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SALAS,P. Tennessee Valley Authority
RECIP.NAME RECIPIENT AFFILIATION
Document Control Branch (Document Control Desk)

See Rpt.

SUBJECT: Forwards "Brown Ferry Nuclear Plant Unit 2,Cycle 7 ISI NIS-1 Rept," in accordance w/paragraphs IWA-6220 & IWA-6230 of ASME B&PV Code,Section XI,1986 Edition.

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	NRR/DE/EMEB	1	1	NUDOCS-ABSTRACT	1	1
	OGC/HDS3	1	0	RES/DSIR/EIB	1	1
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PRIORITY 1 DOCUMENT

Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609

February 13, 1995

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

Gentlemen:

In the Matter of) Docket No. 50-260
Tennessee Valley Authority)

BROWNS FERRY NUCLEAR PLANT (BFN) - UNIT 2 CYCLE 7 INSERVICE INSPECTION, REPAIR AND REPLACEMENT, AND PRESERVICE INSPECTION SUMMARY REPORTS

In accordance with paragraphs IWA-6220 and IWA-6230 of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 1986 Edition, TVA submits the BFN Unit 2 Cycle 7 summary reports for NRC review. In addition, TVA is including corrections to the BFN Unit 2 Cycle 6, inservice inspection and repair and replacement reports.

Enclosures 1 and 2 respectively contain historical records of BFN Unit 2 Cycle 7, inservice inspection and repair and replacement summary reports for Code Class 1 and 2 pressure retaining components and their supports. Enclosure 3 contains the preservice inspection report for Code Class 1 and 2 components. These reports are for activities that were performed from June 4, 1993 through November 23, 1994.

Additionally, Enclosure 4 provides corrections to BFN Unit 2 Cycle 6 inservice inspection and repair and replacement reports. The corrections included, changes such as revising a component's category item number and clarifying a component's examination type.

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A047
1/1

There are no commitments contained in this letter. If you have any questions please contact me at (205) 729-2636.

Sincerely,

Pedro Salas
Manager of Site Licensing

Enclosures
cc (Enclosures):
Mr. Mark S. Lesser, Section Chief
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

NRC Resident Inspector
Browns Ferry Nuclear Plant
Route 12, Box 637
Athens, Alabama 35611

Mr. J. F. Williams, Project Manager
U.S. Nuclear Regulatory Commission
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852

