02		Serial Nun	nber	
(1) <u>N02018M01-02</u>	In Numerical Order	Serial Nun (26) (27) (28)	nber	
(1) N02018M01-02 (2) (3) (4)	In Numerical Order	Serial Nun (26) (27) (28) (29)	nber	
(1) N02018M01-02 (2) (3) (4) (5)	In Numerical Order	Serial Nun (26) (27) (28) (29) (30)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6)	In Numerical Order	Serial Nun (26) (27) (28) (29) (30) (31)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6) (7)	In Numerical Order	Serial Nun (26) (27) (28) (29) (30) (31) (32)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6)	In Numerical Order	Serial Nun (26) (27) (28) (29) (30) (31)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10)	In Numerical Order	Serial Nun (26) (27) (28) (29) (30) (31) (32) (33) (34) (35)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)	In Numerical Order N/A(DN-1305)*	(26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36)	nber	
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(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (110) (111) (12)	In Numerical Order N/A(DN-1305)*	(26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13)	In Numerical Order N/A(DN-1305)*	Serial Nun (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39)	nber	
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(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17)	In Numerical Order N/A(DN-1305)*	Serial Num (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18)	In Numerical Order N/A(DN-1305)*	(26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19)	In Numerical Order N/A(DN-1305)*	Serial Num (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20)	In Numerical Order N/A(DN-1305)*	Serial Num (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45)	nber	
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(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21)	In Numerical Order N/A(DN-1305)*	Serial Nun (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21)	In Numerical Order N/A(DN-1305)*	(26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46)	nber	
(1) N02018M01-02 (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23)	In Numerical Order N/A(DN-1305)*	Serial Nun (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48)	nber	

\*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 % 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.

10.Design pressure 1185 (S side)/2485 (P side) psi. Temp. 600 / 650 \*F.

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

Hydro. test pressure  $\frac{1481(S \text{ side})psi/3107(P \text{ side})psi}{70 \text{ °F}/70 \text{ °F}}$  at temp. °F

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### FORM N-2 (Back - Pg. 2 of 3)

	Certificate Holder's Serial	Nos. <u>N02018M</u>	01-02 th	rough	N/A
	CERTIFICATION OF	DESIGN	,		
Design specifications certified by	BRUCE A, BELL (when applicable)	P.E.State	IN	Reg.no	102034
Design report* certified by	JAMES R. SCHWALL (when applicable)	P.E.State	TN	Reg.no	10121
	CERTIFICATE OF COM	IPLIANCE	·		
We certify that the statements made in this	s report are correct and that this (thes	e)	PART		
conforms to the rules of construction of the	ASME Code, Section III, Division	ı 1.			
NPT Certificate of Authorization No.	N-2767	Ex	oires	JANUARY. 8	. 2006
Date 8/12/06 Name Doosan I	Heavy Industries & Construction (	Co. Ltd. Signed	(auth	S. Go	ne)
	CERTIFICATE OF SHOP				
I, the undersigned, holding a valid commit	-				tate or Province
of OHIO and employed					
	ive inspected these items described in				
best of my knowledge and belief, the Certif	•	, ,	in accordance	with the ASMI	E Code, Section
III, Division 1. Each part listed has been au	thorized for stamping on the date sho	wn above.			
By signing this certificate, neither the insp	pector nor his employer makes any w	arranty, expressed o	or implied, conc	eming the equ	ipment describe
in this Data Report. Furthermore, neither th	ne inspector nor his employer shall be	liable in any manne	r for any perso	nal injury or pr	operty damage
or a loss of any kind arising from or connec	cted with this inspection.				
Date 8-12.05 Signed CP	Francon co	mmissions 0/	410 169	7	

(Authorized Inspector)

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[Nat'l.Bd.(incl.endorsements) and state or 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

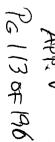
Pg. 3 of 3

1. Manufactured an	d certified	by Doosan Hea	vy Industries 8	Construction Co.,Ltd.:	555,Guygok-Dong, Ch	ang-Won, Kyung-Nam, K	Corea.
				(name and addr	ess of NPT Certificate Holder)		
2. Manufactured for	Westir	nghouse Electric	Company LL	C Energy Center Site	4350 Northern Pike	Monroeville, PA 15146	, USA
				(name and	address of purchaser)		
3. Location of instal	lation Te	ennessee Valley Au	thority Watts Ba	r Nudear Power Plant, U	nit 1, 1260 Nuclear Plan	t Road, Hgwy 68, Spring Ci	ty, TN 37381 USA.
				(na	me and address)		
4. Type:100	10E01 R	ev.3 S	SA508 CL.3a	90 ksi		N/A	2005
	(drawing no.)	(	mat'l, spec. no.)	(tensile streng	th) (	CRN)	(year built)
8.Nom. thickness (i	n.) <u>See</u>	Below Min. desi	gn thickness (i	n.) See Below Dia. II	(ft & in.) See Below	_ Length overall (ft & in.)	54 ft 6.75 in.
Part Descri	ption	Material Specification	Tensile Strength	Nom. Thickness (in.)	Min. design thickness (in.)	Dia. ID (ft & in.)	Length overall (ft & in.)
2:1 Torispherio	al Top	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"

Tubesheet	S	A508 CL3a	90 Ksi	22.00*		22.00			88"(P side)	2'-4.60"
Primary Head	S	A508 CL3a	90 Ksi	6.21		6.19		SF	R62.81"	N/A
Upper Shell #1	S/	4508 CL3a	90 Ksi	3.92"		3.72		Φ	168.50"	5'-2.41"
Upper Shell #2	S	A508 CL3a	90 Ksi	3.92"		3.72		Φ	168.50"	13'-5.09"
Shell Cone	S	A508 CL3a	90 Ksi	3.92"/ 3.90"/ 3.	19"	3.72"/ 3.73"/ 3	.11"	Ф 129.8	8"/Ф 168.50"	7'-8.09"
Lower Shell #1	S	A508 CL3a	90 Ksi	4.13"/ 3.19"	•	4.06"/ 3.11	*	Φ	129.88"	14'-1.58"
Lower Shell #2	S	A508 CL3a	90 Ksi	3.19"		3.11"		Ф	129.88*	14'-1.58"
Purpose	Q't y	Dia.or Size	Туре	How Attached		Material Specification	Th	ickness	Reinforceme Material	nt Location
Primary Side Nozzle (Inlet)	1	31.0 in. ID	Forging	Integrally	SA-	508 Class 3a	5.13	29/4.71*	integral	Primary Head
Primary Side Nozzle (Outlet)	1	31.0 in. ID	Forging	Integrally	SA	508 Class 3a	5.1	29/4.71"	integral	Primary Head
Primary Manway	2	16.0 in. ID	Forging	Integrally	SA	508 Class 3a	5.9	3"	integral	Primary Head
Steam Outlet Nozzle	1	32.0 in. OD	Forging	Integrally	SA-	508 Class 3a	1.3	75"	integral	Top Head
Level Tap Nozzle	5	0.75 in. NPS	Forging	Welded	SA-	508 Class 1a	0.4	28"	Build-up	Upper Shell-2
Pressure Tap Nozzie	3	1.0 in. NPS	Forging	Welded	SA	508 Class 1a	0.4	2"	Build-up	Upper Shell-2
Secondary Manway	2	16.0 in. ID	Forging	Welded	SA	508 Class 3a	5.5	65"	integral	Upper Shell-2

(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. 1D	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. 1D	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

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DOOSAN NO. CERTIFIED BY असिहारीओं। - ह SERIAL NO. EQUIPMENT NAME DESIGN PRESSURE HYDRO TEST PRESSURE APPLICABLE CODE WATTS BAR NUCLEAR POWER PLANT, UNIT 1

		SHOUND THE POLICE HOUSE BEFORE THE TO FREE OUT OF STATE OF	NER'S REPORT FOI d by the Provisions o	200 To 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The state of the second state of the second state of the second s	and the second second	5	
1. Owner	TENN	ESSEE VALLEY AL	JTHORITY	Date	12/8/00	-		
	1101 Ma	Name rket St., Chattanoog	ga, TN 37402	Sheet	of			
2. Plant	Watts	Address Bar Nuclear Plant		Unit	Unit 1			
F	P. O. Box	Name x 2000, Spring City,	TN 37381	WO #: 0	05-816062-003		er.	
3. Work P	erformed	Address d by Bechtel Constr	ruction Company	Type Co	Repair Organization ode Symbol Stamp			
F	P. O. Box	ر x 549, Soddy-Daisy,	Name TN 37384	Authoriz	ation No N/A			
		Address		Expiration	***		<del></del>	
4. Identific	ation of	system RCS		LApiratio	- IVA			
(b) App	licable E	dition of Section XI	ASME SECT. III 19 71 Utilized for Repairs o	r Replace	ments 1989	a, N/A	Co	de Case
· · · · · · · · · · · · · · · · · · ·			Manufacturer Serial No.	National Board No		Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
گا" ۷BN-1-MI	IV) ISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO
`								
			<u> </u>					
•							7	
·	-		,					-
		CRO	REINSTALLATION C SSOVER みいり / neumatic □ Nominal ure psi	HOT LE	G MAIN LOOP	PP	PING	901
<b>IOTE</b> : S	Suppleme 1 in., (2)	ental sheets in form information in items	of lists, sketches, or a 1 through 6 on this of sheets is recorded	drawings report is ir	may be used, prov	vided (	1) size is 8½	∕₂ in. x

APP. V PG114 OF 196

	FORM NIS-2 (Back)
9. RemarksTr	acking Number: RR-07-101 WO Number: 05-816062-003
CODE CASE A	
	·
	<del> </del>
	CERTIFICATE OF COMPLIANCE
We certify that the	statements made in the report are correct and this <u>replacement</u> conforms to the repair or replacement
rules of the ASME	Code, Section XI.
Type Code Symbol	Stamp N/A
,	rization No. N/A
Signed K. 2	
Signed / Car	Owner or Owner's Designee. Title  Date 12-5 20 66
	CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned,	holding a valid commission issued by the National Board of Boiler and Pressure Vessel
	State or Province of <u>Tennessee</u> and employed by <u>HSB-CT</u>
	Tford CT. have inspected the components described in this
Owner's Report dur	ing 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
·	t in accordance with the requirements of the ASME Code, Section XI.
By signing this certi	ficate neither the inspector nor his employer makes any warranty, expressed or implied,
concerning the example	minations and corrective measures described in this Owner's Report. Furthermore, neither
the inspector nor his	s employer shall be liable in any manner for any personal injury or property damage or a loss
of any kind arising f	rom or connected with this inspection.
Bour	M. Ermich Commissions TN 2534
Inspector's	M. Earnigh Commissions TN 2534  Signature National Board, State, Province, and Endorsements
Date	20 <u>06</u>

APP. V PG115 OF 196

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

Pg. 1 of 4

. Manuta	ctured and certified t	by		Electric Com	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		address of N Certific			
Manufa	ctured for Tenn	essee Valley	Authority (	TVA), Watts	Bar Nuclear			· •	Hgwy 68, Sprin	g City Tennessee 373
							ess of Purchaser)			<del> </del>
. Locatio	n of installation Tenn	essee Valley	Authority (	TVA), Watts	Bar Nuclear			ar Plant Road,	Hgwy 68, Sprin	g City Tennessee 373
<b>.</b>	Vertical	Ht. Exch. (Ste	am Genera	itor) Wi	B1-RSG-C	(nar	ne and address) N/A	10010E01, Rev	. 3 87	2005
. Type	horiz or verL)	(Lank, jackete			Holder's serial no	<del>.)</del> -	(CRN)	(drawing no.)	(Na(7, Bd. n	
ASME	Code, Section III, Div	ulsion 1:		1989		No Adder	da	Class	1	N-20-3
				(edition)	<del></del>	(addenda d		(class)		(Code Case no.)
ms 6 - 10	Inclusive to be co	mpleted for si	ngle wall v	essels, jacke	ets of jacket	ed vessels	, or shells of h	eat exchanger	<b>S</b> .	
Shell:	SA-508 Class 3a	90 K		See Page 3	<u> </u>		ige 3, Sect 6	See Page		54 ft 6.75 ln
	(mat1 spec. no.)	D(tensile s		(nom. thickne			ign thickness (in.)]		(ft. & in.))	[length (overall) (ft & in.)]
Seams	Seamless (long.)	N/A		N/A (RT)	10_		(pirth)	Id Yes (HT)	Full (RT)	5 (no. of courses
	SA-508 Clas		ľ	90 K	•	~)	(genn) N/A	(1111)	(81)	N/A
Heads:	[(a) math			(tensile :			(d) mat1:	spec no.)	<del></del>	(tensile strength)
١	Location (top,	<del></del>	Corresion	Crown	Knuckle T	Elliptical	Conical	Hemispherica	l Flat	Side to Pressure
1	bottom, ends)	Thickness	Allowance	Radius	Radius	Ratio	Apex Angle	Radius	Diameter	(convex or concave)
(a)	Тор	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
	e, bolts used			N/A				Other fasteni		N/A
SINOVADIO			(m	natī. spec. no., sla	e, quantity)			_ Other lastern		scribe or attach sketch)
	Pressure <sup>2</sup> 118	05 at max	. temp	eou .		_	re dimensions, descri	De or sketch) Pneu., (hydr		1494
Design ms 11 an	Pressure <sup>2</sup> 118	at max	ctions.	600	ogee & weld, ba Min. pressur	r, etc. If bar, giv e-test temp	70° (°F)			pressure 1481
Design ms 11 an	Pressure <sup>2</sup> 118 (ps	ed for tube se	ctions.	600 ° (°F) 9.88 in. (S si	ogee & weld, ba Min. pressur	r, etc. If bar, giv e-test temp	). 70° (°F)	Pneu., (hydr	o) or comb. lest	pressure 1481
Design	Pressure <sup>2</sup> 118 (ps	ed for tube se	ctions.	600 ° (°F) 9.88 in. (S si	ogee & weld, ba Min. pressur de) / 125.62	r, etc. If bar, giv e-test temp	). 70° (°F)	Pneu., (hydr 2.00 in. (ness (h.))	o) or comb. lest	pressure 1481 (psi)
Design	Pressure <sup>2</sup> 118 (ps d 12 to be complete eets: SA-(stational	ed for tube se -508 Class 3a ary, matt spec, no.)	ctions.	600 ° (°F)  9.88 in. (S si	Min. pressur de) / 125.62	r, etc. If bar, giv e-test temp	70° (°F) 22 (thick	Pneu., (hydr 2.00 in. (ness (h.))	o) or comb. lest	pressure 1481 (psi)  Welded inchment (welded, bolked))
. Design <i>ms 11 an</i> . Tubesh	Pressure <sup>2</sup> 118 (ps d 12 to be complete eets: SA- (stational (floating SB-163	ed for tube se -508 Class 3a sry, matt spec. no.) N/A g, matt spec. no.) B UNS N06690	ctions.	600 ° (°F)  9.88 in. (S si	de) / 125.62  Win. pressur  de) / 125.62  ubject to press.)  N/A  (dia. (in.))	r, etc. If bar, give- e-test temp	70° (*F)  22 (thick N/ (thick) 0.043 in.	Pneu., hydr 2.00 in. mess (in.)] /A ness (in.))	o) or comb. lest	pressure 1481  (psi)  Welded inchment (welded, bolted))  N/A (attachment)  U-Bend Tubes
Design ms 11 an Tubesh Tubes:	Pressure <sup>2</sup> 118  (ps d 12 to be complete eets: SA- (stationa (floating SB-163	ed for tube se -508 Class 3a sry, matt spec. no.) N/A 3, matt spec. no.) 3 UNS N06690 att. spec. no.)	ctions.	600 ° (°F) 9.88 in. (\$ si	de) / 125.62  Win. pressur  de) / 125.62  object to press.)  N/A  (dia. (in.))  0.750 in.  (OD (in.))	r, etc. if bar, give- e-test temp	70° (*F)  22 (thick N/ (thick 0.043 in.	Pneu., (hydr 2.00 in. mess (in.)] /A ness (in.)]	o) or comb. lest	pressure 1481 (psi)  Welded schment (welded, bolted))  N/A (attachment)
Design  Tubesh  Tubes:	Pressure <sup>2</sup> 118 (ps d 12 to be complete eets: SA-(stational (floating SB-163) (m.	ed for tube se -508 Class 3a sry, matt spec. no.) N/A 3, matt spec. no.) 3 UNS N06690 att. spec. no.)	ctions. 12	600 ° (°F) 9.88 in. (\$ si	de) / 125.62  Win. pressur  de) / 125.62  ubject to press.)  N/A  (dia. (in.))  0.750 in.  [OD (in.)]  seted vessel	r, etc. if bar, give- e-test temp	(°F)  22 (thick N/ (trick 0.043 in. ideness (inches or 9	Pneu., (hydr 2.00 in. (ness (in.)) (A ness (in.))	(atta	pressure 1481 (psi)  Welded schment (welded, bolted))  N/A (attachment)  U-Bend Tubes [type (straight or U)]
Design  Tubesh  Tubes:	Pressure <sup>2</sup> 118  (ps d 12 to be complete eets: SA- (stationa (floating SB-163	at max  and for tube se  508 Class 3a  any, matt spec. no.)  N/A  a, matt spec. no.)  UNS N06690  art. spec. no.)  completed for	ctions.	9.88 in. (S si [da. in. (s	de) / 125.62  Win. pressur  de) / 125.62  object to press.)  N/A  (dia. (in.))  0.750 in.  (OD (in.))	e-test temp	70° (*F)  22 (thick N/ (thick 0.043 in.	Pneu., (hydr 2.00 in. wess (n.)] (A ness (n.)) age)) (changers.	o) or comb. lest	pressure 1481  Welded schment (welded, bolted))  N/A (attachment)  U-Bend Tubes
Design  71 an  Tubesh  Tubes:  71 an  Tubes:	Pressure <sup>2</sup> 118 (ps d 12 to be complete eets: SA-(stational floating SB-163 (m. 16 inclusive to be complete to	at max  and for tube se  508 Class 3a  any, matt spec. no.)  N/A  a, matt spec. no.)  UNS N06690  art. spec. no.)  completed for	ctions. 12  inner chan	9.88 in. (S si [da. in. (s	de) / 125.62  de) / 125.62  ubject to press.))  N/A  (dia. (in.))  0.750 in.  [OD (in.)]  seted vessel  N/A  n. thickness (in.))	e-test temp	70° (°F)  22 (thick N/ (thick 0.043 in. inches or 9 nels of heat ex	Pneu., (hydr 2.00 in. (ness (in.)) (A ness (in.)) (changers.	5128 (no.)	pressure 1481 (psi)  Welded schment (welded, bolted))  N/A (attachment)  U-Bend Tubes (type (straight or U))  N/A (length (overall) (ft & in.))
Design ms 11 an Tubesh Tubes: ms 13 to Shell:	Pressure <sup>2</sup> 118 (ps d 12 to be complete eets: SA-(stational floating SB-163 (m. 16 inclusive to be complete to	ed for tube se -508 Class 3a ary, matt spec. no.) N/A a, matt spec. no.) 3 UNS N06690 art. spec. no.) completed for	inner chan	9.88 in. (S si [dla. in. (s	de) / 125.62  de) / 125.62  ubject to press.))  N/A  (dia. (in.))  0.750 in.  [OD (in.)]  seted vessel  N/A  n. thickness (in.))	e-lest tempin. (P side)	(*F)  22  (thick N/  0.043 in.  ideness (inches or genels of heat ex N/A design thickness (in	Pneu., (hydr 2.00 in. (ness (in.)) (A ness (in.)) (changers.	5128 (no.)	Welded  Welded  whenent (welded, bolted))  N/A  (attachment)  U-Bend Tubes  [type (straight or U)]  N/A  [tength (overait) (ft & in.)]
Design  ms 11 an  Tubesh  Tubes:  ms 13 to  Shell:  Seams:	Pressure <sup>2</sup> 118  (ps d 12 to be complete eets: SA- (stationa  (floating SB-163 (m) 16 inclusive to be complete N/A (mat1. spec. no.)	at max  and for tube se  508 Class 3a  any, matt spec. no.)  N/A  a, matt spec. no.)  UNS N06690  all. spec. no.)  completed for  (ten	inner chan	9.88 in. (S si [da. in. (s	de) / 125.62  de) / 125.62  ubject to press.))  N/A  (dia. (in.))  0.750 in.  [OD (in.)]  seted vessel  N/A  n. thickness (in.))	e-lest tempin. (P side	70° (°F)  22 (thick N/ (thick 0.043 in. inchess (inches or genels of heat ex N/A design thickness (in	Pneu. (hydr 2.00 in. oness (h.)) (A ness (in.)) age)) schangers. (h.)) (dia. yeid Yei (HT')	5128 (no.) N/A ID (ft & in.)]	Welded  Welded  worment (welded, bolked))  N/A  (attachment)  U-Bend Tubes  [type (straight or U)]  N/A  [tength (overait) (ft & in.)]
Design  ms 11 an  Tubesh  Tubes:  ms 13 to  Shell:  Seams:	Pressure <sup>2</sup> 118  (ps d 12 to be complete eets: SA- (stationa  (floating SB-163 (m. 16 inclusive to be complete N/A (mat1, spec, no.) N/A [hong. (welded, dbl., sin	at max  and for tube se  508 Class 3a  any, matt spec. no.)  N/A  a, matt spec. no.)  UNS N06690  art. spec. no.)  completed for  (ten	inner chan N/A Sife strength) N/A	9.88 in. (S si [da. in. (s nbers of jack	de) / 125.62  Min. pressur  de) / 125.62  object to press.)  N/A  (dia. (in.))  0.750 in.  (OD (in.))  ceted vessel  N/A  n. thickness (in.))	e-lest tempin. (P side	(trick)  222 (thick)  N/A  1. design thickness (in the extens of the extension	Pneu., (hydr  2.00 in.  oness (in.))  Aness (in.))  age))  cchangers.  h.)) [dia.  weld Yes  (HT')	5128 (no.) N/A ID (ft.8 in.)]	Welded  whenent (welded, bolted))  N/A  (attachment)  U-Bend Tubes  [type (straight or U)]  N/A  [tength (overall) (ft & in.)]  II N/A  (no. of courses)
Design  ms 11 an  Tubesh  Tubes:  ms 13 to  Shell:  Seams:	Pressure <sup>2</sup> 118 (ps d 12 to be complete eets: SA-(stational (floating SB-163 (m. 16 inclusive to be complete to the complete to be complete to the comple	at max  and max  and for tube se  508 Class 3a  sny, mati spec. no.)  N/A  and spec. no.)  UNS N06690  att. spec. no.)  (ten  (ten	inner chan N/A site strength) N/A T¹ (yes or no)] 90 Ksi ssite strength) Crown	9.88 in. (S si [dla. in. (s nbers of jack]	de) / 125.62  Min. pressur  de) / 125.62  ubject to press.)  N/A  (dia. (in.))  0.750 in.  (OD (in.))  (eted vessel  N/A  n. thickness (in.))	e-lest temp	70° (°F)  22 (thick N/ (thick 0.043 in. ideness (inches or 9 mels of heat ex N/A design thickness (in Double butt (girth) N/A (tensile strength)	Pneu., (hydr  2.00 in.  wess (in.))  Aness (in.))  age))  cchangers.  ii))   dia.  weld Yes  (HT')	5128 (no.)  N/A ID (ft & in.)]  S Fu (ft)  N/A nat'l spec. no.]	Welded  Welded  whenent (welded, bolked))  N/A  (attachment)  U-Bend Tubes  [type (straight or U))  N/A  [tength (overalt) (ft & in.)]  II N/A  (no. of courses)
Design ms 11 an Tubesh Tubes: ms 13 to Shell: Seams: Heads:	Pressure <sup>2</sup> 118  (ps d 12 to be complete eets: SA- (stationa  (floating SB-163 (m. 16 inclusive to be complete N/A  (matt. spec. no.) N/A  [long (welded, dbl., sin SA-508 Class 3; ((a) matt spec. no.)	at max  and for tube se  508 Class 3a  any, matt spec. no.)  N/A  a, matt spec. no.)  UNS N06690  art. spec. no.)  completed for  (ten	inner chan N/A she strength) N/A T' (yes or no)) 90 Ksi	9.88 in. (S si [dla. in. (s nbers of jack]	de) / 125.62  Min. pressur  de) / 125.62  ubject to press.)  N/A  (dia. (in.))  (OD (in.))  (efect vessel  N/A  n. thickness (in.))  A  N/A  O) mat1 spec. no.	e-lest tempelin. (P side)  in. (P side)  iv.  (min.)  N/A  (eff. %)	70° (°F)  22 (thick N/ (thick 0.043 in. ideness (inches or genels of heat ex N/A design thickness (in Double butt (girth) N/A (tensée strength)	Pneu., (hydr  2.00 in.  uness (in.))  A  ness (in.))  spe))  (changers.  t.)) [dia.  weld Yes  (HT')	5128 (no.)  N/A ID (ñ å in.)]  N/A nat'l spec. no.]	Welded  Welded  Welded  whenent (welded, bolted))  N/A  (attachment)  U-Bend Tubes  [type (straight or U)]  N/A  [tength (overall) (ft & in.)]  II  N/A  (tensile strength)
. Design ms 11 an . Tubesh . Tubes: ms 13 to . Shell: . Seams: . Heads:	Pressure <sup>2</sup> 118  (ps d 12 to be complete eets: SA- (stationa  (floating SB-163 (m. 16 inclusive to be complete N/A  (math. spec. no.) N/A  [long. (weided. dbl., sin SA-508 Class 3; ((a) math spec. no.)  Location pp. bottom, ends	at max  and max  and for tube se  508 Class 3a  sny, mati spec. no.)  N/A  and spec. no.)  UNS N06690  all. spec. no.)  (ten  (ten  Thickness  N/A	inner chan N/A she strength) N/A T' (yes or no)) 90 Ksi ssile strength) Crown Radius N/A	9.88 in. (S signal of the sign	de) / 125.62  Win. pressur  de) / 125.62  ubject to press.)  N/A  (dia. (in.))  0.750 in.  [OD (in.)]  reted vessel  N/A  N/A  N/A  D) matt spec. no.  Elliptica  Ratio  N/A	e-lest tempelest	70° (*F)  22 (thick N/A 0.043 in. inickness (inches or 9 mels of heat ex N/A design thickness (in Qirth) N/A (tensile strength) onical c Angle	Pneu., (hydr  2.00 in.  wess (in.))  Aness (in.))  age))  cchangers.  ii))   dia.  weld Yes  (HT <sup>1</sup> )  flemispherical  Radius  N/A	5128 (no.)  N/A ID (ft & in.)]  N/A nati spec. no.]  Flat Diameter N/A	Welded  Welded  whenent (welded, bolted))  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [tength (overalt) (ft & in.)]  N/A (tensile strength)  Side to Pressure (convex or concave)  N/A
. Design ms 11 an . Tubesh . Tubes: ms 13 to . Shell: . Seams: . Heads:	Pressure <sup>2</sup> 118  (ps d 12 to be complete eets: SA- (stationa  (floating SB-163 (m. 16 inclusive to be complete N/A  (math. spec. no.) N/A  [long (weided. dbl., sin SA-508 Class 3; ((a) math spec. no.) Location pp. bottom, ends nannel	at max  and max  and for tube se  508 Class 3a  sny, mati spec. no.)  N/A  a, mati spec. no.)  UNS N06690  ati. spec. no.)  (ten  (ten  Thickness  N/A  6.19 In.	inner chan N/A she strength) N/A T¹ (yes or no)) 90 Ksi ssile strength) Crown Radius N/A N/A	9.88 in. (S signal of the sign	de) / 125.62  Win. pressur  de) / 125.62  ubject to press.)  N/A  (dia. (in.))  0.750 in.  [OD (in.)]  teted vessel  N/A  N/A  N/A  D) matt spec. no.  Elliptica  Ratio  N/A  N/A	e-lest tempelest	70° (*F)  22 (thick N/ (inick) 0.043 in. inickness (inches or genels of heat ex N/A design thickness (in Double butt (girth) N/A (tensile strength) onical t Angle V/A	Pneu. (hydr  2.00 in.  uness (in.))  Aness (in.))  get)  (changers.  ii))  fdia.  weld  Yes  (HT <sup>1</sup> )  flemispherical  Radius  N/A  62.81 In. (ID)	5128 (no.)  N/A ID (ft.8 in.)]  N/A nati spec. no.]  Flat Diameter N/A N/A	Welded  whenent (welded, bolted))  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [tength (overalt) (ft & in.)]  N/A (tensile strength)  Side to Pressure (convex or concave)  N/A Concave
. Design ms 11 an . Tubesh . Tubes: ms 13 to . Shell: . Seams: . Heads:	Pressure <sup>2</sup> 118  (ps d 12 to be complete eets: SA- (stationa  (floating SB-163 (m. 16 inclusive to be complete N/A  (math. spec. no.) N/A  [long (weided. dbl., sin SA-508 Class 3; ((a) math spec. no.) Location pp. bottom, ends nannel	at max  and max  and for tube se  508 Class 3a  sny, mati spec. no.)  N/A  and spec. no.)  UNS N06690  all. spec. no.)  (ten  (ten  Thickness  N/A	inner chan N/A she strength) N/A T' (yes or no)) 90 Ksi ssile strength) Crown Radius N/A	9.88 in. (S si [da. in. (s mbers of jack [non N// (RT)] (I) Knuckle Radius N/A N/A N/A	de) / 125.62  Win. pressur  de) / 125.62  ubject to press.)]  N/A  (dia. (in.))  (OP (in.))  (eted vessel  N/A  N/A  N/A  D) matt spec. no.  Elliptica  Ratio  N/A  N/A  N/A  N/A	e-lest tempelest	70° (*F)  22 (thick N/A 0.043 in. inickness (inches or 9 mels of heat ex N/A design thickness (in Qirth) N/A (tensile strength) onical c Angle	Pneu., (hydr  2.00 in.  wess (in.))  Aness (in.))  age))  cchangers.  ii))   dia.  weld Yes  (HT <sup>1</sup> )  flemispherical  Radius  N/A	5128 (no.)  N/A ID (ft & in.)]  N/A nati spec. no.]  Flat Diameter N/A	Welded  Welded  whenent (welded, bolted)]  N/A (attachment)  U-Bend Tubes [type (straight or U)]  N/A [tength (overalt) (ft & in.)]  N/A (tensile strength)  Side to Pressure (convex or concave)  N/A  Concave  N/A
. Design ms 11 an . Tubesh . Tubes: ms 13 to . Shell: . Seams: . Heads:	Pressure <sup>2</sup> 118  (ps d 12 to be complete eets: SA- (stationa  (floating SB-163 (m. 16 inclusive to be complete N/A  (math. spec. no.) N/A  [long (weided. dbl., sin SA-508 Class 3; ((a) math spec. no.) Location pp. bottom, ends nannel	at max  and max  and for tube se  508 Class 3a  sny, mati spec. no.)  N/A  a, mati spec. no.)  UNS N06690  ati. spec. no.)  (ten  (ten  Thickness  N/A  6.19 In.	inner chan N/A she strength) N/A T¹ (yes or no)) 90 Ksi ssile strength) Crown Radius N/A N/A	9.88 in. (S si [da. in. (s nbers of jack]  [non N/A	de) / 125.62  Min. pressur  de) / 125.62  ubject to press.)  N/A  [dia. (in.))  0.750 in.  [OD (in.)]  reted vessel  N/A  N/A  N/A  N/A  N/A  N/A  N/A  N/	e-lest temp in. (P side) s, or chant (min N/A (eff. %)	70° (*F)  22 (thick N/ (inick) 0.043 in. inickness (inches or genels of heat ex N/A design thickness (in Double butt (girth) N/A (tensile strength) onical t Angle V/A	Pneu., (hydr  2.00 in.  uness (in.))  Anness (in.))  spel)  (changers.  weld Yes  (HT¹)  [(c) r  semispherical Radius  N/A  62.81 In. (ID)  N/A	5128 (no.)  N/A ID (ft.8 in.)]  N/A nati spec. no.]  Flat Diameter N/A N/A	Welded  whenent (welded, bolted))  N/A  (attachment)  U-Bend Tubes  [type (straight or U)]  N/A  [tength (overalt) (ft & in.)]  N/A  (tensile strength)  Side to Pressure (convex or concave)  N/A  Concave  N/A  N/A
Tubesh Tubesh Tubesh Tubesh Seams: Seams: (a) To (b) Cl (c) Ficeemovable	Pressure <sup>2</sup> 118 (ps d 12 to be complete eets: SA-(stational floating SB-163 (m. 16 inclusive to be complete et s. SA-(stational floating SB-163 (m. 16 inclusive to be complete et s. SA-(stational floating floating et s. SA-508 Class 3: [(a) mail spec. no.]  Location (pp. bottlom, ends patting et, bolts used	at max  and max  and for tube se  508 Class 3a  sny, mati spec. no.)  N/A  a, mati spec. no.)  UNS N06690  ati. spec. no.)  (ten  (ten  Thickness  N/A  6.19 In.	inner chan N/A she strength) N/A T¹ (yes or no)) 90 Ksi ssile strength) Crown Radius N/A N/A	9.88 in. (S si [da. i	de) / 125.62  Win. pressur  de) / 125.62  ubject to press.)]  N/A  (dia. (in.))  (OP (in.))  (eted vessel  N/A  N/A  N/A  D) matt spec. no.  Elliptica  Ratio  N/A  N/A  N/A  N/A	e-lest temp in. (P side) s, or chant (min N/A (ef. %)	70° (*F)  22 (thick N/ (inick) 0.043 in. inickness (inches or genels of heat ex N/A design thickness (in Double butt (girth) N/A (tensile strength) onical t Angle V/A	Pneu., (hydr  2.00 in.  uness (in.))  Anness (in.))  spel)  (changers.  weld Yes  (HT¹)  [(c) r  semispherical Radius  N/A  62.81 In. (ID)  N/A	5128 (no.)  N/A ID (ft & in.)]  Flat Diameter N/A N/A N/A	Welded  Welded  whenent (welded, bolted)]  N/A  (attachment)  U-Bend Tubes  [type (straight or U)]  N/A  [tength (overall) (ft & in.)]  N/A  (tensile strength)  Side to Pressure (convex or concave)  N/A  Concave  N/A  (describe or attach sketch)

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<sup>\*</sup> 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.

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

WB1-RSG-C Certificate Holder's Serial No. 17. Nozzles, inspection and safety valve openings: Reinforcement (inlet, outlet, drain, etc.) Dia. or Size Attached Thickness Location (See pages 3 and 4 of this Data Report for complete table of nozzle, inspection and safety valve openings) Legs N/A Other 4 Support Pads (describe) \_\_\_ Attached Channel head / Integral forged 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** Bruce A. Bell Design specification certified by Reg. no. P.E. State James R. Schwall - P.E. State TN Design report certified by - Rea. no. 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-1149 November 24, 2007 N Certificate of Authorization No. Expires Westinghouse Electric Company LLC Date August 17, 2005 Name Signed (N Certificate Holder) CERTIFICATE OF SHOP INSPECTION 1, 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 Boller Inspection and Insurance Company of Connecticut Hartford, Connecticut have inspected the component described in this Data Report on \_ , 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. Junes M. Mylan Commissions James R. Myhan NB 10822 N [Nat1, 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. \_\_\_\_ \_Expires \_ N/A \_\_.. Name \_ .. Signed . (N Certificate Holder) (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 \_ and employed by have compared the statements in this Data Report with the described component \_,not included in the certificate of shop N/A and state that parts referred to as data items \_\_\_\_ N/A and that to the best of my knowledge and belief the Certificate Holder has inspection, have been inspected by me on \_ 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 \_\_ Signed \_ Commissions (Authorized Nuclear Inspector)

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[Nat] Bd. (incl endorsements) and state or prov. and no.]

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

Pg. 3 of 4

1. Manufa	actured and cer	tified by	Westinghouse Electri	c Company LLC, 4350 No	orthern Pike, Mo	nroeville Pennsylvan	la 15146	
				(name	and address of N Cer	tificate Holder)		
2. Manufa	actured for	Tennessee	Valley Authority (TVA)	Watts Bar Nuclear Plant	, Unit 1, 1260 No	uclear Plant Road, Hg	wy 68, Spring City	/ Tennessee 37381
	•		· · · · · · · · · · · · · · · · · · ·	(name and	address of Purchaser	)		
3. Locatio	on of installation	Tennessee	Valley Authority (TVA)	Watts Bar Nuclear Plant	, Unit 1, 1260 No	uclear Plant Road, Hg	wy 68, Spring City	y Tenness <del>ee</del> 37381
				<del></del>	(name and address)			
4. Type	Vertical	Ht. Exc	h. (Steam Generator)	WB1-RSG-C	N/A	10010E01, Rev. 3	87	2005
,,,,	hortz. or vert.)	(tank	Jackeled, heat ex.)	(Cerl Holder's seriel no.)	(CRN)	(drawing no.)	(Natī. 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 Ksl	3.72 in.	3.72 in.	14 ft 0.50 in.	13 ft 5.09 ln.
Upper Shell -1 Barrel	SA-508 Class 3a	90 Ksl	3.72 in.	3.72 in.	14 ft 0.50 ln.	5 ft 2.41 ln.
Conical Shell Transition	SA-508 Class 3a	90 Ksl	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	Туре	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 Shelf
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 Feedwaler 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"	integrai	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: Westir	nghouse Electric Comp	Dany LLC N Certificate of Au	thorization No.:	N-1149	Expires	November 24, 2007
Authorized Representative	Terry L. Casteel	My Ila	sa		Date	August 17, 2005
		777				
Authorized Nuclear Inspector	James R. Myhan	tamo n. Mohm	Comissions:	NB 10822 N	Date	August 17, 2005
<u> </u>	<i>ــــــــــــــــــــــــــــــــــــ</i>	amo 11. Mysm		TENN 2693	L	l

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

Pg. 4 of 4

			(name	and address of N C	ertificate Holder)		
Manufa	ctured for	Tennessee Valley Authority (TVA)	, Watts Bar Nuclear Plant	Unit 1, 1260 N	Nuclear Plant Road, Hg	wy 68, Spring City	Tennessee 3738
	-		(name and	address of Purchase	er)		
Locatio	n of installation	Tennessee Valley Authority (TVA)	, Watts Bar Nuclear Plant	Unit 1, 1260 N		wy 68, Spring City	Tennessee 3738
Туре	Vertical	Ht. Exch. (Steam Generator)	WB1-RSG-C	N/A	10010E01, Rev. 3	87	2005

(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*	NVA	Primary Head
Primary Manway Studs	32	1.875	1.875-8UN-2A	Thread	SA-193 Grade B7	N/A	NVA	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	NA	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-BUNC-2B	Thread	SA-194 Grade 7	N/A	N/A	Lower Shell

N Certificate Holder: Westin	ighouse Electric Comp	any LLC A Ce	tificate of Author	rization No.: 1	N-1149	Expires	November 24, 2007
Authorized Representative	Terry L. Casteel	5/2/11	This			Date	August 17, 2005
					_		
Authorized Nuclear Inspector	James R. Myhan	- 1 1	Horlan	Comissions:	NB 10822 N	Date	August 17, 2005
	L	and 11.	ngran		TENN 2693	L	<u> </u>

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F-8.4-2 Rev. 0



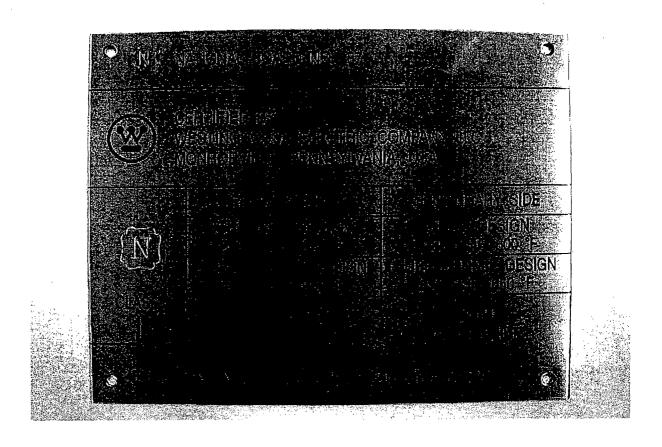
### **CODE SYMBOL STAMPING REVIEW LIST**

Cust	omer:	Tennessee Valley Authorit	Westinghouse PO No.:	450010	03901	
ltem:	R	eplacement Steam Generator	Mfr. Ser. No.: N02018M	101-03		
Supp	lier:	Doosan Heavy Ind. & Const. Co. Ltd.	Natl. Board No.: 87			
Code	Secti	on: III - Div. 1 Class: 1	Edition: 1989	Addend	a: <u>No</u>	ne
					ок	N/A
1.	Desi	gn Specification			$\boxtimes$	
2.	Desig	gn Report			$\boxtimes$	
3.	Supp	lier Traveler:				•
	a.	All operations have been completed and a	accepted by Quality and AN	II.	$\boxtimes$	
4.	Hydr	ostatic, pneumatic or structural integrity tes	t:			
	a.	Proper procedure available and in use;			$\boxtimes$	
	b.	Pressure gage properly calibrated;			$\boxtimes$	
	C.	Pressure, holding time;			$\boxtimes$	
	d.	Fluid quality, temperature.			$\boxtimes$	
5.	Com	pletion of Data Report Form for fabrication.			$\boxtimes$	
6.	Code	Symbol stamping by supplier for fabricatio	n.		$\boxtimes$	
7.	Com	pletion of Data Report form by Westinghous	se and ANI.		$\boxtimes$	
3.	ANI a	authorization for Westinghouse to apply Co	de Symbol stamp.		$\boxtimes$	
Comr	nents	·				
		/ DAD				
Terrv	L. Ca	steel Sun Husly		Augus	it 17, 20	005
Quali		way & source		Date	,	
Jame	s Myh	an Immy N. Mylan		Augus	it 17, 20	05
		Nuclear Inspector		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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### 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

Pg. 1 of 3

		struction Co.,Ltd. 555,Guygok-Don (name and address of NPT Certificate in		i, ryung-nam,	
Manufactured for Westingho	ouse Electric Company LLC En	ergy Center Site 4350 Northern	Pike Monroe	ville, PA 1514	6, USA
		(name and address of purchaser)			
ocation of installation. Tennes	ssee Valley Authority Watts Bar Nuc	lear Power Plant, Unit 1, 1260 Nuclea	ar Plant Road, H	lawy 68 Spring (	City TN 37381 US
	oose valley value of value of value	(name and address)	ar r learn rede, r	guy oo, opinig t	3y, 111 57 55 1 50
- 400405045		• •			
Type: 10010E01 Rev.3 (drawing no.)	SA508 CL.3a (mat'l, spec, no.)	90 ksi	N/A (CRN)		2005
(drawing no.)	(mati. spec. no.)	(lensile strength)	(CHN)		(year built)
SME Code,Section III,Division	1: 1989	No Addenda		1	N-20-3
	(edition)	(addenda dala)		(dass)	(Code Case no.
abricated in accordance with C	Const. Spec. (Div. 2 only)		N/A	Date	N/A
		(no )			
temarks: 1 Item Nam	ie : Watts Bar Unit 1 Replacem	ent Steam Generator "1C" set	•		
		en deam cenerator to ser			<del></del>
2. ( )* : D	OOSAN No.				
		•			
hen applicable, Certificate Hol	lder' Data Reports are attached for	each item of this report:		·	
Part or Appurtenance	National	Part or Appurt	enance	· ·	lational
. a	Board No.				
Serial Number		Serial Num		B.	oard No.
Serial Number	In Numerical Orde	, ,		l .	oard No. nerical Order
(1) N02018M01-03	In Numerical Orde	(26)		l .	
(1) N02018M01-03	In Numerical Orde	(26) (27)		l .	
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\*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 % 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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### FORM N-2 (Back - Pg. 2 of 3)

	Certificate Holder's Se	erial Nos. N02018M	01-03 the	rough	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 C		5457		
We certify that the statements made in			PARI		
conforms to the rules of construction of	• • • • • •				
NPT Certificate of Authorization No	N-2767	Ext	oires	IANUARY. 8	2006
Date 8/11/07 Name Doos	an Heavy Industries & Construction	on Co. Ltd. Signed		5. G	Jons
· · · · · · · · · · · · · · · · · · ·	(NPT Certificate Holder)		(autho	orized representati	ve) F
<del>-</del>					
•	CERTIFICATE OF SHO	OP INSPECTION			
	nmission issued by the National Board		•		tate or Province
of OHIO and emp					
of <u>CT.</u>	have inspected these items describe	ed in this Data Report o	n <u>8-12-</u>	05 , and	state that to the
best of my knowledge and belief, the C	ertificate Holder has fabricated these	parts or appurtenances	in accordance	with the ASM	E Code, Section
III, Division 1. Each part listed has bee	n authorized for stamping on the date	shown above.			
By signing this certificate, neither the	inspector nor his employer makes an	y warranty, expressed o	r implied, conce	eming the equ	ipment describe
in this Data Report. Furthermore, neith	er the inspector nor his employer shal	l be liable in any manne	r for any persor	nal injury or pr	operty damage
or a loss of any kind arising from or cor	nnected with this inspection.				
Date 8/12/05 Signed 62	~ /	Commissions 0/	110 16	7	
	(Authorized Inspector)				or proviand no.