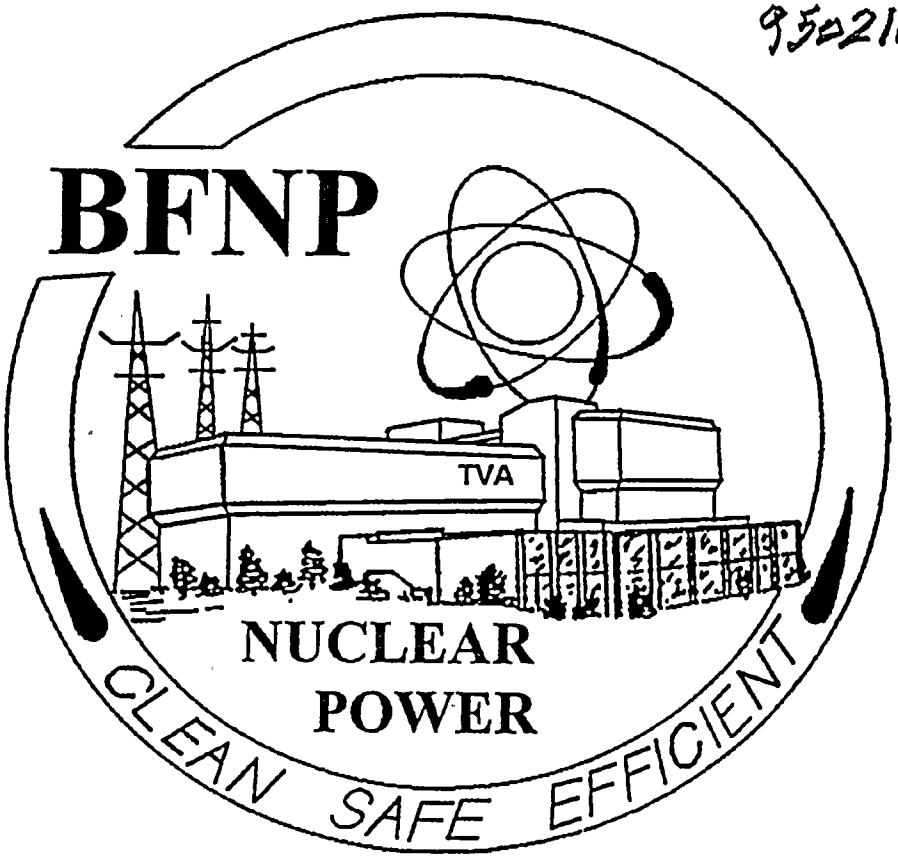
ENCLOSURE 1

BROWNS FERRY NUCLEAR PLANT

UNIT 2, CYCLE 7
INSERVICE INSPECTION NIS-1 REPORT

50-260
2/13/95

9502160048



TENNESSEE VALLEY AUTHORITY

PREPARED BY: [signature] TVA NDE L:III 1-12-95

PREPARED BY: John T. Lewis 1-12-95

REVIEWED BY: [signature] 1-12-95

REVIEWED BY: Frederick W. Frascella Jr. 1-12-95

H.L. WILLIAMS. MANAGER
ENGINEERING & MATERIALS [signature] 1/12/95

ENCLOSURE 2

BROWNS FERRY NUCLEAR PLANT

UNIT 2 CYCLE 7

ASME SECTION XI

NIS-2 DATA REPORT

OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

APPENDIX I _____ Summary of Repair and Replacement Activities

APPENDIX II _____ Form NIS-2 Owner's Report For Repairs or Replacements

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

APPENDIX I

SUMMARY OF REPAIR AND REPLACEMENT ACTIVITIES

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

The following compilation of Form NIS-2 Owner's Report For Repairs Or Replacements is an accounting of those Class 1 and Class 2 repairs and replacements performed during the Unit 2 Cycle 7 period of operation. Records of pump and valve inservice tests that were required to be performed as a result of a repair or replacement activity are listed on the applicable Form NIS-2.

Class 3 Form NIS-2 Owner's Report for Repairs Or Replacements are contained in the Browns Ferry Plant Report.

Owner: TENNESSEE VALLEY AUTHORITY
Nuclear Power Group
1101 Market Street
Chattanooga, TN 37402-2801

Plant: Browns Ferry Nuclear Plant
P.O. Box 2000
Decatur, AL 35609-2000

Unit: Two

Certificate of Authorization: Not Required

Commercial Service Date: March 1, 1975

National Board Number For Unit: Not Required

WID	SYS	ORG	CLASS	ACTIVITY
92-60477-04	1	TVA	1	REPAIRED
92-60447-05	1	TVA	1	REPLACED
94-09849-00	1	TVA	1	REPLACED
94-09849-01	1	TVA	1	REPLACED
94-09849-02	1	TVA	1	REPLACED
94-09849-03	1	TVA	1	REPLACED
94-09849-04	1	TVA	1	REPLACED
94-09849-05	1	TVA	1	REPLACED
94-09849-06	1	TVA	1	REPLACED
94-09849-07	1	TVA	1	REPLACED
94-09849-08	1	TVA	1	REPLACED
94-09849-09	1	TVA	1	REPLACED
94-09849-10	1	TVA	1	REPLACED
94-09849-11	1	TVA	1	REPLACED
94-09849-12	1	TVA	1	REPLACED
94-15972-01	1	TVA	1	REPLACED
94-06277-00	63	TVA	2	REPLACED
94-00227-00	68	TVA	1	REPLACED
94-09648-00	68	GE	1	REPAIRED
94-11598-01	68	GE	1	REPAIRED
94-11598-02	68	GE	1	REPAIRED
94-13986-00	68	GE	1	REPLACEMENT
94-15880-00	68	GE	1	REPLACED/ REPLACEMENT
W21635-001	68	GE	1	REPAIRED
94-01951-00	71	TVA	2	REPLACED