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### 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

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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 SA508 CL.3a 90 ksi N/A 2005 (drawing no:) (mat1. spec. no.) (tensile strength) (CRN) (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 overal (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"	Ф 129.88"	14'-1.58"	
Lower Shell #2	SA508 CL3a	90 Ksi	3.19"	3.11"	Ф 129.88"	14'-1.58"	

Purpose	Q't y	Dia.or Size	Туре	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 Nozzie	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

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		DOOSAN NO.	DATE DATES
95. 1	garage in the second	CERTIFIED BY	Value Crat Taran Arena Taran Arena A
	ju.	SERIAL NO.	Wiki and A.
		EQUIPMENT NAME	National Manager Control of the Association
Mayora shirt or ye	7		-1-14/pa1-191241
	DESIGN	N PRESSURE	
	HYDRO	TEST PRESSURE	
	APPLIC	CABLE CODE	College State Stat
		WATTS BAR NUCLEAR F	POWER PLANT, UNIT 1
			Poosan Heavy Industries & Construction Co., Ltd.

# DUPLICATE ORIGINAL

Owner TE	NNESSEE VALLEY AL	JTHORITY	Date	12-8-06			
1101	Market St., Chattanoog	ga. TN 37402	Sheet	of	<del></del>		
Plant W	Address atts Bar Nuclear Plant		Unit U	nit 1			
P. O.	Box 2000, Spring City,	TN 37381		-816062-004	·		
Work Perfor	Med by Bechtel Consti	ruction Company	Type Code	tepair Organization P B Symbol Stamp	N/A N/A	. Job No etc.	
P. O.	Box 549, Soddy-Daisy,	Vame TN 37384	Authorizat	tion No N/A			
	Address		Expiration	Date N/A			
Identification	of system RCS						
(a) Applicab	le Construction Code	ASME SECT. III 19 71	Edition 5	S73 Addenda	à, N/A	\ Co	de Case
(b) Applicab	le Edition of Section XI	Utilized for Repairs or	Replacem	ients 1989		<del>*</del>	
Identification	of Components Repail	red or Replaced and F	Replaceme	nt Components			
ame of Compon	ent Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
	1						
(रा" में	<del>)</del>					i	
(31" FD BN-1-MISC-	068 N/A	N/A	N/A	N/A	N/A	Replacement	NO
BN-1-WISC-1	068 N/A	N/A	N/A	N/A	N/A	Replacement	NO
(31° 70 BN-1-MISC-1	068 N/A	N/A	N/A	N/A	N/A	Replacement	NO
BN-1-MISC-	) 068 N/A	N/A	N/A	N/A	N/A	Replacement	NO
(31° FD BN-1-MISC-1	) 068 N/A	N/A	N/A	N/A	N/A	Replacement	NO
(31° FD BN-1-MISC-I	) 068 N/A	N/A	N/A	N/A	N/A	Replacement	NO
(31° FD BN-1-MISC-I	) 068 N/A	N/A	N/A	N/A	N/A	Replacement	NO
(31° FD BN-1-MISC-	068 N/A	N/A	N/A	N/A	N/A	Replacement	NO
	of Work REMOVAL &	REINSTALLATION O	F.RCS PIP	ING STMG			NO
Description o	of Work REMOVAL &	REINSTALLATION O	F.RCS PIP	ING STMG	ey 4	*4	
Description o	of Work REMOVAL &	REINSTALLATION O	F.RCS PIP	ING STMG	ey 4	*4	

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9. Remarks Tracking Number: RR-07-102 WO Number: 05-816062-004
CODE CASE N46-3
Cove case 19114 S
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> 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 Field Engineen 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 Hart Ford 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.
Bruc M. Eamigh Commissions TN 2534 Inspector's Signature National Board, State Province, and Endorsements
Dale 12/8 20 0 6

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

Pg. 1 of 4

) Me=: 1		nessee Vallev	Authority (1	ΓVΔ1 Watte :	Rar Nuclear		address of N Certifi	icale Holder) lear Plant Road,	Hawar SP Carles	n City Tan-	OFFAA 272
2. Manufa	ictured for	nessee valley	Abdionty (	VA), Watts			ress of Purchaser)	lear Plant Road,	ngwy 68, Spring	City Tenn	essee 3/3
3. Locatio	n of installation Ten	nessee Valley	Authority (1	ſVA), Watts I			· · · · · · · · · · · · · · · · · · ·	lear Plant Road,	Hgwy 68, Spring	City Tenn	essee 373
					<del></del>		me and address)				
I. Type	Vertical	Ht. Exch. (Steam Generator) WB1-RSG-D N		N/A	N/A 10010E01, Rev. 3			2005			
•	horiz, or vert.)	(tank, jackete	d, heat ex.)	(Cert.	Holder's serial no.		(CRN)	(drawing no.)	(Nati. Bd. no	<del>)</del>	(year built)
. ASME	Code, Section III, D	ivision 1:		1989		No Addei	nda	Class	I	N-20	-3
ms 6 - 10	) inclusive to be co	ompleted for si		(edition) essels, jacke	ets of jackete	(addenda d d vessels		(class) heat exchangers		(Code Ca	ise no.)
5. Shell:	SA-508 Class 3:			See Page 3			age 3, Sect 6	See Page		54 ft 6.7	'5 lภ
	(matt spec. no.)	D(tensile s	trength)	Inom. thickne	ss (in.))	Įmin, des	ign thickness (in.))	[dia. ID (	R. & In.))	(length (overall)	(ft & in.)}
. Seams:	Seamless	N/A	4	N/A	100	· τ	Double butt we	eld Yes	Full		5
	(long.)	(нт	· -	(RT)	(eff. %	·)	(girth)	(HT+)	(RT)	(n	o. of courses
Heads:	SA-508 Cla	ss 3a		90 K	si		N/A	٠ .		N/A	
	((a) mat	1 spec no.)		(sensite s	trength)		(b) mat1	[(b) ma(1 spec no.) (tensile strength)		)	
ſ	Location (top,	70.14	Comosion	Crown	Knuckle	Elliptical	Conical	Hemispherical		4	Pressure
(a)	bottom, ends)	Thickness	Allowance	Radius	Radius	Ratio	Apex Angle	Radius	Diameter	<del></del>	or concave)
(b)	Top Bottom	3.72" N/A	0.0625" N/A	12'- 3.06" N/A	28.0"	N/A	N/A	N/A	14'- 0.50"	<del></del>	cave
1,0/	Douton	N/A	IVA	1 WA	N/A	N/A	N/A	N/A	N/A	<u> </u>	I/A
emovable	e, bolts used			N/A				Other fastening	ng _	N/A	
			(m	at1. spec. no., siz	e, quantity)			<b></b>	(desc	cribe or attach s	ketch)
· ·	Pressure <sup>2</sup> 11	at made s/)	temp.	sno.	ogee & weld, bar, Min. pressure	_	ve dimensions, desc 70° (°F)	cribe or sketch) . Pneu., (hydro	or comb. test p	ressure	1481 (psi)
. Design ms 11 an	Pressure <sup>2</sup> 11 (p	at max si) ted for tube se	ctions.	500 ° (°F)	Min. pressure	etc If bar, gi	70°	Pneu., (hydro	or comb. test p		
. Design ms 11 an	Pressure <sup>2</sup> 11 (p	at made s/)	ctions.	500° (°F) 3.88 in. (S si	Min. pressure de) / 125.62 k	etc If bar, gi	). 70° (°F)	Pneu., (hydro		Welded	(psi)
. Design ms 11 an	Pressure <sup>2</sup> 11 (p	ted for tube se	ctions.	(°F) 3.88 in. (S sì	Min. pressure	etc If bar, gi	). 70° (°F)	Pneu., (hydro		Welded	(psi)
. Design ms 11 an	Pressure <sup>2</sup> 11 (p	ted for tube se 1-508 Class 3a ary, mart spec. no.)	ctions.	500 ° (°F) 3.88 in. (S si	Min. pressure  de) / 125.62 la	etc If bar, gi	) 70° (°F)	Pneu., (hydro 2.00 in. chaess (in.))		Welded	(ps/)
. Design <i>ms 11 an</i> . Tubesh	Pressure <sup>2</sup> 11 (p d 12 to be comple eels: SA (station (floatin	at max si) ted for tube se i-508 Class 3a ary, mart spec. no.) N/A	ctions.	(°F) (°B) (0.88 in. (S single) (dia. in. (se	Min. pressure  de) / 125.62 li  bject to press.))  N/A	etc If bar, gi	) 70° (°F)	Pneu., hydro (2.00 in. chness (n.)) VA kness (in.))		Welded hment (welded, N/A	(psi)
. Design ms 11 an . Tubesh . Tubes:	Pressure <sup>2</sup> 11 (p d 12 to be comple eets: SA (station (floatin SB-16	st maxistic at maxistic at maxistic at maxistic at maxistic at the second ary, martispec. no.)  N/A  19, martispec. no.)  3 UNS N0669( nartispec. no.)	ctions.	500° (°F) 3.88 in. (S sin. (Sd. in. (sd.	Min. pressure  de) / 125.62 li  object to press.))  N/A  dia. (in.)]  0.750 in.  [OD (in.)]	etc. if bar, gi	). 70° ("F)  2 (thick thick th	Pneu., (hydro 12.00 in. 12.00 in. 12.00 in.) 14/A Inness (in.)) 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	(attac	Welded thment (welded, N/A (attachment	(ps/) boked)(
. Design ms 11 an . Tubesh . Tubes:	Pressure <sup>2</sup> 11 (p d 12 to be comple eets: SA (station (floatin	st maxistic at maxistic at maxistic at maxistic at maxistic at the second ary, martispec. no.)  N/A  19, martispec. no.)  3 UNS N0669( nartispec. no.)	ctions.	500° (°F) 3.88 in. (S sin. (Sd. in. (sd.	Min. pressure  de) / 125.62 li  object to press.))  N/A  dia. (in.)]  0.750 in.  [OD (in.)]	etc. if bar, gi	). 70° ("F)  2 (thick thick th	Pneu., (hydro 12.00 in. 12.00 in. 12.00 in.) 14/A Inness (in.)) 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	(attac	Welded thment (welded, N/A (attachment	(psi) boiled); ) Tubes
. Design ms 11 an . Tubesh . Tubes: ms 13 to	Pressure <sup>2</sup> 11 (p d 12 to be comple eets: SA (station SB-16 (r 16 inclusive to be N/A	at max stip at max sted for tube se s-508 Class 3a any, marti spec. no.) N/A ng, marti spec. no.) 3 UNS N06690 na/1, spec. no.) completed for	ctions. 123	500° (°F)  9.88 in. (S single in. (single	Min. pressure  de) / 125.62 is  bject to press.j)  N/A  de. (in.j)  0.750 in.  [OD (in.j)  reted vessels	etc. if bar, gi	). 70° ("F)  2 (thick  0.043 in  nels of heat exists.	Pneu., (hydro	5128 (no.)	Welded hment (welded, N/A (attachment U-Bend type (straig	(ps/) boked)(
. Design ms 11 an . Tubesh . Tubes: ms 13 to	Pressure <sup>2</sup> 11 (p d 12 to be comple eels: SA (station (floatin SB-16	at max stip at max sted for tube se s-508 Class 3a any, marti spec. no.) N/A ng, marti spec. no.) 3 UNS N06690 na/1, spec. no.) completed for	ctions. 123	500° (°F)  9.88 in. (S single in. (single	de) / 125.62 li voject to press.i) N/A de. (in.i) 0.750 in. 100 (in.j) reted vessels	etc. if bar, gi	) 20 (TF) ) 2 (thick   N (thickness (inches or nels of heat e.	Pneu., (hydro	5128 (no.)	Welded hment (welded, N/A (attachment U-Bend type (straig	(ps/) boiled)  Tubes ht or U)
. Design ms 11 an . Tubesh . Tubes: ms 13 to . Shell:	Pressure <sup>2</sup> 11 (p d 12 to be comple eets: SA (station (floatin SB-16 (r 16 inclusive to be N/A (mart. spec. no.) N/A	st)  ted for tube se (-508 Class 3a ary, matl spec. no.)  N/A ng, matl spec. no.)  3 UNS N06690 (sen	inner cham	500° (°F)  9.88 in. (S sin (sin (sin (sin (sin (sin (sin (sin	Min. pressure  de) / 125.62 is  bject to press.))  N/A  da. (in.)]  0.750 in.  [OD (in.)]  reted vessels  N/A  n. (hickness (in.))	etc. If bar, gi	). 70° ("F)  2 (thick  0.043 in  nels of heat e.  N/A  design thickness (i)	Pneu., (hydro 12.00 in. 12.00 in. 14/A 15/A 15/A 15/A 15/A 15/A 15/A 15/A 15	5128 (no.) N/A D (ft & in.)]	Welded himent (welded, N/A (attachment U-Bend ftype (straig	(ps/) boked()  Tubes int or U)  //A sii) (ft & in.))
ms 11 an Tubesh Tubes: ms 13 to Shell:	Pressure <sup>2</sup> 11 (p d 12 to be comple eets: SA (station (floatin SB-16 (r 16 inclusive to be N/A (mart. spec. no.) N/A [long. (welded. dbi., si	ted for tube se (-508 Class 3a ary, mart spec. no.) N/A 19, mart spec. no.) 3 UNS N06690 (ten (ten	ctions.  125  inner cham. N/A  ste strength)	0.88 in. (S single for the control of the control o	Min. pressure  de) / 125.62 is  bject to press.))  N/A  da. (in.)]  0.750 in.  [OD (in.)]  reted vessels  N/A  n. (hickness (in.))	etc. If bar, gi	) 20 (thick of the control of the co	Pneu., hydro  2.00 in.  choess (n.))  VA  kness (n.))  gage))  xchangers.	5128 (no.) V/A D (ft & in.)}	Welded himent (welded, N/A (attachment U-Bend ftype (straig	(ps/) boked()  Tubes int or U)  //A sii) (ft & in.))
. Design ms 11 an . Tubesh . Tubes: ms 13 to . Shell:	Pressure 2 11 (p d 12 to be comple eets: SA (station (floatin SB-16 (r 16 inclusive to be N/A (mart. spec. no.) N/A [long. (welded. dbi., si SA-508 Class 3	ted for tube se (-508 Class 3a ary, mart spec. no.) N/A ng, mart spec. no.) 3 UNS N06690 (ten (ten	inner cham N/A sile strength) N/A T* (yes or no)]	0.88 in. (S single line in. (see line in. (s	Min. pressure  de) / 125.62 is  bject to press.))  N/A  dia. (in.)]  0.750 in.  [OD (in.)]  reted vessels  N/A  n. (hickness (in.))  (  N/A	etc. If bar, gi	). 70° ("F)  2 (thick  0.043 in hickness (inches or innels of heat expenses of heat expenses of heat expenses (inches or innels or innel	Pneu., (hydro	5128 (no.) N/A D (ft & in.)] Full (RT)	Welded himent (welded, N/A (attachment U-Bend ftype (straig	(ps/) borked)  Tubes intor U)  //A  N/A o, of courses
ms 11 an Tubesh Tubes: ms 13 to Shell:	Pressure <sup>2</sup> 11 (p d 12 to be comple eets: SA (station (floatin SB-16 (r 16 inclusive to be N/A (mart. spec. no.) N/A [long. (welded. dbi., si	ted for tube se (-508 Class 3a ary, mart spec. no.) N/A ng, mart spec. no.) 3 UNS N06690 (ten (ten	inner cham N/A Ste strength) N/A T' (yes or no)]	0.88 in. (S single line in. (see line in. (s	de) / 125.62 in ubject to press.)) N/A 00.750 in. [OD (in.)] reted vessels N/A . thickness (in.))	etc. If bar, gi	). 70° (TF) ) 2 (thick of the control of the contro	Pneu., (hydro	5128 (no.) N/A 0 (ft & in.)}	Welded himent (welded, N/A (attachment U-Bend ftype (straig	(psl)  boiled()  Tubes  ht or U)  /A  aii) (ft & in.))  N/A  o of courses
ms 11 an Tubesh Tubes: ms 13 to Shell:	Pressure <sup>2</sup> 11 (p d 12 to be comple eels: SA (station (floatin SB-16 (r 16 inclusive to be N/A (mart. spec. no.) N/A [long. (wekled. dbi., si SA-508 Class 3	ted for tube se a-508 Class 3a ary, marl spec. no.) N/A ng, marl spec. no.) 3 UNS N06690 (Nen (Nen (Nen (Nen (Nen (Nen (Nen (Nen	inner cham N/A ste strength N/A T' (yes or no)] 90 Ksi sile strength) Crown	9.88 in. (S single line in. (single line	Min. pressure  de) / 125.62 li  ubject to press.))  N/A  dia. (in.)]  0.750 ln.  [00 (in.)]  (eted vessels  N/A  n. (hickness (in.))  (  N/A  p) main spec. no.)  Elliptical	etc. If bar, gi	). 70° ("F)  ) 2 (thick of the strength) (girth) (girt	Pneu., (hydro  2.00 in.  Chress (in.))  VA  Kness (in.))  xchangers.  in.))  t weld Yes  (HT¹)    (tc) m	5128 (no.)  N/A (nt& in.))  Full (RT)  N/A at spec. no.)	Welded hment (welded, N/A (attachment U-Bend Type (straig) N [length (overs to N Side to Pe	(psl) boned()  Tubes ht or U()  /A si) (f & in.))  N/A o. of courses /A strength)
ms 11 an Tubesh Tubes: ms 13 to Shell: Heads:	Pressure <sup>2</sup> 11 (p d 12 to be comple eets: SA (station  (floatin SB-16 (r 16 inclusive to be N/A (mati. spec. no.) N/A [long. (welded. dbl., si SA-508 Class 3 [ia) mati spec. no Location	st)  ted for tube se a-508 Class 3a ary, mart spec. no.)  N/A ng, mart spec. no.)  3 UNS N06690  (ten  (ten  Thickness	inner cham N/A site strength N/A T' (yes or no!) 90 Ksi site strength Crown Radius	9.88 in. (S single in. (so in the soft jack)  [out the soft jack)  [norm   N/A (RT)    [Knuckle   Radius	Min. pressure  de) / 125.62 li ubject to press.)) N/A  dia. (in.)] 0.750 in. {OD (in.)] (eted vessels N/A is. (hickness (in.))  // N/A is pressure  Elliptical Ratio	etc. If bar, gi	). 70° ("F)  2 (thick of the set	Pneu., (hydro 2.00 in. chness (n.))  VA kness (n.))  xchangers.  in.)	5128 (no.)  N/A O (fl & in.))  Full (RT)  N/A at spec. no.)	Welded  N/A (attachment U-Bend Type (straig N  [tength (overs n  tensile	(psl) borked)  Tubes ht or U)  /A si) (f & in.))  N/A o. of courses /A strength)  ressure
ms 11 an Tubesh Tubes: ms 13 to Shell: Heads:	Pressure 2 11 (p d 12 to be comple eets: SA (station  (floatin SB-16 (r 16 inclusive to be N/A (mart. spec. no.) N/A [long. (welded. dbl., si SA-508 Class 3 [ia) mart spec. no Location p, bottom, ends	st)  ted for tube se a-508 Class 3a ary, mart spec. no.)  N/A ng, mart spec. no.)  3 UNS N06690  (ten  (ten  Thickness  N/A	inner cham N/A ste strength N/A T' (yes or no)] 90 Ksi stile strength) Crown Radius N/A	9.88 in. (S single line line line line line line line li	Min. pressure  de) / 125.62 li ubject to press.))  N/A  dia. (in.)]  0.750 in.  {OD (in.)]  (eted vessels  N/A  i. (hickness (in.))  (  N/A  D) mail spec. no.)  Elliptical Ratio N/A	etc. If bar, gi	). 70° ("F)  2 (thick of the are expenses of heat expenses functioness (inches or inches or inches or inches or inches or heat expenses of heat expenses (inches or inches or in	Pneu., (hydro 2.00 in. choess (n.))  VA kness (n.))  xchangers.  in.))   dia. 1  yes (HT')   (lc) m  Hemispherical Radius N/A	5128 (no.)  N/A  O (fl & in.))  Full  (RT)  N/A  art spec. no.)  Flat Diameter  N/A	Welded  A/A  (attachment U-Bend Type (straig  N  (n  (nensite Side to Pr (convex or c	(psl) borkedH  ) Tubes int or U]  //A  N/A  N/A  o. of courses //A  strength  ressure concave)
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. Design ms 11 an . Tubesh . Tubes: ms 13 to . Shell: . Seams: . Heads: . (a) To . (b) Cr . (c) Fice	Pressure <sup>2</sup> 11 (p d 12 to be comple eels: SA (station (flootin SB-16 (r 16 inclusive to be N/A (mart. spec. no.) N/A [long. (wekled. dbi., si SA-508 Class 3 [la) mart spec. no Location p, bottom, ends name) sating	st max st ted for tube se s-508 Class 3a ary, mart spec. no.) N/A ng, mart spec. no.) 3 UNS N06690 (nart, spec. no.) completed for (ten Thickness N/A 6.19 in.	inner cham N/A Site strength) N/A 17' (yes or ne)] 90 Ksi Isile strength) Crown Radius N/A N/A	Soo *  O *  O *  O *  O *  O *  O *  O *	Min. pressure  de) / 125.62 li ubject to press.)) N/A  dia. (in.)] 0.750 in. {OD (in.)} (eted vessels N/A i. (hickness (in.))  // // // // // // // // // // // //	etc. If bar, gir	). 70° ("F)  2 (thick of the strength)  N/A (tensite strength)  N/A (tensite strength)  N/A (tensite strength)	Pneu., (hydro  2.00 in.  Choress (in.))  VA  Inness (in.))  Exchangers.  It weld Yes  (HT)  (Ic) m  Hemispherical Radius  N/A  62.81 in. (ID)  N/A	5128 (no.)  N/A (no.)  Full (RT)  N/A all spec. no.)  Flat Diameter N/A N/A N/A her fastening	Welded N/A (attachment U-Bend Type (straig N Tength (overs Concar N/A Concar N/A (describe or at	(psl) borked)  Tubes ht or U)  /A si) (ft & in.))  N/A o, of courses /A strength)  ressure concave)
. Design ms 11 am . Tubesh . Tubes: ms 13 to . Shell: . Seams: . Heads: (a) To (b) Cr (c) Fic	Pressure 2 11 (p d 12 to be comple eels: SA (station  (floatin SB-16 (r 16 inclusive to be N/A (mart. spec. no.) N/A [long. (welded. dbl., si SA-508 Class 3 [la) marti spec. no Location p. bottom, ends namel patting	st)  ted for tube se a-508 Class 3a ary, mart spec. no.)  N/A g, mart spec. no.)  3 UNS N06690  (sen  (sen  Thickness  N/A  6.19 in.  N/A	inner cham N/A site strength) N/A T' (yes or no!) 90 Ksi site strength) Crown Radius N/A N/A N/A	Soo *  O *  O *  O *  O *  O *  O *  O *	Min. pressure  de) / 125.62 li  ubject to press.))  N/A  dia. (in.)]  0.750 In.  [OD (in.)]  (eted vessels  N/A  i. (hickness (in.))    N/A  i. (hickness (in.))  Elliptical  Ratio  N/A  N/A  N/A  N/A  N/A	etc. If bar, gir	). 70° ("F)  ) 2 (thick of the control of the contr	Prieu., (hydro 12.00 in. 12.00 in. 12.00 in. 12.00 in. 14.4  Inchess (in.)) 15. 16. 17. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18	5128 (no.)  N/A (no.)  Full (RT)  N/A at spec. no.)  Flat Diameter N/A N/A N/A	Welded N/A (attachment U-Bend Type (straig N Tength (overs Concar N/A Concar N/A (describe or at	(ps/) boned)  Tubes int or U)  //A  N/A o. of courses //A supength)  ressure concave)

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(7/98)

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

Certificate Holder's Serial No. WB1-RSG-D

17.	Nozzles, inspection and safety	valve openings:							
	Purpose	T			How			Reinforcement	T
	(inlet, outlet, drain, etc.)	Quantity	Dia. or Size	Туре	Attached	Mati	Thickness	Material	Location
		<b> </b>	ļ	ļ <u> </u>			ļ		ļ
	(See pages 3 an	4 of this Dat	Report for com	plete table	of nozzie, insp	ection and	safety valve op	enings)	
		<u> </u>	<del>}</del>	<del> </del>			<del> </del>		
			<del> </del>			<b></b>	<del></del>		1
		<del> </del>		<del> </del>	<del> </del>		<del> </del> -		+
		<b></b>	<del></del>	<del>                                     </del>	<del> </del>	<del> </del>	<del></del>		<del>                                     </del>
18	Supports: Skirt No	Lugs N/A	LegsN/A	Other	4 Suppor	t Pads	Attache	Channel head /	Integral forged
	(yes or no)	(quantity)	(quanth)	0	(des	scribe)		(where and h	DW)
19.	Remarks: 1.) This assembly Authorization N-2							Co. Ltd. under NP1 Report for S/N -N	
							e rollers Data	Neport for S/14 -14	720101401-04
	.) Unit received full PWHT a						s overdald with	weld deposited Ni-	Cr-Fe alloy
	.) The Primary Side of the to .) Line 10 - Max. Pressure D								
	.) Line to - max. Plessure D	merential acro	135 10062 - 010 F	SID & GOO	r, Line 10 - ma	ax. Pressu	re Dinerential ac	1058 (does - 1000	F 310 81 030 F
		· · · · · · · · · · · · · · · · · · ·	CE	DTIECATION	ON OF DESIGN				
De	sign specification certified by	Bruce	A. Beil	KIIFICATI	JN OF DESIGN		P.E. State	TN Reg. no.	102034
	sign report certified by		R. Schwall					TN Reg. no.	10121
- 50	Sign report contined by						- P.E. State -	Reg. No.	
			CERTIF	ICATE OF S	SHOP COMPLIA	ANCE			
We	e certify that the statements	made in this	report are corre	ct and that	this nuclear v	essel conf	forms to the rule	es for construction	of the ASME
	de, Section III, Division 1.		N 4.				N	. 2007	DAK
	Certificate of Authorization No	101	N-1			Expires	November 24		
Da	te August 17, 2005	Name	stinghouse Elec	ale Holder)	ny LLC	Signed	Terry L. Casteel	ithorized representative)	rascu
		<del></del>					<del></del>		
					SHOP INSPEC				<b>.</b> .
1, 1	the undersigned, holding a Tennessee and emn	_	ion issued by the he Hartford Stea				-		e or Province
of	Tennessee and emp	·-,,	, Connecticut		<del></del>				
_	8-17-05 and s		<del></del>			•	•	described in this Da	-
	, und s		best of my knowle	dge and beli	et, the Certifica	ite Holder	nas constructed	this component in	accordance
	h the ASME Code, Section III. signing this certificate neith		or nor his employ	er makes a	inv warrantv. e	expressed	or implied, conce	erning the compone	ent described
in t	his Data Report. Furthermor	e, neither the	inspector nor his	employer s					
or	a loss of any kind arising	from or conne	cted with this ins	spection.					
Da	te August 17, 2005 Sign	ned James R		us 11.18	from Cor	nmissions	NB 10822 N	TENN 2693	
			(Authorized Nuclea	r Inspector)			(Nat1. Bd. (ind. en	dorsements) and state or	prov. and no.]
			CERTIFICATE	OF FIELD	ASSEMBLY CO	MPLIANC	E		
We	e certify that the statements	on this repor	t are correct and	that the f	ield assembly	constructio	n of all parts of	this nuclear vessel	conforms to
	rules of construction of the	•			•				
N	Certificate of Authorization 1	No	N/A		E	Expires		N/A	
Da	te N/A Nam	ne	N/A			Signed		N/A	
			(N Certificate	Holder)			(auti	horized representative)	
			CERTIFICATE	OF FIELD	ASSEMBLY IN	SPECTION	ł		
l, t	ne undersigned, holding a val	id commission	issued by the N	lational Boa	ard of Boiler a	nd Pressur	e Vessel Inspec	tors and the State	or Province
of	N/A and emp		•		N/A		,		
	of	N.	/A	have con	npared the stat	tements in	this Data Repor	t with the describe	d component
and	d state that parts referred to	as data items			N/A		,not in	cluded in the certific	cate of shop
	pection, have been inspecte		N1/ A	ar	nd that to the be	st of my kn	owledge and beli	ef the Certificate Ho	lder has
	structed and assembled this	•		e ASME Co	de, Section III, I	Division 1.			ļ
	signing this certificate neither								
	his Data Report. Furthermore a loss of any kind arising fro				hall be liable in	any mani	ner for any perso	onal injury or prop	erty damage

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[Nat'l Bd. (incl endorsements) and state or prov. and no.]

N/A

(Authorized Nuclear Inspector)

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

Pg. 3 of 4

1.	Manufactured and cer	ified by Westing	house Electric (	Company LLC, 435	0 Northern Pike, Mo	nroeville Pennsylvar	la 15146	
					(name and address of N Cort	ficate Holder)		
2.	Manufactured for	Tennessee Valley Au	thority (TVA), W	atts Bar Nuclear P	Plant, Unit 1, 1260 Nu	clear Plant Road, Hg		
	•			(name and address of N Contracto Holder)  VA), Watts Bar Nuclear Plant, Unit 1, 1260 Nuclear Plant Road, Hgwy 68, Spring City Tennessée 37381  (name and address of Purchaser)				
3.	Location of installation	Tennessee Valley Au	thority (TVA), W	latts Bar Nuclear P	Plant, Unit 1, 1260 Nu	clear Plant Road, Ho	wy 68, Spring Ci	ty 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, he	et ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Nafl. Bd. no.)	(year built)

6. Shelf:

#### (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 Ksl	3.72 In.	3.72 In.	14 ft 0.50 ln.	13 ft 5.09 in.
Upper Shell -1 Barrel	SA-508 Class 3a	90 Ksl	3.72 ln.	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 Shelf -2 Barrel	SA-508 Class 3a	90 Ksl	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 Ksl	3.11 and 4.06 in.	3.11 and 4.06 ln.	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:

Section 17: (able 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: Westlin	ghouse Electric Compa	IN Certificate of Autho	rization No.:	I-1149	Expires	November 24, 2007
Authorized Representative	Terry L. Casteel	Joing fl	islu		Date	August 17, 2005
Authorized Nuclear Inspector	James R. Myhan	amp n. M. from	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005
						-

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

Pg. 4 of 4

Manufactured for	c Company LLC, 4350 N	ny LLC, 4350 Northern Pike, Monroeville Pennsylvania 15146							
	2. Manufactured for				(nai	ne and address of N Ce	ruficate Holder)		
2.	Manufact	tured for	Tennessee	Valley Authority (TVA)	, Watts Bar Nuclear Plar	nt, Unit 1, 1260 No	uclear Plant Road, Hg	wy 68, Spring City	Tennessee 37381
		-			{name a	nd address of Purchaser	)		
	uclear Plant Road, Hg	wy 68, Spring City	Tennessee 37381						
						(name and address)			
4.	Туре	Vertical	Ht. Excl	n. (Steam Generator)	WB1-RSG-D	N/A	10010E01, Rev. 3	88	2005
	· -	hortz, or vert.)	(tank,	jacketed, heat ex.)	(Cert. Holder's serial no.)	(CRN)	(drawing no.)	(Narl. Bd. no.)	(year built)
4-									

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 Sheli
Recirculation Nozzle Nuts	8	1"	1.000-BUNC-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	Boited	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-28	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: Westin	ghouse Electric Company L	M Certificate of Author	orization No.:	N-1149	Expires	November 24, 2007
Authorized Representative	Terry L. Casteel	Win Klus			Date	August 17, 2005
	•					
Authorized Nuclear Inspector	James R. Myhan	N. Myhan	Comissions:	NB 10822 N TENN 2693	Date	August 17, 2005

APP. V PG131 OF 196

### F-8.4-2 Rev. 0

### DOOSAN TVA Watts Bar Unit-1 RSG Contract # 16346



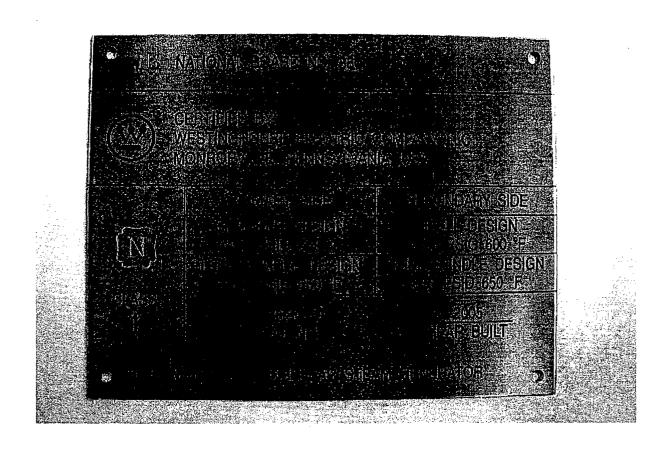
### **CODE SYMBOL STAMPING REVIEW LIST**

Cust	omer:	Tennessee Valley Authorit	Westinghouse PO No.:	45001	03901	
ltem:	Rep	placement Steam Generator	Mfr. Ser. No.: <u>N02018</u>	M01-04		
Supp	olier: _C	Doosan Heavy Ind. & Const. Co. Ltd.	Natl. Board No.: 88		·	
Code	Section	n: III - Div. 1 Class: 1	Edition: 1989	Addend	la: <u>No</u>	ne
		•			ок	N/A
1.	Design	Specification			$\boxtimes$	
2.	Design	Report	•		$\boxtimes$	
3.	Supplie	er Traveler:				
	a. A	All operations have been completed and a	accepted by Quality and A	NI.	$\boxtimes$	
4.	Hydros	tatic, pneumatic or structural integrity tes	t:			
	a. F	Proper procedure available and in use;			$\boxtimes$	
	b. P	Pressure gage properly calibrated;			$\boxtimes$	
	c. F	Pressure, holding time;			$\boxtimes$	
	d. F	Fluid quality, temperature.			$\boxtimes$	
5.	Comple	etion of Data Report Form for fabrication.			$\boxtimes$	
6.	Code S	Symbol stamping by supplier for fabricatio	n.		$\boxtimes$	
7.	Comple	etion of Data Report form by Westinghous	se and ANI.		$\boxtimes$	
8.	ANI aut	thorization for Westinghouse to apply Co	de Symbol stamp.		$\boxtimes$	
Comi	ments:			•		
		1				
		// $//$	2			
Terrv	L. Caste	eel Villa / Sia Via	<b>&gt;</b>	Augus	st 17, 20	005
Quali		- may france		Date		
lame	s Myhar	mus M. Myhan		Augus	st 17, 20	005
		uclear/inspector		Date	. 11, 20	
	•	$\smile$				

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

APP. V PG 132 OF 196

DOOSAN TVA Watts Bar Unit-1 RSG Contract # 16346



APP. V PG 133 OF 196

### 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

Pg. 1 of 3

. Manuiaci	tured and certified by Doose			address of NPT Certificate F	Holder)		
Manufact	tured for Westinghouse El	ectric Company LLC	Energy Center :	Site 4350 Northern	Pike Monroev	rille, PA 1514	6. USA
				and address of purchaser)			
Location	of installation Tennessee Va	illev Authority Watte Bar N	Judgar Power Plai	at Unit 1 1260 Nuclea	r Plant Road Ho	nw 68 Spring	City TN 37381 US
. Location	Of Illstallation Termessee ve	mey radionly wats barr	ducear rower rigi	(name and address)	ar rancroud, rig	gily co, opining	O.(), 1110100100
					<b>8</b> 11.6		2005
. Type:	10010E01 Rev.3	SA508 CL.3a (mat'l. spec. no.)	90 (tensile s	ksi	N/A (CRN)	<del></del> · <del></del>	(year built)
	(drawing no )	(mat i. spec. no.)	(tensile s	rengui)	(CAN)		(year bom)
ASME Co	de,Section III,Division 1 :	1989	No	Addenda	1	t	N-20-3
		(edition)		(addenda data)	(4	dass)	(Code Case no.)
	4	teen (Div. O entra	A1/A	Davisias	N/A	Date	N/A
Fabricate	d in accordance with Const. S	spec. (Div. 2 only)	N/A (no.)	Revision	IN/A	Date	13/2
			• • •				
Remarks	: 1. Item Name : Wa	atts Bar Unit 1 Replac	ement Steam G	enerator "1D" set			
	2. ( )* : DOOSA	N No					
	2.( ) .00037	1110.					
When ap	plicable, Certificate Holder' Da	ata Reports are attached		ia. ID (ft & in.) See P			
<u>.                                 </u>		ata Reports are attached		his report :			National
	Part or Appurtenance			his report :	lenance	E	Board No.
	Part or Appurtenance Serial Number	National Board No. In Numerical O	for each item of	his report : Part or Appurt Serial Num	lenance	E	
(1)	Part or Appurtenance	National Board No.	for each item of	his report :  Part or Appurt  Serial Nurr	lenance	E	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O	for each item of	Part or Appurt Serial Nuri 26)	lenance	E	Board No.
(1)	Part or Appurtenance Serial Number	National Board No. In Numerical O	rder ()	his report :  Part or Appurt  Serial Nurr	lenance	E	Board No.
(1) (2) (3)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O	rder ()	Part or Appurt Serial Num 26) 27) 28)	lenance	E	Board No.
(1) (2) (3) (4) (5) (6)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 30)	lenance nber	E	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 30) 31)	lenance nber	E	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 30) 31) 32)	lenance nber	E	Board No.
(1) (2) (3) (4) (5) (6) (7) (8) (9)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 30) 31) 32) 33)	lenance nber	E	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 30) 31) 32)	lenance nber	E	Board No.
(1) — (2) — (3) — (4) — (5) — (6) — (7) — (8) — (9) — (10) —	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 30) 31) 32) 33) 34)	lenance nber	E	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 30) 31) 32) 33) 34) 35) 36) 37)	lenance nber	E	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 30) 31) 32) 33) 34) 36) 37) 38) 39)	lenance nber	E	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 30) 311 32) 33) 34) 35) 36) 37) 38) 39)	lenance nber	E	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 30) 33) 34) 35) 36) 37) 38) 39) 40)	lenance nber	E	Board No.
(1) (2) (3) (4) (5) (6) (7) (10) (11) (12) (13) (14) (15) (16) (17) (17) (17) (17) (17) (17) (17) (17	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 30) 31) 32) 33) 34) 35) 36) 37) 38) 38) 40) 41)	lenance	E	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 30) 31) 33) 34) 35) 36) 37) 38) 39) 40) 411	lenance nber	E In Nu	Board No.
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (15) (16) (17) (18) (18)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 30) 31) 33) 34) 35) 36) 37) 38) 39) 40) 411	lenance nber	E In Nu	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 30) 31) 32) 33) 34) 35) 36) 37) 38) 39) 40) 41) 42) 43) 44) 45)	lenance	E In Nu	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 29) 31) 31) 32) 33) 34) 35) 36) 37) 38) 39) 40) 41) 42) 43) 442 443 45) 46) 47)	lenance nber	E In Nu	Board No.
(1) (2) (3) (4) (5) (6) (7) (8) (9) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (23)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 30) 311 322 33) 34) 35) 36) 37) 38) 40) 41) 42) 43) 44) 45) 46) 47)	lenance nber	E In Nu	Board No.
(1)	Part or Appurtenance Serial Number N02018M01-04	National Board No. In Numerical O N/A(DN-130)	rder 7)*	Part or Appurt Serial Num 26) 27) 28) 30) 311 322 33) 34) 35) 36) 37) 38) 40) 41) 42) 43) 44) 45) 46) 47)	lenance nber	E In Nu	Board No.

\*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 % 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.

10.Design pressure 1185 (S side)/2485 (P side) psi. Temp. 600 / 650 \*F.

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

Hydro, test pressure 1481(S side)psi/3107(P side)psi at temp. 'F

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### FORM N-2 (Back - Pg. 2 of <u>3</u>)

	Certificate Holder's S	erial Nos. N02018M0	11-04 thr	ough	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 C	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, Divi	sion 1.			
NPT Certificate of Authorization No.	N-2767	Exp	iresJ	ANUARY. 8	. 2006
Date & Moit Name Doosa	n Heavy Industries & Construction (NPT Certificate Holder)	on Co. Ltd. Signed	(autho	S. C. C. C. Contraction of the c	mf ve) f
	CERTIFICATE OF SH	OP INSPECTION			
I, the undersigned, holding a valid com	mission issued by the National Boar	d of Boiler and Pressure	Vessel Inspect	tors and the S	tate or Province
of <u>OH10</u> and emp	loyed byThe Hartford Steam	Boiler Inspection and	Insurance Co		
of <u>CT.</u>	have inspected these items describ	ed in this Data Report o	n <u>8-12-</u>	<u>05</u> , and	state that to th
best of my knowledge and belief, the Co	ertificate Holder has fabricated these	parts or appurtenances	in accordance	with the ASM	E Code, Section
III, Division 1. Each part listed has beer	authorized for stamping on the date	shown above.			
By signing this certificate, neither the	inspector nor his employer makes ar	ny warranty, expressed o	r implied, conc	eming the equ	ipment describ
in this Data Report. Furthermore, neithe	er the inspector nor his employer sha	ill be liable in any manne	r for any persor	nal injury or pr	operty damage
or a loss of any kind ansing from or con	nected with this inspection.				
Date 8-12-05 Signed 6	Rfrancer	Commissions	410 16	9	

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### 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

Pg. 3 of 3

1. Manufa	ctured and certified by Do	oosan Heavy Industries & Con.	struction Co.,Ltd. 555,Guygo	ok-Dong, Chang-Won, Kyu	ng-Nam, Korea.
			(name and address of NPT Co	ertificate Holder)	
2. Manufac	ctured for Westinghous	e Electric Company LLC En	ergy Center Site 4350 No	rthern Pike Monroeville, i	PA 15146, USA
			(name and address of pu	rchaser)	
3. Location	n of installation <u>Tennesse</u>	e Valley Authority Watts Bar Nuc	lear Power Plant, Unit 1, 1260	Nuclear Plant Road, Hgwy 6	8, Spring City, TN 37381 USA
			(name and addre	rss)	
4. Type:	10010E01 Rev.3	SA508 CL.3a	90 ksi	N/A	2005
	(drawing no.)	(mat1. spec. no.)	(tensile strength)	(CRN)	(year built)
8.Nom. thi	ickness (in.) See Below	Min. design thickness (in.) S	See Below Dia. ID (ft & in.)	See Below Length over	all (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 overal (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	Ф 168.50"	5'-2.41"
Upper Shell #2	SA508 CL3a	90 Ksi	3.92"	3.72	Ф 168.50"	13'-5.09"
Shell Cone	SA508 CL3a	90 Ksi	3.92"/ 3.90"/ 3.19"	3.72"/ 3.73"/ 3.11"	Ф 129.88"/Ф 168.50"	7'-8.09"
Lower Shell #1	SA508 CL3a	90 Ksi	4,13"/ 3.19"	4.06"/ 3.11"	Ф 129.88"	14'-1.58"
Lower Shell #2	SA508 CL3a	90 Ksi	3.19"	3.11"	Ф 129.88"	14'-1.58"

Purpose	Q't y	Dia.or Size	Туре	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 Nozzie	1	3.0" NPS	Forging	Welded	SA-182 Grade F11	0.300"	Build-up	Tubesheet

APP. V PG 136 OF 196

Salama Salah	a et alana are transporte a constituir e de l'alana a communità de l'alana acceptante de l'alana de l'alana de							
200	v ·							
	DOOSAN NO.							
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	more use in section							
of contracting of	DESIGN PRESSURE	D STREETH THE THE THE THE THE THE THE THE THE						
HYDRO TEST PRESSURE  APPLICABLE CODE								
		PRINT NEW THE THE TANK TO THE TELESTICS.						
get in which	WATTS BAR NUCLEAR	WATTS BAR NUCLEAR POWER PLANT. UNIT 1						
		Doosan Feavy Industries & Construction Co., Ltd.						
. Water	A SAME TO SAME THE SAME OF SAM							

Owner TEN	NESSEE VALLEY A	UTHORITY	Date	12/1/06	,		
1101 <b>M</b> a	Name arket St., Chattanoo	ga, TN 37402	Sheet	of			
Plant Watts	Address s Bar Nuclear Plant		Unit U	nit 1			
P. O. Bo	Name ox 2000, Spring City	, TN 37381	WO #: 05	-818887-004			
. Work Performe	Address ed by Bechtel Consti	ruction Company		Repair Organization P e Symbol Stamp		. Job No., etc.	
P. O. Bo	ox 549, Soddy-Daisy	Name , TN 37384	Authorizat	tion No N/A			
	Address		Expiration	Date N/A	• • • • • • • • • • • • • • • • • • • •		
. Identification of	f system FEEDWA	TER PIPING				<u> </u>	
(b) Applicable I	Edition of Section XI	ASME SECT. III 19 71  Utilized for Repairs or Replaced and	or Replacer	ments 1989	a, N/A 	Coo	de Case
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)
tame or component	Traine of Mandractores	West and actual of Contain No.	Board 140.	Other Identification	Ounc		140/
WBN-1-PIPE- 003-B	N/A	N/A	N/A	N/A	N/A	Replacement	NO
				·			<del></del>
		·					
Description of V	Vork REMOVAL &	REINSTALLATION C	F FEEDW	ATER PIPING	5тт.	Gev#4	
Tests Conducte	d: Hydrostatic □ P Other □ Press	neumatic  Nomina ure psi	l Operating Test Te	Pressure 🖭 🦸	l-78 F (4	I-3-903 NO# 05-8	3 20536~
OTE: Supplem 11 in., (2	ental sheets in form ) information in item	of lists, sketches, or s 1 through 6 on this of sheets is recorded	drawings m	nay be used, prov cluded on each s	vided	(1) size is 8	½ in: x