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

WID	SYS	ORG	CLASS	ACTIVITY
93-02108-00	74	TVA	2	REPLACED
94-09648-01	74	GE	1	REPAIRED
94-11598-03	74	GE	1	REPAIRED
94-09980-00	75	GE	1	REPAIRED
94-10308-00	85	NES	1	REPLACED/ REPLACEMENT
94-10308-01	85	NES	1	REPLACED/ REPLACEMENT
94-10308-02	85	NES	1	REPLACED/ REPLACEMENT
94-10308-03	85	NES	1	REPLACED/ REPLACEMENT
94-10308-04	85	NES	1	REPLACED/ REPLACEMENT
94-10308-05	85	NES	1	REPLACED/ REPLACEMENT
94-10308-06	85	NES	1	REPLACED/ REPLACEMENT
94-10308-07	85	NES	1	REPLACED/ REPLACEMENT
94-10308-08	85	NES	1	REPLACED/ REPLACEMENT
94-10308-09	85	NES	1	REPLACED/ REPLACEMENT
94-10308-10	85	NES	1	REPLACED/ REPLACEMENT
94-10308-11	85	NES	1	REPLACED/ REPLACEMENT

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

WID	SYS	ORG	CLASS	ACTIVITY
94-10308-12	85	NES	1	REPLACED/ REPLACEMENT
94-10308-13	85	NES	1	REPLACED/ REPLACEMENT
94-10308-16	85	NES	1	REPLACED
94-10308-17	85	NES	1	REPLACED
94-10308-18	85	NES	1	REPLACED
94-10308-19	85	NES	1	REPLACED
94-10308-20	85	NES	1	REPLACED

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

LEGEND

WID - Work Implementing Document
ex. Wxxxxx-xxx refers to a workplan
9x-xxxxx-xx refers to a work order

SYS - System
1 - Main Steam
63 - Standby Liquid Control
68 - Reactor Water Recirculation
71 - Reactor Core Isolation Cooling
74 - Residual Heat Removal
75 - Core Spray
85 - Control Rod Drive

ORG - Organization which performed the WID
TVA - Work performed by TVA utilizing TVA and/or Stone and Webster Engineering Corporation personnel
GE - General Electric Company
NES - Work performed by Nuclear Energy Services utilizing TVA's Quality Assurance Program and procedures

CLASS - Refers to ASME Code Class 1 or 2

ACTIVITY - Classifies work activity as being repaired, replaced, or replacement as denoted on NIS-2 Form

Owner:	TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant:	Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit:	Two	Certificate of Authorization:	Not Required
Commercial Service Date:	March 1, 1975		
National Board Number For Unit:	Not Required		

APPENDIX II

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date January 18, 1995

Sheet 1 of 7

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2
Work Orders 92-60447-04 and 92-60447-05
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition, N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Main Steam Line B Relief Valve	Target Rock Corp.	TVA stamped S/N 1033	N/A	2-PCV-001 -0018	N/A	Repaired/ Replaced	No

7. Description of Work Repaired indication in MSRV 2-PCV-001-0018 by grinding and replaced miscellaneous studs and nuts. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

* and ASME Section III, Article 9, 1965 Edition along with supplemental requirements contained within contract 66C60-90744

FORM NIS-2 (Back)

9. Remarks The MSRV having S/N 1033 was originally removed from the position designated 2-PCV-1-34

Applicable Manufacturer's Data Reports to be attached

during the Unit 2, Cycle 6 outage (reference WO 92-60447-00) for purposes of performing 0-SI-4.6.D-4, Disassemble One Relief Valve. WO 92-60447-04 contained the instructions for removing the indication and replacing various studs and nuts whereas WO 92-60447-05 installed the valve at the noted position of 2-PCV-1-18. In addition to performing a system leakage test per 2-SI-3.3.1.A following installation, tests conducted which were performed to satisfy ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

CERTIFICATE OF COMPLIANCE repair and

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

repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L. Gilbert System Engineer Date January 18, 1995

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 TENN and employed by HSB I & I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 9-13-94 to 11-10-94, 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.