APR V PG 138 OF 196

P. Remarks  Tracking Number: RP-67-103  WO Number: 05-818887-004  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.  Signed  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 Temessee  and employed by   ##5B-CT  of   ##AFFord CT  have inspected the components described in this  Owner's Report during the period  ##15/5-5  to 12/12/6-6  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.
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 Authorization No. N/A  Signed 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 Temesses and employed by HSB-CT of Hartford CT have inspected the components described in this  Owner's Report during the period 8/15/5 to 12/12/5 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
We certify that the statements made in the report are correct and this replacement conforms to the repair or replacement  Type Code Symbol Stamp N/A  Certificate of Authorization No. N/A  Signed Report 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 Temessee and employed by HSB-CT of Hartford CT have inspected the components described in this  Owner's Report during the period 8/15/5 to 12/12/5 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
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repair or replacement  Type Code Symbol Stamp N/A  Certificate of Authorization No. N/A  Signed Report of Nowner's Designee. This  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 Temessee and employed by HSB-CT  of Hartford CT have inspected the components described in this  Owner's Report during the period 8/15/5 to 12/12/5 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
Type Code Symbol Stamp N/A  Certificate of Authorization No. N/A  Signed Regular Serious Serio
Signed Authorization No. N/A  Signed Authorization No. N/A  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 Temessee and employed by HSB-CT  of Hartford CT have inspected the components described in this  Owner's Report during the period 8/15/26 to 12/12/26 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
Signed Authorization No. N/A  Signed Authorization No. N/A  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 Temessee and employed by HSB-CT  of Hartford CT have inspected the components described in this  Owner's Report during the period 8/15/26 to 12/12/26 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
Signed Roger of Survey
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 Texcesses and employed by HSB-CT of Hartford CT have inspected the components described in this  Owner's Report during the period 8/15/05 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
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 Texcessee and employed by HSB-CT of HavTFard CT have inspected the components described in this  Owner's Report during the period 8/15/56 to 12/12/56 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
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texcessee and employed by HSB-CT of Hartford CT have inspected the components described in this  Owner's Report during the period 8/15/56 to 12/12/56 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
Inspectors and the State or Province of Texessee and employed by HSB-cT of Hartford CT have inspected the components described in this  Owner's Report during the period 8/15/56 to 12/12/56 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
have inspected the components described in this  Owner's Report during the period
Owner's Report during the period
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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
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. Earnings. Commissions 1N 2534  Inspector's Signature National Board, State, Province, and Endorsements
Date 12/12 20 06

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	FORMINIS 2 QW	NER'S REPORT FOR	REPAIRS The ASME	ORIRERIACEN Sode Section X	IENII B				
	NESSEE VALLEY A		Date	12/19/06					
	Name arket St., Chattanoo		Sheet	1 of 2					
	Address s Bar Nuclear Plant		Unit U	 nit 1		<u> </u>			
	Name ox 2000, Spring City,	TN 37381		<b>-8</b> 16062-018					
	Address	····	F	Repair Organization P					
3. Work Performed by Bechtel Construction Company Type Code Symbol Stamp N/A  Name  Name									
P. O. Box 549, Soddy-Daisy, TN 37384 Authorization No N/A  Address									
Expiration Date N/A									
4. Identification of system VERTICAL COLUMN SUPPORTS									
	_	ASME SECT. III 19 71  Utilized for Repairs or			i, N/A	Coo	dé Case		
		·	•	<del></del> -					
6. Identification o	f Components Repair	red or Replaced and I	Replaceme I	nt Components			ASME		
						Repaired, Replaced,	Code		
Name of Componen	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	or Replacement	(Yesor No)⊧		
WBN-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacemen	NO		
· · · · · · · · · · · · · · · · · · ·									
			! 						
<del> </del>									
7. Description of V	Vork VERTICAL CO	OLUMN SUPPORT M	ODIFICAT	ON Source	1 2	384			
·		REPLACE CAPS	crows	- JIMGEN	1, 6	-, 7.7.1			
8. Tests Conducte	ed: Hydrostatic □ P	neumatic D Nominal	Operating	Pressure □					
	Other D Press	urepsi	i est i en	np °F			1		
11 in., (2	) information in items	of lists, sketches, or o s 1 through 6 on this r of sheets is recorded	eport is inc	luded on each sh					

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TO PRIVING (BECK)
9. Remarks Tracking Number: RR-07-104 WO Number: 05-816062-018 Applicable Manufacturers 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 <u>replacement</u> 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 Texnessec and employed by HSB-CT
of <u>HarTford</u> <u>eq.</u> have inspected the components described in this
Owner's Report during the period $\frac{9/2/\sigma \xi}{}$ to $\frac{12/19/\delta \xi}{}$ 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.
Inspector's Signature Commissions TN2534  National Board, State, Province, and Endorsements
Inspector's Signature National Board, State, Province, and Endorsements
Date 12/19 20 06
Date

			NER'S REPORT FOI d by the Provisions o				S	
1. Owner	TENN	ESSEE VALLEY AU	JTHORITY	Date	11.30-06			
110	)1 Ma	Name rket St., Chattanooç	ga, TN 37402	Sheet	of			
2. Plant \	Vatts	Address Bar Nuclear Plant		Unit !	Unit 1			
P. (	O. Box	Name x 2000, Spring City,	TN 37381	WO #: 0	5-820128-000			
3. Work Perf	ormed	Address d by Bechtel Constr	ruction Company	Type Co	Repair Organization F de Symbol Stamp			,
P. (	D. Box	x 549, Soddy-Daisy,	Name TN 37384	Authoriza	ation No N/A			
		Address		Expiratio	n Date N/A			
4. Identification	on of :	system RHR/COI	NTAINMENT SPRAY	PIPING S	SUPPORTS - UPF	PER C	ONTAINME	NT
5. (a) Applica	able C	onstruction Code	ASME SECT. III 19 71	Edition	S73 Addenda	a, N//	A Co	de Case
(b) Applica	ble E	dition of Section XI	Utilized for Repairs o	r Replacei	ments 1989			
6. Identification	on of (	Components Repair	ed or Replaced and I	Replacem	ent Components			
Name of Comp	onent	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 (	(SQ)	NA	N/A	NA	NA	NA	REPLACEMEN	r No
CBI-283	328°)	NA	N/A	NA	NIA	NA	REPLACEMEN	- No
7. Description	of W		ID REINSTALLATION G 1 & 4 UPPER COM			SPRA	AY PIPING	
NOTE: Supp	pleme n., (2)	Other * Pressu * Spray Nozzle ental sheets in form information in items	neumatic  Nominal re psi rest Per 1-SI-74-1-A of lists, sketches, or o the first per 1 through 6 on this r of sheets is recorded	Test Ter A&B. drawings report is in	mp°F may be used, prov cluded on each sh			

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FORM NIS-2 (Back)
9. Remarks Tracking Number: PR-07-109 WO Number: 05-820128-000 Applicable Manufacturer's Data Reports to be Atlached
CODE CASE N-416-3
CERTIFICATE OF COMPLIANCE
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> 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 Texnessee and employed by HSB-CT
of have inspected the components described in this
Owner's Report during the period 7/24/56 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.
Sruce M. Earnigh   Commissions   TN 2534   National Board, State, Province, and Endorsements
Date 12/1 20 06

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		NER'S REPORT FOR d by the Provisions of	ALONG CHARLEST SENSE FROM THE CONTROL OF THE	PERSONAL PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PERSONAL PROPE	Onch terral Stores Alles II Care		
1. Owner TENN	ESSEE VALLEY AL	JTHORITY	Date	11-36-08	;		
1101 Ma	Name rket St., Chattanoog	a, TN 37402	Sheet	of			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Box	Name × 2000, Spring City,	TN 37381	WO #: 05-820128-001				
3. Work Performed	Address d by Bechtel Constr	ruction Company	Type Cod	Repair Organization P e Symbol Stamp	.O. No. N/A	. Job No etc.	
	·	lame	• •	ion No N/A			
	Address		Expiration			· · · · · · · · · · · · · · · · · · ·	
4. Identification of	system RHR/CON	NTAINMENT SPRAY	•		ER C	ONTAINME	NT
	_	ASME SECT. III 19 71 Utilized for Repairs of			n, N/A	Coo	de Case
6. Identification of	Components Repair	ed or Replaced and I	Replaceme	nt 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 (Az 176)	N/A	N/A	NA	N/A	NA	Replacement	NO
			,				
7. Description of W		ND REINSTALLATION SG 2 & 3 UPPER CO			SPRA	AY PIPING	
NOTE: Suppleme	Other * Press  * Spray Note that sheets in form information in items	neumatic Definition Nominal Sure psi	Test Te '4-1-A&B drawings m eport is ind	mp°F nay be used, prov cluded on each sh	ided (	1) size is 8½ and (3) each	∕₂ in. x n sheet

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FORM NIS-2 (Back)
9. Remarks Tracking Number: RR - 07 - //O WO Number: 05-820128-001 Applicable Manufacturers 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 <u>replacement</u> conforms to the repair or replacement
rules of the ASME Code, Section XI.
Time Code Simpled Stores N/A
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
Signed Phil Lewis ISI PROGRAM ENGR. Date Mov. 30 20 66  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 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. Earnigh, Commissions TN 2534
Bruce M. Earnigh, Commissions TN 2534  Inspector's Signature National Board, State, Province, and Endorsements
Bruch, Earnigh, Commissions TN 2534 Inspector's Signature National Board, State, Province, and Endorsements  Date 12/1 20 06
Bruch, Earnigh, Commissions TN 2534 Inspector's Signature National Board, State, Province, and Endorsements  Date 12/1 20 06

. Owner TENN	NESSEE VALLEY A	UTHORITY	Date	12-12-06			·. ,	
1101 Ma	Name arket St., Chattanoo	ga, TN 37402	Sheet of					
. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1				
P. O. Bo	Name ox 2000, Spring City	TN 37381	WO #: 05	-818887-003				
	Address ed by Bechtel Consti			Repair Organization P e Symbol Stamp		. Job No., etc.		
		Name	••	tion No N/A				
	Address	, 114 07004	Expiration				······································	
Identification of	system FEEDWA	TER PIPING	LXpiration	/ IVA				
(b) Applicable I		Utilized for Repairs or Replaced and	·	ments 1989	a, <u>N/A</u>	Cod	de Case	
Name of Component	Name of Manufacturer	Manufacturer Senal 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	
	·						<u> </u>	
		·						
Description of V	Vork REMOVAL &	REINSTALLATION (	OF FEEDW	ATER PIPING	STI	n Gov #	<b>≠</b> 3	
	d: Hvďrostatia □ . D	neumatic □ Nomina ure psi	ol Operating	a Proceure #0/	1-TX	7-3-9	163	

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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 <u>replacement</u> conforms to the repair or replacement rules of the ASME Code, Section XI.
Tales of the Nowie Code, Section XI.
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
***************************************
Signed Gent, Lewis ISI PROGRAM ENGR. Date Dec. 12 20 06 Owner of 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 HART Force CT. have inspected the components described in this
Owner's Report during the period to to 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.
Inspector's Signature Commissions <u>FN 2534</u> National Board, State, Province, and Endorsements
Inspector's Signature National Board, State, Province, and Endorsements
Date 12/12 20 06

	TO THE PROPERTY OF THE PROPERT	NER'S REPORT FOR d by the Provisions o	Control of Control of the Control of the	THE PROPERTY OF THE PROPERTY O			
1. Owner TE	NNESSEE VALLEY A	UTHORITY	Date	12/5/0	6		
1101	Name Market St., Chattanoo	ga, TN 37402	Sheet	of			
2. Plant Wa	Address atts Bar Nuclear Plant		Unit L	Init 1			
P. O.	Name Box 2000, Spring City,	TN 37381	WO #: 05	-817773-034		<del></del>	
	Address ned by Bechtel Const			Repair Organization Ple Symbol Stamp	.Ο. No. N/Δ	. Job No etc.	· <del></del>
	·	Name		tion No N/A			-
1.0.	Address	, 114 37304		<del></del>			
4. Identification	of system STEAM (	GENERATOR BLOW	Expiration DOWN / S				
5. (a) Applicabl	e Construction Code e Edition of Section XI of Components Repai	Utilized for Repairs or	r Replacem	nents 1989	n, N/A	Co	de Case
Name of Compone		Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
WBN-1-MISC-0	15 N/A	N/A	N/A	N/A	N/A	Replacement	NO
					,		
						·	
7. Description o	Work REMOVAL &	REINSTALLATION O	F SHELL [	RAIN PIPING	STN G	en#1,2,	3 ई 4
NOTE: Supple	cted: Hydrostatic  P Other  Press mental sheets in form (2) information in items bered and the number	of lists, sketches, or on this r	drawings m	lay be used, providuded on each sh	ided (	1) size is 8½	∕₂ in. x

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		FORM	VIS-2 (Bac	(k)====================================	
9. Remarks Tra	acking Number:	RR-07-	116	WO Number:	05-817773-034
CODE CA	15E N-416-3				
		71113			
	•	CERTIFICATE	OF COMP	PLIANCE	e
We certify that the	statements made	in the report are o	correct and		ent conforms to the
rules of the ASME	Code, Section XI.			repair or re	eplacement
	,				
Type Code Symbol	Stamp N/A				
Certificate of Autho	rization No. N/	Α			
Signed Road	a. Lenlin	Field Fa	ainser	. Date	December 5, 20 06
Oigned 10gc1	Owner or Own	ner's Designee. Title	ineci	Date	<u> </u>
	CER	TIFICATE OF IN	SERVICE	INSPECTION	
I, the undersigned,	holding a valid cor	nmission issued	by the Nat	ional Board of	Boiler and Pressure Vessel
Inspectors and the	_				
of <u>HA</u>	rtford CT.	have	e inspecte	d the compone	nts described in this
					and state that to the best of
my knowledge and	belief, the Owner h	nas performed ex	amination	s and taken co	rrective measures described in
this Owner's Report	in accordance wit	th the requiremen	nts of the A	ASME Code, Se	ection XI.
By signing this certif	icate neither the in	nspector nor his e	employer r	nakes any wari	ranty, expressed or implied,
-					s Report. Furthermore, neither
•		•		ny personal inji	ury or property damage or a loss
of any kind arising fr	om or connected	with this inspection	on.		•
0.	1				
Inspector's	7. Earniel	_ Commissions _	TN 2.	534 Board State P	rovince, and Endorsements
			National	Doard, State, 1	Tovince, and Endorsements
Date	20 0 5	<del></del>			

APP, V PG 149 OF 196

**************************************		NER'S REPORT FOR d by the Provisions o				S	
1. Owner TENN	IESSEE VALLEY AL	JTHORITY	Date	12/1/06	,	•	
1101 Ma	Name arket St., Chattanoog	ga, TN 37402	Sheet	of			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	Init 1			
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05	-816062-015			
	Address d by Bechtel Constr			Repair Organization F e Symbol Stamp			
		Name		tion No N/A		· 	
	Address				····		
4. Identification of	system UPPER L	ATERAL SUPPORT	Expiration	Date N/A	<del></del>		
(b) Applicable E	dition of Section XI	ASME SECT. III 19 71 Utilized for Repairs or	Replacem	nents 1989	a, N//	DDE GASE	de Case <del>N-416-</del> 3 <i>1</i> 3-06
Name of Component		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 W	/ork REMOVAL &	REINSTALLATION O	F UPPER I	LATERAL SUPPO	ORT	S (62)	#2
8. Tests Conducted  NOTE: Supplemental in., (2)	d: Hydrostatic □ Pi Other □ Pressi ental sheets in form information in items	neumatic  Nominal ure psi of lists, sketches, or call through 6 on this roof sheets is recorded	Operating Test Tendrawings meport is inc	Pressure □ np°F lay be used, prov	ided (	1) size is 8½	∕₂ in. x

APR. V PG 150 OF 196

		EORMIN	NS-2 (Back		
9. Remarks Tr	acking Number:	RR-07-117 Applicable Manufacturer	7 's Data Reports to	WO Number: 05-81606:	2-015
CODE CASE N-4	6-3-				
dis	7-13-04				
	V	······································			
			<del></del>		
		<del></del>			
	·	CERTIFICATE	OF COMPL	IANCE	
		CERTIFICATE			
We certify that the	statements made	in the report are o	correct and	this <u>replacement</u> conforn repair or replacement	ns to the
rules of the ASME	Code, Section XI.				
Type Code Symbo	l Stamp N/A				
	· <u></u>				
Certificate of Author			- 4.		
Signed	Koges a. Dwner or Ow	Handus F ner's Designee. Title	Field Engine	<u>ver</u> Date <u>Decembe</u>	r/, 20 06
	CER	TIFICATE OF IN	SERVICE II	NSPECTION	
1, the undersigned,	holding a valid cor	nmission issued t	by the Natio	nal Board of Boiler and F	Pressure Vessel
	=		•	yed by HSB-CT	
of <u>Ha</u>	-TFord ct.	have	inspected	the components describe	ed in this
				7/06 and sta	
my knowledge and	belief, the Owner	nas performed ex	aminations	and taken corrective me	asures described in
this Owner's Repo	t in accordance wi	th the requiremen	its of the AS	ME Code, Section XI.	<i>i.</i>
By signing this cert	ificate neither the i	nspector nor his e	employer ma	akes any warranty, expre	ssed or implied,
concerning the exa	minations and corr	ective measures	described in	this Owner's Report. F	urthermore, neither
the inspector nor h	is employer shall b	e liable in any ma	nner for any	personal injury or prope	erty damage or a loss
of any kind arising	from or connected	with this inspectio	on.		
Bruce ?	M. Earnigh	_ Commissions _	TN25.	3 <mark>4</mark> pard, State, Province, an	
i			National Bo	oard, State, Province, an	d Endorsements
Date 12/7	20 06			•	

APP. V PG151 OF 196

	FORM/NIS-2 OW As Require	NER'S REPORT FOR the design of the Provisions of	REPAIRS f the ASME	OR REPLACEN Code Section X	IENT:	See and a	
1. Owner TENN	IESSEE VALLEY A	JTHORITY	Date	12/05/06			
1101 Ma	Name arket St., Chattanoog	ga, TN 37402	Sheet	of			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05	-816062-017			
	Address d by Bechtel Const			Repair Organization P e Symbol Stamp	.O. No. N/A		
1	-	Name					
P. O. Bo	x 549, Soddy-Daisy,	1N 3/384	Authorizai	tion No N/A			
4. Identification of	system UPPER L	ATERAL SUPPORT	Expiration	Date N/A			
(b) Applicable E	Edition of Section XI	ASME SECT. III 19 71 Utilized for Repairs of	Replacem	nents 1989		DDE CASE	
6. Identification of	Components Repair	red or Replaced and I	Replaceme	nt Components		1	ASME
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)
					_		
WBN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO
					••••		
7. Description of W	ork REMOVAL&	REINSTALLATION O	F UPPER I	_ATERAL SUPPO	DRT		
	Other Dess	neumatic  Nominal urepsi of lists, sketches, or o	Test Ten	np °F	ded (	1) size is 8½	∕₂ in. x
11 in., (2)	information in items	s 1 through 6 on this r of sheets is recorded	eport is inc	luded on each sh			

APP. V PG 152 0F 196

		FORM	NIS-2 (Ba	ick)	
9. Remarks	Tracking Number:	RR-07-	118	WO Numb	er: 05-816062-017
-CODE CASE N	<del>l-416-3-</del>	Applicable Mandiacture	ii s Data Repo	is to be Attached	and the second of the second o
9	1Z9-13-06	· · · · · · · · · · · · · · · · · · ·			
	· · · · · · · · · · · · · · · · · · ·	<del> </del>			
		<del></del>	·		
		····			
	•				
<del></del>		CERTIFICATE	OF COM	IPLIANCE	
	the statements made		correct a	nd this <u>replac</u> repair o	ement conforms to the replacement
Tules of the Ac	ML Code, Section XI.				
Type Code Syn	nbol Stamp N/A				
Certificate of A	uthorization No. N/	Α			
			1 ~	5-4	Da / 5 00 00
Signed 16	Owner or Own	ner's Designee. Title	Engi	neer Dat	e <i>December 5</i> , 20 06
	CER	TIFICATE OF I	NSERVIC	E INSPECTION	 DN
l the condensation					
					of Boiler and Pressure Vessel
inspectors and	the State or Province	of Jennessee	_ and en	iployed by	panta described in this
Owner's Pener	t during the period	- nav	e inspeci	ed the compo っ/ケ/』と	nents described in this
					and state that to the best
	eport in accordance with	•			corrective measures described in
		·			
		•	, ,	•	varranty, expressed or implied,
_					er's Report. Furthermore, neither
		_		any personal	injury or property damage or a lo
of any kind aris	ing from or connected	with this inspect	ion.		
	. /				
Brue	or's Signature	_ Commissions	TN2	534	
	or's Signature		Nationa	l Board, State	e, Province, and Endorsements
Date	7 20 06				

APP. V PG 153 OF 196

Owner TENN	ESSEE VALLEY AL	JTHORITY	Date	12-12-0	96	<del></del>	
1101 Ma	Name irket St., Chattanoog	ga, TN 37402	Sheet	of			
Plant Watts	Address Bar Nuclear Plant		Unit <u>U</u>	nit 1			
P. Q. Bo	Name x 2000, Spring City,	TN 37381		-816062-010			
Work Performe	Address d by Bechtel Constr	ruction Company		Repair Organization P e Symbol Stamp			
P. O. Bo	x 549, Soddy-Daisy.	Name , TN 37384	Authorizat	tion No N/A			
	Address		Expiration	Date N/A			
Identification of	system LOWERI	LATERAL SUPPORT					
(a) Applicable C	Construction Code	ASME SECT. III 19 71	Edition S	S73 Addenda	a, N/A	A Co	de Case
(b) Applicable E	dition of Section XI	Utilized for Repairs of	r Replacem	nents 1989	- 60	DDE CASE	N 410-3 29-13-0
Identification of	Components Repair	red or Replaced and I	Replaceme	nt Components		<i>y</i> / 2	- <i>Z-</i> /3*(
tame 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)
ania bi Component	Traine of Wandracidier	Warrange Collect Gertal 140.	BOBIO NO.	Oney rounding			1107
BN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO
							<del></del> <u>.</u>
	·	<u> </u>					
	•						
Description of W	ork REMOVAL & F	REINSTALLATION O	F LOWER	LATERAL SUPP	ORT	5m 600	/ <del>/*</del> /

APP. V PG 154 DF 196

DUPLICATE

9. Remarks	Tracking Number:	RR-67-119 Applicable Manufacturers Data	WO Number: 05-816062-010
<del>CODE CASE</del>	N-418-3 812-13-06		
	<u> </u>		
		CERTIFICATE OF C	COMPLIANCE
We certify that	the statements made		ct and this replacement conforms to the
rules of the Al	SME Code, Section XI	,	repair or replacement
Type Code Sy	mbol Stamp N/A		
		/A	
Signed	tul Town	ner's Designee. Title	ENGR Date Dec. 12 20 06
	CE	RTIFICATE OF INSER	VICE INSPECTION
		•	e National Board of Boiler and Pressure Vessel
nspectors and	the State or Province	of <u>Tennessec</u> and	employed by <u>HSB-CT</u>
of	HARTFORD CT.	have insp	ected the components described in this
Owner's Repor	t during the period	8/16/06 to	12/12/06 and state that to the best of
ny knowledge	and belief, the Owner	has performed examin	ations and taken corrective measures described in
his Owner's Re	eport in accordance w	th the requirements of	the ASME Code, Section XI.
By signing this	certificate neither the	nspector nor his emplo	yer makes any warranty, expressed or implied,
concerning the	examinations and cor	rective measures desc	ribed in this Owner's Report. Furthermore, neither
he inspector n	or his employer shall b	e liable in any manner	for any personal injury or property damage or a loss
of any kind aris	ing from or connected	with this inspection.	
_ Bru	um, Earnigh	Commissions TN	2534
	or o originature o	Natio	a339 onal Board, State, Province, and Endorsements
ate/2/	12 20 02	_	