Albert Tackett Commissions NB 6908 TN 3135

Inspector's Signature National Board, State, Province, and Endorsements

Date Jan. 19 1995

5557 1505

Form NIS-2 Attachment
Sheet 2 of 7
WO 92-60447-04 & -05

FORM N-2 N OR[illegible] CERTIFICATE HOLDERS' DATA [illegible]ORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*

As Required by the Provisions of the ASME Code, Section III, Division 1
Not To Exceed One Day's Production

Pg 1 of 1

1. Manufactured and certified by Target Rock Corp.; 1966E Broadhollow Rd; Farmingdale, NY 11735
(name and address of certificate holder)

2. Manufactured for Tennessee Valley Authority C/O Bechtel Corp.; Athens, AL 35611
(name and address of purchaser)

3. Location of installation Browns Ferry Nuclear Plant; Near Athens, AL 35611
(name and address)

4. Type	102049-4	SA-193 B7	125 ksi	N/A	1993
	(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)	(year built)

5. ASME Code, Section III:	1968	Summer 1970	1	None
	(edition)	(addenda)	(class)	(Code Case no.)

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

7. Remarks: Spare parts for valve assembly 7567F-100-22

Stud QTY 10 Heat No. 25114

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

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

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	N/A	N/A
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
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(9)		
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(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board Number In Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
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(46)		
(47)		
(48)		
(49)		
(50)		

ORIGINAL
When Stamped in Red

10. Design pressure N/A psi Temp. N/A °F. Hydro. test pressure N/A (when applicable) at temp. °F.

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ X 1. (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.

(6/85)-1 This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017.

FORM N-2 (back)

Mfr. Serial No. N/A

CERTIFICATE OF DESIGN

Design specifications certified by R. R. Ghosh (when applicable) P. E. state CA Reg. no 16371

Design report* certified by D. M. Pattarini (when applicable) P. E. state NY Reg. no 029841

CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization no. 1498 Expires 12-12-95

Date 5/27/93 Name Target Rock Corporation (NPT Certificate Holder) Signed for E. Champey; Director, QA (authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of New York and employed by Commercial Union Insurance Company of Boston, Mass. have inspected these items described in this data report on 5/27/93, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 5/27/93 Signed William O. Roland (Authorized Inspector) Commissions N.Y. STATE COMMISSION NO. 2288 ALSO COMMISSIONED IN PENN., OHIO & CONN. (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

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

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

Not To Exceed One Day's Production

Pg 1 of 1

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735
(name and address of certificate holder)

2. Manufactured for Tennessee Valley Authority, Chattanooga, Tennessee 37401
(name and address of purchaser)

3. Location of installation Browns Ferry Nuclear Plant, Athens Alabama 35611
(name and address)

4. Type PL-7567F-100-116 (drawing no.) Rev- SA-194 GR 7 (mat'l. spec. no.) N/A (tensile strength) N/A (CRN) 1986 (year built)

5. ASME Code, Section III: 1968 (edition) S 1970 (addenda) 1 (class) N/A (Code Case no.)

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

7. Remarks: Spare Parts for a completed valve assembly

(5/8-11 UNC-2 Hex Nut Drilled, 6 X 10 Safety Relief Valve) QTY 20

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

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

	Part or Appurtenance Serial Number	National Board No. In Numerical Order		Part or Appurtenance Serial Number	National Board Number In Numerical Order
(1)	N/A	N/A	(26)		
(2)			(27)		
(3)			(28)		
(4)			(29)		
(5)			(30)		
(6)			(31)		
(7)			(32)		
(8)			(33)		
(9)			(34)		
(10)			(35)		
(11)			(36)		
(12)			(37)		
(13)			(38)		
(14)			(39)		
(15)			(40)		
(16)			(41)		
(17)			(42)		
(18)			(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

10. Design pressure N/A psi Temp. N/A °F. Hydro. test pressure N/A (when applicable) at temp. °F.

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ X 1, (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.

(6/86)-1 This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017.

0120 0869

FORM N-2 (back)

Mfr. Serial No. N/A

CERTIFICATE OF DESIGN

Design specifications certified by R. R. Ghosh (when applicable) P. E. state Calif. Reg. no. 16371

Design report* certified by D. M. Pattarini (when applicable) P. E. state N.Y. Reg. no. 029841

CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization no. 1948 Expires 12-9-86

Date 12-9-86 Name Target Rock Corporation (NPT Certificate Holder) Signed R Ruckstein QA SUPERVISOR (authorized representative) FOR G. Abruzzo, Q.A. Manager

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 New York and employed by Commercial Union Insurance Co. of Boston Mass. have inspected these items described in this data report on 12/9/86, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 12/9/86 Signed William A Roland (Authorized Inspector) NEW YORK STATE COMMISSION NO. 2 Commissioned COMMISSIONED IN Penn., Ohio & Conn. (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