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		NER'S REPORT FOR d by the Provisions o	CONTRACTORY FRANCE	Charles and the second of the	To Control of Land		
1. Owner TENN	IESSEE VALLEY AU	JTHORITY	Date	12-12-06			
1101 Ma	Name irket St., Chattanoog	ga, TN 37402	Sheet	of			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1			
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05-	-816062-011			<del> </del>
	Address d by Bechtel Consti		Type Code	Repair Organization P e Symbol Stamp	P.O. No. N/A	. Job No., etc.	
		Name	•	ion No N/A			
1.0.60	Address	, 114 37304					
4. Identification of	system LOWER I	LATERAL SUPPORT	Expiration	Date N/A			
(b) Applicable E	dition of Section XI	ASME SECT. III 19 71 Utilized for Repairs o	r Replacem	ents 1989	·	Col	de Case <del>N-416-3</del> /3-0-6
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 W	ork REMOVAL&	REINSTALLATION O	F LOWER	LATERAL SUPP	ORT	Som Gen	#2
8. Tests Conducted	· ·	neumatic    Nominal ure psi					
11 in., (2)	information in items	of lists, sketches, or or state of the state of the state of sheets is recorded	eport is inc	luded on each sh			

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FORM(NIS-2 (Back))
9. Remarks Tracking Number: RR-07-120 WO Number: 05-816062-011  Applicable Manufacturers Data Reports to be Attached
CODE CASE N-416-3 97Z
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 Start, Leurs ISI Prog Ework 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 <u>Tennessee</u> and employed by <u>HSC-CT</u> of <u>HA-TFord CT</u> have inspected the components described in this
Owner's Report during the period $8/16/36$ to $12/12/36$ 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. Earnings Commissions TN 2534 Inspector's Signature National Board, State, Province, and Endorsements
Date
Date

		FORM NIS-2 OW AS Require	NER'S REPORT FO	R REPAIR	IS OF REPLACE IE Gode Sections	MENT 1 %	8	
1, Owner	TENN	NESSEE VALLEY A	UTHORITY	Date	12-12-06			,
11	101 Ma	Name arket St., Chattanoo	ga, TN 37402	Sheet	of			
2. Plant	Watts	Address Bar Nuclear Plant	-	Unit	Unit 1			**
P.	O. Bo	Name ox 2000, Spring City,	TN 37381	WO #: 0	5-816062-012			
3. Work Per	forme	Address d by Bechtel Const	ruction Company	Type Co	Recair Organization I de Symbol Stamp	P.O. No N/A	Job No etc	1,
		x 549, Soddy-Daisy	Name		ation No N/A			
		Address		Expiratio	n Date N/A			
4. Identificat	tion of	system LOWER	LATERAL SUPPORT			· · · · · · · · · · · · · · · · · · ·		<b></b>
(b) Applic	able E	dition of Section XI	ASME SECT. III 19 71 Utilized for Repairs or	r Replacer	nents 1989		ODE CASE	9.13 0
Name of Comp	ponent	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-MIS	C-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO
						;		
. Description	n of W	ork REMOVAL & F	REINSTALLATION O	F LOWER	LATERAL SUPP	ORT	SomGe	/#3
. Tests Cond	ducted		neumatic   Nominal psi					
11 ir	n., (2)	information in items	of lists, sketches, or d 1 through 6 on this re of sheets is recorded	eport is inc	luded on each sh	ded (1 eet, a	l) size is 8½ nd (3) each	ź in. x sheet

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9. Remarks	Tracking Number: RR-07-121 WO Number: 05-816062-012
CODE CASE	
OOBE ONOL	9129.1306
	CERTIFICATE OF COMPLIANCE
We certify that	the statements made in the report are correct and this replacement conforms to the
rules of the At	repair or replacement SME Code, Section XI.
	SME BOOK, GOSHON AN.
Type Code Sy	mbol Stamp N/A
Certificate of A	authorization No. N/A
Signad	Shut Tewn IST PROSENGE. Date Dec. 12 20 OF
Signed	Owner or Owner's Designee. Title
	CERTIFICATE OF INSERVICE INSPECTION
. the undersian	ned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel
_	the State or Province of Tennessee and employed by HSB-CT
of	HARTFord CT. have inspected the components described in this
Owner's Repor	t during the period 8/16/06 to 12/12/56 and state that to the best of
	and belief, the Owner has performed examinations and taken corrective measures described in
his Owner's Re	eport 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,
oncerning the	examinations and corrective measures described in this Owner's Report. Furthermore, neither
ne inspector ni	or his employer shall be liable in any manner for any personal injury or property damage or a loss
of any kind aris	ing from or connected with this inspection.
Bru	or's Signature Commissions TN 2534  National Board, State, Province, and Endorsements
ate /2	112 20 06

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. Owner <u>TENN</u>	ESSEE VALLEY A	UTHORITY	Date	12/1/00	0		
	Name irket St., Chattanoo		Sheet	of			
Plant Watts	Address Bar Nuclear Plant		Unit U	Jnit 1			
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05	-816062-013			
. Wark Performe	Address d by Bechtel Const	ruction Company	Type Cod	Repair Organization File Symbol Stamp	P.O. No N/A		
P. O. <b>B</b> o	x 549, Soddy-Daisy	Name , TN 37384	Authoriza	tion No N/A		<del></del>	
<u>, , , , , , , , , , , , , , , , , , , </u>	Address		Expiration	Date N/A			
. Identification of	system LOWER	LATERAL SUPPORT					
(a) Applicable C	onstruction Code	ASME SECT. III 19 71	Edition 8	S73 Addenda	a, N/A	A Co	de Case
(b) Applicable E	dition of Section XI	Utilized for Repairs o	r Replacen	nents 1989	æ	DE GAGE	<del>N 416-3</del>
. Identification of	Components Repair	red or Replaced and I	Replaceme	ent Components	_	<i>W</i>	29-13
			National		Year	Repaired, Replaced, or	ASME Code Stamped (Yes or
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Board No.	Other Identification	Built	Replacement	No)
/BN-1-MISC-068	N/A	N/A	N/A	N/A	N/A	Replacement	NO
						<u>.</u>	
Description of W	ork REMOVAL & I	REINSTALLATION O	FLOWER	LATERAL SUPP	ORT		
			Operation	Praccura n			
Tests Conducted	•	neumatic d'inominal urepsi					ì

9. Remarks	Tracking Number: PP-07-122 WO Number: 05-816062-013
J. 110//12/110	
GODE CASE	N-416-3
	<b>79</b> . (5~ ₽
	CERTIFICATE OF COMPLIANCE
We certify that	It the statements made in the report are correct and this replacement conforms to the
rules of the At	repair or replacement
fules of the A	SME Code, Section XI.
Type Code Sy	/mbol Stamp N/A
•	
Certificate of A	Authorization No. N/A
Signed	Rogera. Landis SGR Nows EUGR. Date December 1, 20 00
	Owner or Owner's Designee, Title
	CERTIFICATE OF INSERVICE INSPECTION
I, the undersign	ned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel
_	the State or Province of Tennessec and employed by WB-cT
of	HATTFord CT. have inspected the components described in this
Owner's Repor	rt during the period 8/16/06 to 12/4/66 and state that to the best
	and belief, the Owner has performed examinations and taken corrective measures described in
=	teport in accordance with the requirements of the ASME Code, Section XI.
	certificate neither the inspector nor his employer makes any warranty, expressed or implied,
	examinations and corrective measures described in this Owner's Report. Furthermore, neither
_	nor his employer shall be liable in any manner for any personal injury or property damage or a lo
	sing from or connected with this inspection.
	,
R.	m 5 · 1 = = = = = = = = = = = = = = = = = =
Inspec	tor's Signature Commissions 702534  National Board, State, Province, and Endorsements
Date/_/	14 20.06
•	
	•

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		NER'S REPORT FOR d by the Provisions o				<b>S</b>			
1. Owner TENN	ESSEE VALLEY AU	JTHORITY	Date _	12-7-06					
1101 Ma	Name rket St., Chattanoog	ga, TN 37402	Sheet	of					
2. Plant Watts	Address Bar Nuclear Plant		Unit U	 nit 1					
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05-816062-014  Repair Organization P.O. No.: Job No.: etc. Type Code Symbol Stamp N/A						
3. Work Performe	Address d by Bechtel Constr	ruction Company							
P. O. Box 549, Soddy-Daisy, TN 37384  Address			Authorization No N/A						
			Expiration		<del></del>	<u> </u>			
4. Identification of	system UPPER L	ATERAL SUPPORT	Expiration	- IVA					
(b) Applicable E	dition of Section XI	ASME SECT. III 19 71 Utilized for Repairs or	Replacem	nents 1989	·	Col	de Case N-416-3- 129-14-		
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		
	·								
,									
	-	REINSTALLATION O			ORT	ImGen:	# /		
8. Tests Conducted	l: Hydrostatic □ Pr Other □ Presst	neumatic D Nobrinal	Operating   Pest Terr	Pressure U > 1p °F					
NOTE: Suppleme 11 in., (2)	ntal sheets in form information in items	of lists, sketches, or d 1 through 6 on this re of sheets is recorded	rawings ma	ay be used, provi luded on each sh					

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9. Remarks	Tracking Number: RR-07-125 WO Number: 05-816062-014
CODE CASE	Applicable Manufacturer's Data Reports to be Atlached
the CASE	N-416-3 997 9-14-06
,	
<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	CERTIFICATE OF COMPLIANCE
Ma cortifu tha	t the statements made in the report are correct and this replacement conforms to the
we certify tha	repair or replacement
rules of the A	SME Code, Section XI.
Time Cada O	and all Otenses BMA
Type Code Sy	mbol Stamp N/A
	Authorization No. N/A
Signed X	Gys A. Landis, Field Engineer Date December 5, 20 06
	Owner or Owner's Designee. Title
	CERTIFICATE OF INSERVICE INSPECTION
I, the undersig	ned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel
_	the State or Province of Terresiec and employed by HSB-CT
of	
Owner's Repo	rt during the period 8/15/56 to 12/7/66 and state that to the best of
	and belief, the Owner has performed examinations and taken corrective measures described in
this Owner's R	eport 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 n	or his employer shall be liable in any manner for any personal injury or property damage or a loss
of any kind aris	sing from or connected with this inspection.
Bou	Mr. Farmer Commissions TN 1534
Inspec	tor's Signature Commissions TN2534  National Board, State, Province, and Endorsements  7 20 04
Date /2/	7 20.04

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		NER'S REPORT FOR I by the Provisions of I			IENT	S				
1. Owner TEN	NESSEE VALLEY A	JTHORITY	Date _/	1/17/2006	•					
1101 M	arket St., Chattanoo	ga , TN 37402	Sheet	1 of 2						
2. Plant Watt	Address s Bar Nuclear Plant		Unit Unit 1							
P. O. Box 2000, Spring City, TN, 37381				Work Order 06-815666-000						
3. Work Performed by TVA Modifications  Name  Watts Bar Nuclear Plant				Repair Organization P e Symbol Stamp						
			Authorizat	tion No N/A						
	Address		Expiration	Date N/A						
4. Identification o										
5. (a) Applicable	Construction Code	ASME III 19 71	Edition, S	373 Addenda	a, N	I/A Cod	de Case			
(b) Applicable	Edition of Section XI	Utilized for Repairs or	Replacem	nents 1989	_					
6. Identification o	f Components Repai	red or Replaced and F	Replaceme	nt Components						
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built		ASME Code Stamped (Yes or No)			
1-PIPE-063-B	TVA	N/A	N/A	1-FE-63-170		Replace- ment	No			
,				,						
							<u> </u>			
							!			
7. Description of	Work Replace flan	ge bolting due to orific	<del>e plate rep</del>	lacement.— 🖓	21	1-16-06				
8. Tests Conduct	ドラレA ed: Hydrostatic F Other Pres	CE ORIFICE Preumatic Nomina surepsi	LATE. I Operating Test Te	レジ   Pressure こい   mp°	HK TE OEF F	37 in 06-8156	>66-60			
11 in., (	nental sheets in form 2) information in item	of lists, sketches, or one one 1 through 6 on this or of sheets is recorded	drawings m report is inc	ay be used, prov	/ided	l (1) size is l	8½ in. x			

APP. V PG 164 OF 196

## NIS-2 FORM SHEET 2 OF 2

56 /-
FORM NIS-2 (Back)
9. Remarks — Gode Case N-416-3 Tracking No. RR-07-129 Applicable Manufacturer's Data Reports to be Attached
Applicable Manufacturer's Dala Heports to be Attached  Work Order 06-815666-000
Work Order 00-813000-000
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the
repair or replacement
rules of the ASME Code, Section XI.
Time Code Cymhal Clama, N/A
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
Signed
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 Temessee and employed by HSB-CT
of 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.
Sruce M. Earnagh Commissions TN2534
Snuc M. Earnigh   Commissions   TN 2 5 3 4     Inspector's Signature   National Board, State, Province, and Endorsements
Date

APP. V PG 165 OF 196

	The State of the Control of the Cont	NER'S REPORT FOI d by the Provisions o	the terminal and the control of the control		201 A	S			
1. Owner TENN	IESSEE VALLEY AL	JTHORITY	Date	12-7-06					
1101 Ma	Name arket St., Chattanoog	ga, TN 37402	Sheet	of					
2. Plant Watts	Address Bar Nuclear Plant		Unit U	nit 1					
P. O. Bo	Name x 2000, Spring City,	TN 37381	WO #: 05-	-816062-016					
3. Work Performe	Address d by Bechtel Consti	ruction Company	Repair Organization P.O. No., Job No., etc.  Type Code Symbol Stamp N/A						
	x 549, Soddy-Daisy,	Authorization No N/A							
	Address		Expiration	<del></del>	<del></del>	· ·			
4. Identification of	system UPPER L	ATERAL SUPPORT	Expiration	Date 14/A	•	<del></del>			
(b) Applicable E	Edition of Section XI	ASME SECT. III 19 71 Utilized for Repairs or	r Replacem	ents 1989		DDE GASE	de Case N 416-3- Z 9-18-0		
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		
		4-11							
	d: Hydrostatic □ Pi	REINSTALLATION O	Operating	Pressure 🗆	ORT	S7m Gen	#3		
11 in., (2)	ental sheets in form information in items	of lists, sketches, or of through 6 on this roof sheets is recorded	drawings m eport is inc	ay be used, provi luded on each sh					

APR V PG 166 OF 196

E FORM NIS <sup>‡</sup> 2 (Back) →	
9. Remarks Tracking Number: 28-07-130 WO Number: 05-816062-016 Applicable Manufacturer's Data Reports to be Attached	
-CODE-CASE N-416-3	
9829-18-06	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are correct and this <u>replacement</u> conforms to the repair or replacement rules of the ASME Code, Section XI.	
Tules of the Asiac Code, Section Al.	
Type Code Symbol Stamp N/A	
Certificate of Authorization No. N/A	
Signed Roger A. Landis, Field Engineer Date December 5, 20 00	<u>,</u>
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 Texas sec and employed by #SB-CT	
ofhave inspected the components described in this	
Owner's Report during the period 8/15/06 to 12/7/06 and state that to the bes	t 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	er
the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a le	oss
of any kind arising from or connected with this inspection.	
Bruce M. Earning Commissions TN 2534	]
Inspector's Signature National Board, State, Province, and Endorsements	
Bruch. Earnight Commissions TN 2534 Inspector's Signature National Board, State, Province, and Endorsements  Date 12/7 20 06	
	- 1

APP. V PG 167 0F 196

			NER'S REPORT FOR I by the Provisions of		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				***********	5	
1. Owner T	ENNE	SSEE VALLEY A	UTHORITY	Date	09/2	27/0	6				
110	1 Mar	Name ket St., Chattanoc	oga, TN 37402	Sheet	1		of	2			
2. Plant W	Vatts	Address Bar Nuclear Plant		Unit	Uni		•	·	_		
P. O	). Box	Name 2000, Spring City	City, TN 37381 W/O - 05-820788-005								
Address  3. Work Performed by MECHANICAL MAINTENANCE				Type C	Rei ode	<sub>bair</sub> ( Syn	Organ N <b>bol</b>	zation F Stam	P.O. No. D <b>N/A</b>	. Job No etc.	
P.O. BOX 200	P.O. BOX 2000 SPRING CITY,TN 37381 Authorization				n N	o <b>N</b>	⁄Α				
		Address		Expirat	ion E	Date	N/	'A			
4. Identification	on of s	system 015 STE	AM GEN. BLOW DO	WN	,						
5. (a) Applica	ble C	onstruction Code A	AISC 19 NA	Edition	, NA	4	A	ddend	a,	N/A Co	de Case
(b) Applical	ble E	dition of Section XI	Utilized for Repairs or	Replac	eme	nts	_	1989		<del></del>	
6. Identificatio	on of (	Components Repai	red or Replaced and F	Replacen	nent	Coi	npor	nents			
Name of Compo	nent	Name of Manufacturer	Manufacturer Serial No.	Nationa Board N		Other	Identi	fication	Year Built	Repaired, Replaced, or Replacemen t	ASME Code Stamped (Yes or No)
1-SNUB-015- 4006199		PSA	3470	NONE	S	SNU	BBE	R	1977	REPL.	YES
1-SNUB-015- 400619	9	PSA	33262	Non	E 4	47A	400-0	/s-199 	200G	REPLACED (REMOVED)	465
7. Description	of W	ork REPLACED S	NUBBER (Will	S09	ا م ا مد	4				· · · · · · · · · · · · · · · · · · ·	
8. Tests Cond		Other X Pre	neumatic Nominal ssure NA 7 of lists, sketches, or d	_ psi	Test	Ter	np _	. ,		_ °F (1) size is 8	½ in. x
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APP. V PG 168 OF 196

SHT 2 of 2

FORM NIS-2 (Back)
9. Remarks TRACKING NO. RK -07 - 13 6 W0#05-820788-005
Applicable instruidations and Reports to be Attached
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> 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 Caller Maint Spec Date 10/3 20 00
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 Texnessee 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.
$Q = m \in \mathcal{A}$
Inspector's Signature Commissions TN2534  National Board, State, Province, and Endorsements
Date
Date 20_8
46,5, A

Manufactured	w Pacific S	cientific 134	5 S. STate Coll	oge Blvd.	Anaheim	, Ca. 92803	
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Manufacturer (	TITI GETIL	en Corporation	on 621 Canasire			hio 44481	
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Location of In	rallation						
. Identification 61	63	(e)	ta)	<b>(</b> a)	(1)	<b>(</b> 2)	Qn)
Component	Canadian,	Applicable	Stress Report	Type of	•		
Support I.D. No.	Registration No.	Drawings with Lest Rev. & Data	or Load Capa- city Data Sheet	Component Support	Class	Nai'l Board No.	Year Bu
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W) Unit	<u>/                                    </u>						
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(9)							<del></del>
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pplemental sheets in form of lists, shetches or drawings may be used provided (1) sire is 814 in., (2) information in items 1, 2.

If on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at 100 of this form.

APP. V. 3.

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## 98004974003

VAREHOUSE WATTS BAR NUCLEAR

177 Grinnell Corporation

HIN 11 1985

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<sub>a</sub> 621 Dana Avenue, N. E Warren, Ohio 44481 

February 26, 1983

Bellefonte Nuclear Plant Order Number 77K53-820732

ITT Grinnell Corporation Atlanta Branch S.O. Number

00800

Specification Number BLNP-DS-1915-2992-00 是现在的。

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 ASE 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.

<del>रिक्षे कुर्विके के एक्क्किन हैं। स्थान हैं स्थान हैं के किस्ता है के किस्ता है के किस्ता है । किस्ता है किस्ता है कि</del> The following Paragraph of ASME Section III, Subsection NF, Summer 1976 Adderda 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 THE PROPERTY OF THE PROPERTY THE PROPERTY OF T

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. gradies applications of the property of the property of the contract of the co Company and a

Material supplied per Certificate of Authorization Number N-2444-4, which expires September 8, 1984.

RUDCLEJI PAVLIK

Quality Assurance Manager

RP/sad

.cc: R. Gospodarski

Master Certificate of Compliance Rev. D reviewed on

98004974003

Attachment 1 02A009 Rev. U:

-				•		
	-Material	letter Code ·		Material	Latte	المتحدة أ
	18,812,321	to the second second	أنجي والمتوافق الموافي وعيادان	7 7	19.	
1.	"SA-36"	desit to	اراً به <b>51.</b> [۱] المجالية	5A-397 @ 11 CL	1 XA	5.5
7.	SA-53 @ A	The right Ad a great street of the	52.	SA-387 Gr 11 CL-		- C
3.	58-53 Gr B -	water Harmon Harmon Control	53.	SA-397 Gr 22 CL	L Live YC	
- 4.	· SA-106 Gr A		34.54	SA-387 Sr 22 CL-	Z 355 YO	
5.	"SA-106 Gr 9 "	Stark regional fine		\$3-409 UNS 81900	) <sup>注意</sup> XG	9.2
6.	A-108 Gr 1019	23 or 43	56.	A-434 GC 93	χı	, , , , , ,
. 7.	A-108 Gr 1117	23 or X2 27 21 21 21 31 or F2	57.	A-434 Gr BC	X3	
8.	: 108 Gr 1144	<b>21.</b> (2.7)	, 58.	A-434 Or 30	XC	
9.	SA-181 Gr 2	्र ह	59. 50.	SA-479 Ty 304	Yil	11
: 10.	SA-187 Gr F7	XJ or F2	50	SA-479 Ty 315		
r.11.	24-107 OL 175	125-11N OF 122	· ` ~ ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	A-500 Gr B 1999	12 YW	11.50
<u></u> 12.	SA-193 Gr B7			A 270 C. A 7134	A COLOR OF THE COL	
¢ 13.	SA-193 Gr 88	WA or B8	62.	ا المراجد A-501	Signatur yz	
14.		TU or 24 or 253	64	A-513 Sr 1020	Ξ(	
15.	SA-194 Gr 7	Z or 7 or 79	65.	A-513 Gr 1025	· 24	
15.	' SA-194 Gr 8	XD or 8 or 83	- 66-	SA-515 Gr 65	⊽ o:	· 🖘
17.	S:-216 Gr WCA	Y3 or WCA	67.	SA-515 Gr 70	24	
19.	EDW nD 215-A2	YA or 4C3	60.	5A-516 G= 70	ZI	
19.	SA-217 Gr WC3	Cil so X	· 69.	A-519 Gr 1013	<u>بر</u>	•
20.		YE		A-513 & 1030		
7.21.	SA-240 Ty 318	WA or 88  ZU or 2V or ZV3  Z or 7 or 78  XD or 8 or 89  Y3 or XCA  YA or XCS  XF or NC3  XE	72.	A-513 Gr 1025	· · · · · · · · · · · · · · · · · · ·	- Z.i.: (
	SA-249 Ty 304			Madda Ot. 017	ZA ZA	1.7
	SA-265 CL-1	I Land	73.	A-570 ጬ C 💮	,\2	
	SA-258 CL-2		7℃.	21. YI 063-42	3 STD	
	54-266 Ci-3	Q		A-388 CL-C	3	
26.	4-275 Ty 304	" ZH		A-563 CI~D	S	•.
	A-276 Ty 115	, <b>Z</b> R		A-366 CL-7	Ţ	
29.	SA-302 Gr 3			Si-375 Ir 50	<i></i>	
29.	SA-205 Gr 50	. D	79.	SA-375 Gr 53	Œ	
30.	SA-308 Gr 33	, D	30. 3	5 <del>7.</del> 375 Gr 83	77	
. 31.	SA-306 Gr 60 SA-306 Gr 55	C		5. <del>1-</del> 575 Gr 55	· ZG	
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33.	SA-306 Gr 70	م در د	. 33. (	C-1013	. J	
24.	SA-106 Gr 75	32	, in (	C-1050	Υ./	
.35.	A-307 Gr A		85	NISI140	Y	Ø.
: 26.	SA-307 Cr 9	27277 4 (27272)	<b>さなれた86</b> 。 /	AISI-4ILAO LI	1.275 C.2M	
	SA-312 Ty 304	Triangle State Control		Strong by since	rn ve 🚾	. 25.25 . <b></b>
J8.	SA-312 TY 204		88. 9	SA-140 TY 304L	: :::	
29.	5A-312 Ty 315		33. /	5-513 Gr 1021	· 1/2	•
. 40.	SA-312 Ty 316!			33-439 Gr 300	5 7 V 7 V 7 V 7 V 7 V 7 V 7 V 7 V 7 V 7	اي لايخ أرو
41.	SA- 320 Gr L7	CORRECT OF LT TRANSPORT	91. S	A-1C5 Gr C	75.50 VG	
42.	54-320 Gr L7A	VA or L7A	92.	54-487 CL-41	स	
43.	53- 320 Or LT3	V3 or \$73			:	
44. * LE	SA-325 Ty 1					
3.	SA-335 Gr 25		11 July 18 18 18 18 18 18 18 18 18 18 18 18 18	Steel 13 1 . 191 .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
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LIS	34-335 Gr P72	<u> </u>		A SECTION S		×7.5
-9.	SA-154 Gr 5D				************	$\{j\}_{j=1}^{n}$
30.	SA-376 TY 304		<b>第六</b>	•• • •		· ·
30.	S-376 Tý 316	Υ/				
	·	and the second of the second of the second		•		i

Note 1: Material Codes listed have taken into account material specification required matkings as much as possible. In some cases, however, e. g.; CA-193 27, the material specification requires certain specific markings for some frame and not others. SA-193 87 requires 37 on the ends of all bolting material. Morever, items such as pivot pins do not require the 37. In all cases, the material specification required markings take procedence over ITT Scinnell generated marking codes. Consult the applicable material specification or Q. A. Department that if questions or doubts arise prior to marking materials which list more than the specification of code above.

Hote 2: The presence of any singular numeric prefix or suffix to the material identification code for 3A-35 (letter Code A) should not be misintempreted as part of III immediate the purposes only.

Note 3: No additions or alterations may be made to the listing without Q. A. Department (Engineering) approval.

APP. V PG 172 OF 196

No. RD- 950407 MEB '841105 408 TENNESSEE VALLEY AUTHORITY REQUEST FOR DELIVERY OF MATERIALS UNDER CONTRACT Date Contract Expires 1-30-85 (PLEASE TYPE OR PRINT FIRMLY) \$147,265 00 80 Date 11/2/84 Est. RD Amount oject Account No. N3 Bergen-Patterson SHIP MATERIALS Attn: Mr. Donald H. Laliberte TO -> Tennessee Valley Authority Street Address 74A Commerce Way P. O. Box 4011 Street Watts Bar Nuclear Plant City. State, Zip Wohurn, Massachusetts 01888 City, State, Zip . (Near) Spring City, TN 37381 TVA, by RKA Attention S. H. Odum - Chief Storekeeper (615) 365-5405 Telephone Name Title Mechanical Engineering MARK: (Use RD No. and Project above) or (02) Tennessee Valley Authority IN TRIPLICATE Accounts Payable Section SHIP By: Motor Freight or UPS (07) To Above Address F. O. B. Watts Bar Nuclear Plant by 3/1/85 Central Accounting Branch (01) FOR EACH E9D88, 400 W. Summit Hill Drive PAYMENT I repair parts Knoxville TN 37902 identify: Invoke ou stohow IVA RO No., Contract No., Discount or Terms of Payment, and F.O.B. point appli Serial No. Motor No. cable to the contract. Item No., description of article or service, quantity, unit orion and total amount Addition it catalis are provided in the Terms of Payment clease in the contract. Consign Add RD Number If materials are Date Invoice Add. from GSA Store 1.3 36 - 39 44 45 - 50 51 52 - 53 54 - 59 60 - 61 Advice 4.6 7 30 - 35 Stock, complete ADA GADIA 15 65.66 644 В Cont. 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 inloudes sheets 1 of 3 and items 1 through 16. COC for performance characteristies 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 RO Procurement item: P0853--408 Date Fleid Voucher No. Amount D. O. Voucher No. Date field Youther No. . Amount D. O. Voucher No. C THE USE ONLY Person receiving material Carrier's Charges: Paid \$ Date Material Received G.B.L. Collect \$ t certify that the articles or services dated above there received in Purchase Cost Truck Common Carrier quality and quantity speci-Approved as reported above Cash Discount-or Vendor TVA Express Freight Par. Air UPS Air Barge Motor Rail Post Carrier's Charges TVA 9625 (DP-1 87) Total Cost 1. Contractor

Copy Ho.

DISTRIBUTION:

2. Accounting Office

1. Purchasing Contract File

4-8. Issuing Office, for use as receiving reports and file city

# REQUEST FOR DELIVERY OF MATERIALS UNDER CONTRACT CONTINUATION SHEET

Item No.	Cont. Hem	Part, Catalog, and/or FSN No.	Arbicles or Services .	14 - 15 - 1 <sub>2</sub> - 1	Quantity	Unit	Unit Piler	Amount
		arrestors, (ser pages) were mis	rmation: 499PSA mechani fal numbers listed on at handled, maladjusted and the long term constructi clear Plant.	tached /or				
		examination and rebuild, retest The rebuild ret be such, that a	rk will consist of initi testing to determine op and recertification as esting and recertificati 11 reworked snubber unit ct and shall be restored ble condition.	erability, required. on shall s shall				
			erson is to be the TVA s pping matters related to					
		(615) 365-5403 Watts Bar Nucle	- Ext. 415 telephone - Ext. 177 telecopy ar Plant ity, Tennessee 37381		·			
			erson is to be the B-P c s related to this work.	ontact for				
	. ,	Greg Haynes (603) 524-1990 Bergen-Paterson 34 Moulton Stree Laconia, New Har	Pipe Support Corporatio et	n :	٠	-		
	·	to immediately will advise as	this RD, M. H. Huff (TV contact Greg Hanyes (BP) to day and time that BP lk shipment of snubbers.	, who				
		each snubber who snubber (by seroperational and Scientific Stand	e separate COC documenta ich certifies that each ial number) will meet th design requirements of dard Design Specification. E dated 1/3/84.	separate e Pacific				
		verify that all	s to present as necessar testing, rework, materi rtification is in accord	als,				
							Apa	· V

### REQUEST FOR DELIVERY OF MATERIALS. UNDER: CONTRACT CONTINUATION SHEET

PSA-1, initial test   25			CONTINOATION SHEET				
Initial Test (required)*  PSA-1/4 initial test		Cont. Ham	Part, Calalug, Articles or Services and/or FSN No.	Quantity	Unit	Unit Price	Amuunt
Initial Test (required)*  PSA-1/4 initial test							
Initial Test (required)*    1			The following listings shows types, quantities,			,	}
PSA-1/4 initial test			and charges for the snubber rework program.				
PSA-1/2 initial test   119			Initial Test (required)*			,	
PSA-1/2 initial test   119	1 :		PSA-1/4 initial test	286	EA	80	22.880
PSA-1, initial test	2				1		9,520
4       PSA-3, initial test       33       EA       85       2,80         5       PSA-10, initial test       26       EA       105       2,73         6       PSA-35, initial test       7       EA       120       84         7       PSA-100 & 100L, initial test       3       EA       135       40         **Inlcudes receipt, inspection, set-up, testing, certification and transportation, excludes rebuilt.         Rebuild & Retest (if required)**       ****       EA       355       50,76         9       PSA-1/4 rebuild and retest       143       EA       355       21,30         10       PSA-1/2 rebuild and retest       13       EA       370       4,81         11       PSA-3 rebuild and retest       16       EA       385       6,16         12       PSA-10 rebuild and retest       13       EA       750       3,00         15       PSA-35 rebuild and retest       4       EA       750       3,00         16       PSA-35 rebuild and retest       2       EA       895       1,790         **Includes disassembly, inspection, rebuild, retest, certification, and transportation.       **** estimated         **A repuilt and retest result			l · · · · · · · · · · · · · · · · · · ·		•	i .	1
FSA-10, initial test   26					1	1	
PSA-35, initial test PSA-100 & 100L, initial test  *Inlcudes receipt, inspection, set-up, testing, certification and transportation, excludes rebuili.  Rebuild & Retest (if required)**  PSA-1/4 rebuild and retest PSA-1/2 rebuild and retest PSA-1 rebuild and retest PSA-1 rebuild and retest PSA-1 rebuild and retest PSA-3 rebuild and retest PSA-1 rebuild and retest PSA-1 rebuild and retest PSA-1 rebuild and retest PSA-10 rebuild and retest PSA-10 rebuild and retest PSA-100 & 100L, rebuild and retest PSA-100 & 100L, rebuild and retest Required replacement parts and unforseen labor costs (if required).  Required replacement parts (estimated lump sum) LS NA lo,000 Labor costs (outside scope shown herein)  LS NA 10,000		•			ľ		
PSA-100 & 100L, initial test  *Inlcudes receipt, inspection, set-up, testing, certification and transportation, excludes rebuild.  Rebuild & Retest (if required)**  PSA-1/4 rebuild and retest  PSA-1/2 rebuild and retest  PSA-1 rebuild and retest  PSA-1 rebuild and retest  PSA-3 rebuild and retest  PSA-3 rebuild and retest  PSA-35 rebuild and retest  PSA-35 rebuild and retest  PSA-100 & 100L, rebuild and retest  **Includes disassembly, inspection, rebuild, retest, certification, and transportation.  Required replacement parts and unforseen labor costs (if required).  Required replacement parts (estimated lump sum)  Labor costs (outside scope shown herein)  **Includes disassembly destimated lump sum)  LS NA 10,000  400					ł	1	840
certification and transportation, excludes rebuild.  Rebuild & Retest (if required)**  PSA-1/4 rebuild and retest  PSA-1/2 rebuild and retest  PSA-1/2 rebuild and retest  PSA-1 rebuild and retest  PSA-1 rebuild and retest  PSA-3 rebuild and retest  PSA-10 rebuild and retest  PSA-35 rebuild and retest  PSA-35 rebuild and retest  PSA-10 & 100L, rebuild and retest  Required replacement parts and unforseen labor costs (if required).  Required replacement parts (estimated lump sum)  Labor costs (outside scope shown herein)  LS NA 10,000	7				1	1	405
certification and transportation, excludes rebuild.  Rebuild & Retest (if required)**  PSA-1/4 rebuild and retest  PSA-1/2 rebuild and retest  PSA-1/2 rebuild and retest  PSA-1 rebuild and retest  PSA-1 rebuild and retest  PSA-3 rebuild and retest  PSA-10 rebuild and retest  PSA-35 rebuild and retest  PSA-35 rebuild and retest  PSA-10 & 100L, rebuild and retest  Required replacement parts and unforseen labor costs (if required).  Required replacement parts (estimated lump sum)  Labor costs (outside scope shown herein)  LS NA 10,000			*Inloudes receipt, inspection, set-up, testing.				
PSA-1/4 rebuild and retest   PSA-1/2 rebuild and retest   PSA-1/2 rebuild and retest   PSA-1 rebuild and retest   PSA-1 rebuild and retest   PSA-3 rebuild and retest   PSA-10 rebuild and retest   PSA-100 & 100L, rebuild and retest				<b>i</b> .			
PSA-1/4 rebuild and retest   PSA-1/2 rebuild and retest   PSA-1/2 rebuild and retest   PSA-1 rebuild and retest   PSA-1 rebuild and retest   PSA-3 rebuild and retest   PSA-10 rebuild and retest   PSA-100 & 100L, rebuild and retest	ļ		Rebuild & Retest (if required)**	***			
PSA-1/2 rebuild and retest PSA-1 rebuild and retest PSA-3 rebuild and retest PSA-10 & 100L, rebuild and retest PSA-100 & 1	8			143	EA	355	50,765
PSA-3 rebuild and retest PSA-10 rebuild and retest PSA-35 rebuild and retest PSA-35 rebuild and retest PSA-100 & 100L, rebuild and retest PSA-35 rebuild and retest PSA-35 rebuild and retest PSA-36 rebuild and retest PSA-100 & 100L, rebuild and retest PSA-35 rebuild and retest PSA-35 rebuild and retest PSA-100 & 100L, rebuild and	9	,	PSA-1/2 rebuild and retest	60	EA	355	21,300
PSA-10 rebuild and retest PSA-35 rebuild and retest PSA-100 & 100L, rebuild and retest PSA-100 & 100L, rebuild and retest PSA-100 & 100L, rebuild and retest  **Includes disassembly, inspection, rebuild, retest, certification, and transportation.  Required replacement parts and unforseen labor costs (if required).  Required replacement parts (estimated lump sum) LS NA 10,000 labor costs (outside scope shown herein)  PSA-10 rebuild and retest PSA-35 rebuild and retest PSA-100 & 100L, rebuild and rete	i .			13	EA	370	4,810
PSA-35 rebuild and retest PSA-100 & 100L, rebuild and retest  **Includes disassembly, inspection, rebuild, retest, certification, and transportation.  Required replacement parts and unforseen labor costs (if required).  Required replacement parts (estimated lump sum) LS NA 10,000 labor costs (outside scope shown herein)  NA 10,000 labor costs (outside scope shown herein)				16	EA	L	6,160
PSA-100 & 100L, rebuild and retest  **Includes disassembly, inspection, rebuild, retest, certification, and transportation.  Required replacement parts and unforseen labor costs (if required).  Required replacement parts (estimated lump sum) LS NA 10,000 Labor costs (outside scope shown herein)  10 HR 40 400			·	13	EA		7,735
**Includes disassembly, inspection, rebuild, retest, certification, and transportation.  Required replacement parts and unforseen labor costs (if required).  Required replacement parts (estimated lump sum) LS NA 10,000 Labor costs (outside scope shown herein)  10 HR 40 400			1	4	EA	750	3,000
Required replacement parts and unforseen labor costs (if required).  Required replacement parts (estimated lump sum) LS NA 10,000 Labor costs (outside scope shown herein)  Required replacement parts (estimated lump sum) LS NA 400	14		PSA-100 & 100L, rebuild and retest	2	EA	895	1,790
costs (if required).  Required replacement parts (estimated lump sum) LS NA 10,000 Labor costs (outside scope shown herein)  HR 40 400	. }	,		***	stima	ted	
Labor costs (outside scope shown herein) 10 HR 40 400							
Labor costs (outside scope shown herein) 10 HR 40 400	15	•	Required replacement parts (estimated lump sum)	LS		NA NA	10,000
Total 147,26:				10	HR	40	400
10 cal 147, 26:				٠		m 1	1/7 065
	İ					locar	147,205
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ranger programmer and the first of the first programmer and the first programmer and the first programmer becomes	İ					;	
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PG 175 00 196

## REQUEST FOR DELIVERY OF MATERIALS UNDER CONTRACT CONTINUATION SHEET

	Gunt. Item	Part, Catalog, and/or FSN No.	Articl	es or Servicos .	Quantity	Unti	Unit #	tice	Vulun	ını
			receipt of snu	of work approximately ubbers consisting of				;		
		recertific		,						
		3. Estimated and project	ted lead time	of replacement parts if applicable.						
			quantity of unverted to rebuild.	nits that are cost						
		<ol> <li>Estimated</li> <li>Labor cost</li> </ol>	return shippin s outside scop	e of work not shown						
.			oondence and he it parts lump s							
	: .	TVA's need dat	e is 12/1/84 t	through 3/1/85.						
		BP's projected	l delivery sche	edule is as follows:						
		Size	Start	Complete						
		A11	12/1/84	3/1/85	•					
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PG 176 OF 196

39A 963'5 Continued (III' 10 73)

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1	88 1	189	846	823	824	825	827	828	829	832
8	33 1	837	846	849	852	858	860	861	862	863
Ś	65	867	868	873	877	881	882	888	889	89.2
	193	903	906	907	913	918	1013	1017	1018	1025
16	130	1035	1037	1041	1047	1058	1059	1068	1072	1073
18	774	1079	868 906 1037 1082 1105	1085	1088	1089	1090	1091	1093	1096
	277	1103	1105	1106	1112	1116	[[Z3]] 	1124	1125	1126
	1.28	1133	1134	1/35	1137	1147	1149	1154	1157	1159
,	GO a	1161	1162	1163	1607	1608	1614	1616	1619	1950
	240	3241	3242	3244	3245	3401	3403	3412	34-13	3414
	146	3419	3422	3423	3425	3427	3428	3429	3430	3431
	1432	3435	3436	3438	3443	3444	3445	3446	3447	3448
Ŝ	449	3452	3453	3454	3455	34.56	3460	3461	3464	3468
	470	3476	3478	3479	3483	3485	3486	3490	3492	3493
	494	3497	3498	350/	3504	3507	3508	3514	3515	3516
	522	3523	3525	3536	3542	3543	3546	3548	3549	3554
	<b>排563</b>	3564	3565	3570	3573	3578	3579	, 3588	3592	3543
ن '	594	3600	3693	3742	3753	4107	4108	4109	4329	4351
4	443	4359	4362	4363	4366	4368	4372	4373	4375	4300
4	4386	4388	4396	4404	4410	4413	4415	4421	4422	44,29
ď	#52	4442	4444	4460	4463	4482	4485	4486	4481	1441.6
4	4496	4499	4504	4508	4516	4521	4530	4539	4541	4547
	1555	4556	4562	4569	4573	4576	4878	4882	4889	4903
	4706	4912	4913	4936	4937	4938	4940	,4943	4948	4951
	453	4957	4965	4968	4972	4978	4981	6460	6461	664.2
			6660							
8	144	8146	8149	,11332	12068	12082	12086	,12088	12090	12106
1.	3 546	12552	12556	12557	12575	21429	21435	21465	2147	1,21479 of 196
	٠.	5 T F # 10 .	•		· D		HAR.	<b>v</b> †	G117	of 170

FORM NF-1 (Back)

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#### CERTIFICATE OF SHOP INSPECTION

Province of his that the parts referred to a inspected by me and that to the ance with the ASME Code fo By signing this cartificate ne supports described in this Oct	and employed by the National and employed by and employed by are compared the statements in this os data items are best of my knowledge and belief the National American Plant Components. The inspector not his employer of the Report. Furthermore, neither the inspector are reconstituted and kind arising from or connected and the control of the control of the connected and the control of the control of the connected and the control of the connected and the control of the connected and the control of the connected and the control of the connected and the connected and the control of the control of the connected and the control of the connected and the connected and the control of the control of the connected and the control of the cont	s Data Report with the describ, not included in the certifical PT Certificate Holder has constructed with the large warranty, expressed of the certification of his employer shall be with this inspection.	ed component supports and state of shop inspection, have been these component supports in according the component supports and state of implied, concerning the component
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Province at his that the parts referred to a inspected by me and that to the	and employed by ave compared the statements in this as data items are best of my knowledge and belief the HP	s Data Report with the describ, not included in the certificant Certificate Holder has constructed	ed component supports and st te of shop inspection, have be
Province of his that the parts referred to a	and employed by ave compared the statements in this as data items	s Data Report with the describ , not included in the certifica	ed component supports and st te of shop inspection, have be
Province of hs	and employed by ave compared the statements in this	s Data Report with the describ	of
Province at	and employed by		01
	CERTIFICATION OF	FIELD INSPECTION	
. 0			
Signed	conflictation co	ommissions <u>CA-1513</u> (Nat') A	d., State, Prov., and flo )
5	· lol		1-1 6 : :00
Con 1211 C 4 1002	• •	•	•
personal injury or property	damage or allows of any kind arisi	ng from or connected with thi	's inspection.
supports described in this D	Sala Report. Furthermore, neither th	e Inspector nor his employers	hall be liable in any manner for a
the ringing this certificate. he	ither the Inspector nor his employer r	maker any warranto avoirried o	.e implied, concerning the compon
With the Maine Book of the	icar Power Plant Components.		
LIN the ASSES Code for Nuc		Certificate Holder has constructed t	hese component supports in accordan
18 and state that to the be	have inspected the component suprest of my knowledge and belief the HPT G		VII

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APP, V P PG 178 OF 196

			NER'S REPORT FOR I by the Provisions of					S			
1. Owner	TENN	ESSEE VALLEY A	UTHORITY	Date	10/01/20	06					
11/	01 Mai	rket St., Chattanoo	oga, TN 37402	Sheet	C	of					
2. Plant	Watts	Bar Nuclear Plant		Unit	Unit 1						
P.	O. Bo	x 2000, Spring City	y, TN 37381	MMG/V	NO# 01-01						
3. Work Per	formed	Address d by MECHANICAL		Repair Organization P.O. No., Job No., etc.  Type Code Symbol Stamp N/A							
WATTS BAR N SPRING CITY,		R PLANT,PO BOX 2000 B1	Name	Authorization No N/A							
4. Identificat	tion of	Address	Kum 10/3/06 idual Heat Removal	Expirat	ion Date	N/A		<u> </u>			
4. Idontinoat	HOIT OF		dual ficat ficility at		(11111)	162, Che	m Vol	13 Cont (	cvcs)		
		onstruction Code :	SECT III 19 /1	Eaition,	, 5/3	Addenda -	a, N/A	A Cod	de Case		
(b) Applic	able E	dition of Section XI	Utilized for Repairs of	or Replac	cements	1989	_	7.1			
6. Identificat	tion of	Components Repai	red or Replaced and	Replace	ment Con	nponents		, i * ,			
Name of Com		N	Mary factoring Control No.	Nationa		. Aift Air	Year	Repaired, Replaced, or	`		
Name of Comp 1-FCV-062-0		Name of Manufacturer ITT GRINNELL	Manufacturer Serial No. 74-2109-8-1	Board N N/A	lo. Otner it	dentification A	1977	Replacement Replaced	No)		
110	7120	TIT GITTING	74210001	18/73	<del></del>	71	10	Поріасса			
1-FCV-642.	-0128	ITT Grinnell	74-2109-8-2-	NIA	NI	A	311	Replace- ment	Y		
SPINDLE		ITT Grinnell  ITT Industries	74-2109-8-Z- N/A	NA	7000	4 4	2001	Replace~	Y		
					14, H 5 70	t 1490)					
l											
7. Descriptio	on of W	/ork Replace valve	e bonnet 4 SPINO	LE							
8. Tests Cor	nducted		neumatic Nomina				∕ °F				
11	in., (2)	information in item	of lists, sketches, or as 1 through 6 on this r of sheets is recorded	report is	s included	on each s	vided sheet,	(1) size is 8 and (3) eac	⅓ in. x h sheet		