375 0372

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

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

Not To Exceed One Day's Production

Pg 1 of 1

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735 (name and address of certificate holder)
2. Manufactured for Tennessee Valley Authority, Chattanooga, TN 37401 (name and address of purchaser)
3. Location of Installation Browns Ferry Nuclear Plant, Athens, Alabama-35611 (name and address)

4. Type	See Back	See Back	See Back	N/A	1988
	(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)	(year built)
5. ASME Code, Section III:	1968	Summer 1970	1	N/A	
	(edition)	(addenda)	(class)	(Code Case no.)	

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (No.) Revision N/A Date N/A
7. Remarks: Spare Parts for a completed valve assembly, 25 Bolts, Item 107, 688 Nuts, Item 115 for valve style 7567F-000
8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A
9. When applicable, Certificate Holders' data reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. In Numerical Order		Part or Appurtenance Serial Number	National Board Number In Numerical Order
(1)	N/A	N/A	(26)		
(2)			(27)		
(3)			(28)		
(4)			(29)		
(5)			(30)		
(6)			(31)		
(7)			(32)		
(8)			(33)		
(9)			(34)		
(10)			(35)		
(11)			(36)		
(12)			(37)		
(13)			(38)		
(14)			(39)		
(15)			(40)		
(16)			(41)		
(17)			(42)		
(18)			(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

10. Design pressure N/A psi Temp. N/A °F. Hydro. test pressure N/A (when applicable) at temp. °F.

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ X 1, (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.

(6/88)-1 This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017.

Form NIS-2 Attachment
Sheet 7 of 7
WO 92-60447-04 & -05

FORM N-2 (back)

Mfr. Serial No. N/A

CERTIFICATE OF DESIGN

Design specifications certified by R. R. Ghosh (when applicable) P. E. state Calif. Reg. no 16371

Design report* certified by D. M. Pattarini (when applicable) P. E. state NY Reg. no 029841

CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization no. 1948 Expires 12-9-89

Date 6/7/88 Name Target Rock Corporation (NPT Certificate Holder) Signed [signature] (authorized representative) For G. Abruzzo, Q.A. Manager

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 New York and employed by Commercial Union Insurance Company of Boston, Mass. have inspected these items described in this data report on 6/7/88, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

NEW YORK STATE COMMISSION NO. 2288
ALSO COMMISSIONED IN Penn., Ohio & Conn.

Date 6/7/88 Signed [signature] (Authorized Inspector) Commissions (Nat'l. Bd. (incl. endorsement) state or prov. and no.)

PL ITEM #	PART NAME	PART NAME	MATERIAL	TENSILE	LOT CODE
107	Bolt	204018-1 Rev. A	SA-193 B7	125,000 MIN	SPS-B7
115	Nut	204041-1 Rev. B	SA-194 GR 7	-	SPS-7

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 21, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-00
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 1968 Edition, Summer 1970 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1014	N/A	as located on 2-PCV-1-180	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content and one bolt (part item #112). The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA S/N 1014. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Willis L Gilbert, System Engineer (Owner or Owner's Designee, Title) Date December 22, 1994

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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-27-94 to 12-30-94, 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.

B.J. Rice (Inspector's Signature) Commissions NO. 9635, TN. A-N-I (National Board, State, Province, and Endorsements)

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date December 21, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-09849-01 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 19 68 Edition, * Summer 1970 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Pilot Cartridge For Main Steam Relief Valve	Target Rock Corp.	1026	N/A	as located on 2-PCV-1-179	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content and one bolt (part item #112). The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed onnhas TVA
Applicable Manufacturer's Data Reports to be attached
S/N 1026. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert System Engineer Date December 22, 1994
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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B. J. Rice Commissions NO. 9635, TN. A-N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 21, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-02
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 1968 Edition, Summer 1970 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1016	N/A	as located on 2-PCV-1-4	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA S/N 1016. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp: N/A

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

Signed Philip L Gilbert, System Engineer (Owner or Owner's Designee, Title) Date December 22, 1994

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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B. J. Rice (Inspector's Signature) Commissions NO. 9635, TN. A-N-I (National Board, State, Province, and Endorsements)