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FORM NIS-2 (Back)
9. Remarks RR-67-139 (47) 1366 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
rules of the ASME Code, Section XI.
Tules of the Asivic Code, Section Al.
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
Signed Authorization Maint Specialist Date 11/13 20 06  Owner or Owner's Designee. Title
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 <u>Fewessec</u> and employed by <u>HSB-cT</u>
of 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. Earnings Commissions TN 2534  Inspector's Signature National Board, State, Province, and Endorsements
Date
A 12

APP. V. PG 180 OF 196

				NER'S REPOR I by the Provisi		,					i	
1. Owner	TENN	ESSEE V	ALLEY A	UTHORITY		Date	10-	02-200	6			
11	01 Ma	rket St., (	Name Chattano	oga, TN 37402	2	Sheet		of	·			
2. Plant	Watts		<sup>ddress</sup> lear Plant			Unit	Uni	t 1				
P.	O. Bo	x 2000, S	Name pring City	y, TN 37381	<del></del>	W/O	05-	315568	3-000			
3 Work Per	rforme		<sup>ddress</sup>	. MAINTENAN	ICE	Type C			enization F ol Stam		. Job No., etc.	
P.O. BOX 2	2000 SI	PRING CI		Name <b>381</b>		Author	izatio	n No	N/A			
		А	ddress			Expirat	tion [	- Date	N/A			
4. Identifica	tion of	system	062- C.V	.c.s				_				
(b) Applic	cable E	dition of	Section XI	SECTION III  Utilized for Re red or Replace	epairs or	Replac	ceme	nts _	Addend 1989 conents	a, N//	<b>A</b> Cod	de Case
Name of Com	ponent	Name of M	lanufacturer	Manufacturer Se	erial No.	Nation Board N		Other Ide	entification	Year Built	Repaired, Replaced, or Replacemen t	ASME Code Stamped (Yes or No)
1-FCV-62-72	2-A	FISHER	CNTLS	5726049		NA		NA	L	1	replaced	Ϋ́
Seat cin	 16	V	/	NA		NA	- /	14, to	<del>1</del> 9-1	1987	Eglar	N
Stem fr uz Vali	dn	1	,	Value S/N 5726052	-	NIA		NIV		1977	1	Y
7 Description	on of W	Vork PE	DI ACED I	/ALVE DISC								
7. Description	OH OI V						· · · · · · · · · · · · · · · · · · ·			17	nu o Co	a d.L.
8. Tests Cor	nducte	d: Hydros Other		Pneumatic N sure	Nominal psi	Operat Test	ting F Tem	Pressui p	re <b>D</b>	W W F(I	ansferv 0G-8180 -TRI-68	4 78 55-000 (- 901)
11	in., (2)	) informat	ion in item	of lists, sketch ns 1 through 6 or of sheets is re	nes, or d on this r	rawings eport is	s may	y be us ided oi	sed, pro	vided	(1) size is 8	½ in. x

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FORM NIS-2 (Back)
9. Remarks TRACKING NO. RR 07-140 wo# 05-8/5568-080
CERTIFICATE OF COMPLIANCE  We certify that the statements made in the report are correct and thisREPLACEMENTconforms to the repair or replacement  Type Code Symbol StampN/A  Certificate of Authorization NoN/A  Signed
repair or replacement
Type Code Symbol Stamp N/A
Certificate of Authorization No. N/A
Signed — Cally Maint Specialist Date 11/16 20 06 Owner or Owner's Designee Title
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 11/16 20 66  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 <u>Texnessee</u> and employed by <u>HSB - CT</u>
of
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.
Brue M. Eamigh   Commissions   TN 2534     Inspector's Signature   National Board, State, Province, and Endorsements
Date 11/23 20 <u>06</u>
Λ (0.5)

App 190 PG 182 OF 196

1. Owner <b>TENN</b>	ESSEE VALLEY A	UTHORITY	Date 10	0-02-2006						
1101 Ma	Name rket St., Chattanoo	oga, TN 37402	Sheet	/ of /			-			
2. Plant Watts	Address Bar Nuclear Plant		Unit <b>U</b>	nit 1						
P. O. Bo	Name x 2000, Spring City	y, TN 37381	W/O 05-815565-000							
3. Work Performe	Address d by <b>MECHANICAL</b>	MAINTENANCE	Repair Organization P.O. No.: Job No.: etc.  Type Code Symbol Stamp N/A							
	· •	Vame	• •	tion No N/A		· .				
	Address		Expiration Date N/A							
I. Identification of	system 062- C.V	.c.s	Expiration		•					
i. (a) Applicable C	Construction Code	SECTION III 19 71	Edition, S	S72 Addend	a, <b>N</b> /	<b>A</b> Cod	le Case			
		Utilized for Repairs o		·	·					
S. Identification of	Components Repai	red or Replaced and F	Replaceme	nt Components	_					
						Repaired,	ASME Code Stampe			
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Replaced, or Replacemen t	(Yes or No)			
1-FCV-62-73-A	FISHER CNTLS	5726050	MA	NA	NA	replaced	Yæ			
seaf Kina	Y	NIA	NA	Ht. # 13949-4	16.87	Replace-	N			
٠١. ٢		Value 5/N 5726053	NIA	NIA	911	Replace- ment	Y			
otem toom		,	1		<b>`</b>	1				
					l					
	·									
otem from 12 value										
12 valve	Vork REPLACED \	/ALVE DISC								
12 valve	d: Hydrostatic F		Il Operating	Pressure D	/ 7 WO	ransfer 06-818 -TR\$-68	redti 055-			

APP. V PG183 OF 196

FORM NIS-2 (Back)
9. Remarks TRACKING NO. PROJECT NO. 19 Wo# 05-815585-000
y ppinodic individuol o Bala reports to be madelled
·
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> 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 Cally 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 Texessee and employed by #SB-CT
of 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.
Brush Earnish   Commissions   TN 2534     Inspector's Signature   National Board, State, Province, and Endorsements
Date 11/23 2006
Date
A-Do V

PG 184 OF 196

. Owner <b>TEN</b> I	NESSEE VALLEY A	UTHORITY	Date 1	0-02-2006	_					
1101 M	Name arket St., Chattanoo	oga, TN 37402	Sheet	of						
. Plant Watt	Address s Bar Nuclear Plant	:	Unit <b>U</b>	nit 1						
P. O. B	Name ox 2000, Spring Cit	y, TN 37381	W/O 0	W/O 05-815567-000						
. Work Performe	Address ed by MECHANICAL	MAINTENANCE	Repair Organization P.O. No., Job No., etc.  Type Code Symbol Stamp N/A							
P.O. BOX 2000 S	SPRING CITY,TN 37	Name   <b>381</b>	Authoriza	tion No N/A						
	Address		Expiration	n Date N/A						
. Identification o	f system 062- C.V	.c.s	•							
(b) Applicable	Edition of Section X	SECTION III 19 <b>71</b> Utilized for Repairs of red or Replaced and F	r Replacen	nents 1989	a, <b>N-</b> : 	<b>3-10</b> Coo	de Cas∈			
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacemen t	ASME Code Stamped (Yes or No)			
1-FCV-62-76-A	FISHER CNTLS	5945221	4446	NA	1980	replaced	Υ,			
seat ring	1	NA	NA	H+ # 13949-3	287	Replae	N			
stem from UZ Valve	V	Value 5/N 5945222	NIA	NIA	1911		4			
			-							
		·	•			•				
. Description of	Work REPLACED	ALVE DISC					ed to 8055- 8-901			

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		FORM NI	S-2 (Back)	
9. Remarks	TRACKING NO.	RR-07-142 Applicable Manufacturer's t	Data Reports to be Atta	wo# 05-815567-000 ached
	·			
			·····	
		CERTIFICATE C	F COMPLIAN	CE
We certify tha	t the statements mad	de in the report are c		REPLACEMENT conforms to the
rules of the A	SME Code, Section	XI.		repair or replacement
	mbol Stamp <u>N/A</u>			
Certificate of	Authorization No.			
Signed (	Calle 1	Maint Spec Owner's Designee. Fille	cialist	Date 11/14 20 06
	CI	ERTIFICATE OF INS	ERVICE INSP	ECTION
I, the undersig	ned, holding a valid	commission issued b	y the National	Board of Boiler and Pressure Vessel
Inspectors and	d the State or Provin	ce of Tennessee	_ and employe	d by HSB-cT
of	HART Ford CT	hav	e inspected th	e components described in this
Owner's Repo	rt during the period _	15/4/06	_ to	and state that to the best
}	_	•		and taken corrective measures described
•	•	•		ME Code, Section XI.
				s any warranty, expressed or implied,
1				is Owner's Report. Furthermore, neither ersonal injury or property damage or a
,	• •	•	• ,	ersonal injury of property damage of a
1055 OF ATTY KIII	id ansing nom or cor	nnected with this insp	ection.	
B	m e -/	,	0 × 3/1	•
Inspe	ctor's Signature	Commissions	National Boa	rd. State. Province, and Endorsements
Date ///	23 200	6		rd, State, Province, and Endorsements
<u></u>				APR. V.

. Owner <b>TENN</b>	ESSEE VALLEY AL	JTHORITY	Date 10	-17-2006		* ·	
1101 Ma	Name rket St., Chattanoo	ga, TN 37402	Sheet	<i>[</i> of	í		
. Plant <b>Watts</b>	Address Bar Nuclear Plant	· · · · · · · · · · · · · · · · · · ·	Unit <b>U</b> ı	nit 1			
P. O. Bo	Name x 2000, Spring City	, TN 37381	W/O 06	i-811039-000			
. Work Performed	Address d by MECHANICAL	MAINTENANCE		Repair Organization P e Symbol Stamp		Job No., etc.	
O. BOX 2000 SI	PRING CITY,TN 37	ame 381	Authorizat	ion No N/A			
<del> </del>	Address		Expiration	Date N/A			
. Identification of	system 062 - C.V	.c.s.	•	<del></del>			
(a) Applicable C	Construction Code	AISC 19 NA	STEEL Co. Edition,	ONSTRUCTION NA Addend			ie Case
		Utilized for Repairs o					
		red or Replaced and F			_		
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replaceme	ASME Code Stamped (Yes or No)
HANGER -062A-038	TVA	N/A	MA	1-HGR-062- RB	ilm	repaired	N
							,
•							
			ļ				
					<u> </u>		
			<u> </u>				
. Description of V	Vork CUT HANGEI	neumatic Nomina	ED WITH F	FULL PENETRA	TION	WELD	1

APR. V PG 187 OF 196

FORM NIS-2 (Back)
9. Remarks TRACKING NO. RR-07-145 CODE CASE N 416-2-77211-16-06
, pp. dable management of the control of the contro
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this <u>REPLACEMENT</u> 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 Certificate of Authorization No. N/A  Signed Certificate of Authorization No. N/A  Date ///S 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 Runcises and employed by HSB-CT
of have inspected the components described in this
Owner's Report during the period 10/17/56 to 11/19/56 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.
Banco M. Esmish Commissions TN 2534
Inspector's Signature Commissions 782534  National Board, State, Province, and Endorsements
Date
,

APP V PG 188 OF 196

		NER'S REPORT FOR d by the Provisions of				IS.	
1. Owner TENN	IESSEE VALLEY A	JTHORITY	Date	12/4	1/20	06	
1101 Ma	Name Irket St., Chattanoog	ga , TN 37402	Sheet	of			
2. Plant Watts	Address Bar Nuclear Plant		Unit U	 nit 1		, ,	
P. O. Bo	Name x 2000, Spring City,	TN, 37381	Work Ord	er 05-82340	5-000	<u>-</u>	
3. Work Performe	Address d by TVA Modificat	tions	Type Cod	epair Organizat e Symbol Sta	ion P.O. I	No Job No etc I/A	i.
Watts Bar Nuclea	r Plant	Name	Authorizat	ion No N/A			
	Address		Expiration	Date N/A			
4. Identification of	system 043 Sam	pling					
	Construction Code		Edition, S		enda, l	N/A Cod	le Case
(b) Applicable E	dition of Section XI	Utilized for Repairs or	Replaceme	ents 19	89		
6. Identification of	Components Repair	red or Replaced and R	eplacemen	t Componen	ts		
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 W	/ork Repair weld 1	-043A-T027-2A	<u> </u>			1	
8. Tests Conducted	d: Hydrostatic □ Other □ Pres	Pneumatic  Nomir		ng Pressure mp	°F		
11 in., (2)	information in items	of lists, sketches, or d s 1 through 6 on this re of sheets is recorded	eport is incli	uded on each			

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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 -07-151  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 <u>repair</u> 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 Mark Could, Coust, 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 <u>Terressec</u> and employed by <u>Hs B - CT</u>
of HarTford CT. have inspected the components described in this
Owner's Report during the period
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.
Bruum Earnigh Commissions TN 2534 Inspector's Signature National Board, State, Province, and Endorsements
Date
APP V.

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	ESSEE VALLEY A	UTHORITY	Date 10	0-11-2005			
1101 Ma	Name rket St., Chattanoo	oga, TN 37402	Sheet	j of (			
2. Plant Watts	Address Bar Nuclear Plant	·	Unit <b>U</b>	<del></del> nit 1			
——— Р. О. Во	Name x 2000, Spring City	v. TN 37381	W/O 04-8	320384-000			<del>~</del>
····	Address d by MECHANICAL		F	Repair Organization F e Symbol Stamp			
	-	Vame		tion No N/A	·	-	<del></del>
F.O. DOX 2000 C.	Address						
4. Identification of	system 062 – CV	ics <sub>p12-7-06</sub>	Expiration	Date <u>N/A</u>	<del></del>	<del></del>	
5 (a) Applicable C	Construction Code	SECTION VIII 19 74		N74 Addend	a N/A	∆ Code	Case
` ,	_	Utilized for Repairs or			a, 147,		Case
		red or Replaced and F	•		_		
	Components Repai	Ted of Replaced and r	Kehiacemei	nt Components	1	T	ASME
						Repaired,	Code Stampe
Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Replaced, or Replacement	d (Yes or No)
1-ISV-062-0550-S	KEROTEST	KP23-19	N/A	N/A	75	REPLACE	Υ
Disc	Kero test	S/N 11	NA	NA	ppy	Replace-	4
						ment	
Stem	Kerotest	NA	NA	/ HA gen	30/00	V	Y
			(	P/N B-9909-50	_ ′		
				<i>D</i> 1 14 1	سب	V -1	
		1					
7. Description of W	/ork REPLACE D	ISC					
·							
·			Operating Test Ter	Pressure //	F		
3. Tests Conducted	d: Hydrostatic P Other Press	isc neumatic Nominal sure psi of lists, sketches, or d			F	1) sizo is 81/	in v

Apr. V PAGE 191 OF 196

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
Applicable inclinication of balancepoint to be a massive
CERTIFICATE OF COMPLIANCE
,
We certify that the statements made in the report are correct and this 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 66  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 <u>Tennessee</u> and employed by <u>HSB · CT</u>
of have inspected the components described in this
Owner's Report during the period
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.
Brues N. Earnigh Commissions TN 2534  Inspector's Signature National Board, State, Province, and Endorsements  Date 12/7 20 06
Transman Board, State, 1 Tovince, and Endorsements
Date

		As Requi	red by the Provisions	or the Aoivi	E code Section	ΛI		
1. Owner	TENN	ESSEE VALLEY A	UTHORITY	Date 1	0/29/03		<del></del>	
1101	Market	St., Chattanooga,	TN 37402	Sheet	of			
2. Plant	Watts	Address Bar Nuclear Plant	<u> </u>	Unit U	nit 1			
P. O. I	Box 20	Name 000, Spring City, T	N 37381	W/O 03-	015765-000			
3. Work Perform		Address	_ MAINTENANCE		Repair Organiza le Symbol Stamp			etc.
	_		Name	•	•		· · · · · · · · · · · · · · · · · · ·	
P.O. BOX 2000	SPKII	NG CITY,TN 37381 Address			tion No N/A			
4. Identification	of syst	em <b>SYSTE</b> N	/ 067 ERCW	Expiration	n Date <u>N/A</u>			
	•			Edition	C/72 Addand			do Cooo N/A
5. (a) Applicable		<u>-</u>	ASME SEC III 19 71 ized for Repairs or Re	_		a, N/	——————————————————————————————————————	de Case N/A
. , , ,			·			_		
6. Identification	of Con	nponents Repaired	or Replaced and Repl	acement C	components			
Name of Compo	nent	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacemen	ASME Code Stamped (Yes o No)
BOLTING MAT 3/4" ALL-THD	.,r_	MFG.	N/A	N/A	HT# 727642	N/A	REPLACE MENT	NO
SA 564 GR 630								
NUTS 3/4" SA 194 GR 6		MFG.	N/A	N/A	HT# 38202	N/A	REPLACE MENT	NO
OF 104 OK 0					00202			
						<u> </u>		
7. Description of	f Work	REPLACE	BOLTING I	N FLA	NGES			
8. Tests Conduc		•	matic Nominal Op	erating Pro Fest Temp	essure T			
informa	ation ir	items 1 through 6	ists, sketches, or draw on this report is includ the top of this form.					

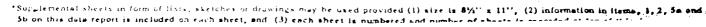
App. V PAGE 193 OF 196

FORM	NIS-2 (Back)
9. Remarks TRACKING NO. RR-06-605 Applicable Manufactu	CODE CASE N-416-1  Vers Data Reports to be Attached
·	
CERTIFICAT	E OF COMPLIANCE
We certify that the statements made in the report at rules of the ASME Code, Section XI.	re correct and this <u>Replacement</u> conforms to the repair or replacement
Type Code Symbol Stamp N/A	
Certificate of Authorization No. N/A	
Signed Jalli Mant Spe Owner or Owner's Designed. Titl	<u>Cialist</u> Date 11/3 20 06
CERTIFICATE OF	INSERVICE INSPECTION
I, the undersigned, holding a valid commission issue	ed by the National Board of Boiler and Pressure Vessel
Inspectors and the State or Province of Texuess	
of Harlford ct.	have inspected the components described in this  to to and state that to the best
in this Owner's Report in accordance with the require	ed examinations and taken corrective measures described
	is employer makes any warranty, expressed or implied,
·	res described in this Owner's Report. Furthermore, neither
	manner for any personal injury or property damage or a
loss of any kind arising from or connected with this i	
Brue M. Earnigh Commissio	ns TN2534  National Board, State, Province, and Endorsements
	National Board, State, Province, and Endorsements
Date	
	APP. V

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

37 As Required by the Provisions of the ASHE Code Rules

1. Manufactured by Henry Pratt Co., 4	Ol S. Highland Av	e.,Aurora, Il	1. Order No. D-00 45-6
(Nam	e & Address of Manufacturer)	60507	
2. Manufactured for Dravo Corp., 11	15 Gilman St., M. (Name and Address)	arietta, Ohio	Order No. E-2897-HPN-1
Topposess Valley Au			÷
3. Owner Tennessee Valley Au		·	
4. Location of Plant Watts Bar Nucle	ear Plant Unit 1 &	2, Spring Cit	y, Tennessee
5. Pump or Valve Identification D-0045	5-6-4 <i>V</i>	1/251	0804K1543 (2
Raw Wa		77 001	00041/1343
	iption of service for which ed	uipment was designed	1)
(a) Drawing No. <u>C-3525</u>	Prepared by N. I	olito REC	3 NO. 83015
(b) National Board No. N/A		ITE	M NO. 4
6. Design Conditions 160	130	209	No. <u>77-2541</u>
(Pressure)	(Temperatu	re)	2
7. The material, design, construction, and wor			II. Class
Edition 1974 , Addenda Da	te N/A	Case No.	
Mark No.	Material Spec. No.	Manufecturer	Remarks
(a) Castings Disc D-2864-13	SA-351, DF8M	Quaker	Ht.No. D-2864
			FILMED FROM BEST
(b) Forgings Top Shaft Bot. Shaft	A564,TP630 A564,TP630	Cartech Cartech	Ht.No. 75804 Ht.No. 75804
	•		App V (0.54.15)
		TAG	115 of 196 Corner



il Spec. No.	Manufactures	
		Remarks
C- D7	Fair Parks	
GR_B8M	Erie Fastener	Ht. No. 820436
	Carcach	nt. 10, 020430
, Gr.55	Bethlehem Steel	Ht.No.801T0931
, Gr.70	U.S. Steel	Ht.No.W11092
	(1) Prof. Eng. Stee (	Tenn. Reg. No. 9411
ratt Com	(1) Prof. Eng. Store	Hearn Reg. No. 9411  Neg. No. 3070
ect.	pany By Am	Hearn Reg. No. 9411
Pratt Com	pany By Am	FILMED FROM REAL
Pratt Com	pany By Am	FILMED FROM BEST
Pratt Com	pany By 2777, 1978	FILMED FROM REAL
Pratt Com May 6  OF SHOP LS	pany By Amore, Store of the pany By Amore of the pa	FILMED FROM BEST
Pratt Com  May 6  DE SHOP Ly  by the Natio	pany By 2000, 1978  SPECTION  and Board of Boiler and Processing to the second point of the second point o	FILMED FROM BEST AVAILABLE CORY
Pratt Com  Way 6  OF SHOP Ly  by the Natio	pany By 2777  , 1978  SPECTION  nal Board of Boiler and Proposed by Hartford Stm	FILMED FROM BEST AVAILABLE COPY  CESSURE Vessel Inspectors L. Bir. Insp. & Ins.
Pratt Com  Way 6  OF SHOP Ly  by the Natio  and cmp	pany By 1978  SPECTION  nal Board of Boiler and Proposed by Hartford Stm (ave inspected the equipment best of my knowledge and proposed to the second proposed to the second proposed to the second proposed to the second proposed to the second proposed to the second proposed	FILMED FROM BEST AVAILABLE COPY  CESSURE Vessel Inspectors In Bir Insp. & Ins. Ont described in this Data I holief, the Manufactures
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