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 21, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-03
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 19 68 Edition, Summer 1970 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1021	N/A	as located on 2-PCV-1-5	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA
Applicable Manufacturer's Data Reports to be attached
S/N 1021. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Philip L Gilbert, System Engineer Date December 22, 1994
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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B. F. Rice Commissions NO. 9635, IN. A-N-T,
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 21, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-04
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 19 68 Edition, Summer 1970 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1079	N/A	as located on 2-PCV-1-18	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA S/N 1033. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

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.

repair or replacement

Type Code Symbol Stamp N/A

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

Signed Willis L Gilbert, System Engineer Date December 22, 1994

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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 10-30-94 to 12-30-94, 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.

B. F. Rice Commissions ND. 9635, TN. A-N-T,

Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date December 21, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-09849-05 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 19 68 Edition, Summer 1970* Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1022	N/A	as located on 2-PCV-1-19	1978.	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA
Applicable Manufacturer's Data Reports to be attached
S/N 1022. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Willie L. Gilbert, SYSTEM ENGINEER Date DECEMBER 22, 1994
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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B. F. Rice Commissions NO. 9635, TN. A-N-T
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 22, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-06
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 1968 Edition, *Summer 1970 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1076	N/A	as located on 2-PCV-1-22	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is as ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒, Pressure N/A psi, Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA
Applicable Manufacturer's Data Reports to be attached
S/N 1070. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirments include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L. Gilbert, System Engineer Date December 22, 1994
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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B. J. Rice Commissions NO. 9635, TN, A-N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 22, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-07
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 19 68 Edition, Summer 1970 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1069	N/A	as located on 2-PCV-1-23	1978	Replaced	Yes

7. Description of Work Replace pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA S/N 1031. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, System Engineer Date December 22, 1994
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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B. J. Rice Commissions NO. 9635, TN, A-N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 22, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-08
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System Main Steam, System 1

5. (a) Applicable Construction Code ASME Sec. III 1968 Edition, Summer 1970 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1028	N/A	as located on 2-PCV-1-30	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA S/N 1028. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, System Engineer Date December 22, 19 94
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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B. J. Rice Commissions ND-9635, TN. A-N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 19 94

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 22, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-09
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 1968 Edition, Summer 1970* Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1020	N/A	as located on 2-PCV-1-31	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA
Applicable Manufacturer's Data Reports to be attached
S/N 1020. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L. Gilbert, System Engineer Date December 22, 1994
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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B. F. Rice Commissions ND 9635, TN. A-N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 22, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-10
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 1968 Edition, Summer 1970* Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1033	N/A	as located on 2-PCV-1-34	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA S/N 1063. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

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.

repair or replacement

Type Code Symbol Stamp N/A

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

Signed Billie L Gilbert, System Engineer Date December 22, 1994

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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B.F. Rice Commissions ND. 9635, TN. A-N-T

Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 22, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-11
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 1968 Edition, Summer 1970 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1015	N/A	as located on 2-PCV-1-41	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* and as amended by additioanl quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA S/N 1015. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

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.

repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, System Engineer Date December 22, 1994

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 Tenn. and employed by Hartford Stm. Blr. Insp. & Ins. Co. of Hartford, Conn. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B. F. Rice Commissions NO. 9635, TN. A-N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 22, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09849-12
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code ASME Sec. III 1968 Edition, Summer 1970* Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Pilot Cartridge for Main Steam Relief Valve	Target Rock Corp.	1032	N/A	as located on 2-PCV-1-42	1978	Replaced	Yes

7. Description of Work Replaced pilot disc (part item #55) with one having 0.3% platinum content. The MSRV is an ASME Code Class 1 equivalent component.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

*and as amended by additional quality assurance and design requirements contained within General Electric Purchase Order No. 205-AJ600

FORM NIS-2 (Back)

9. Remarks The valve body to which this pilot cartridge was installed on has TVA
Applicable Manufacturer's Data Reports to be attached
S/N 1084. In addition to performing a system leakage test per 2-SI-3.3.1.A, tests conducted which were performed to meet ASME Sec. XI inservice test requirements include 0-SI-4.6.D.1, Bench Test Relief Valves, and 2-SI-4.6.D.2, Main Steam Relief Valves Manual Cycle Test.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Philip L Gilbert, System Engineer (Owner or Owner's Designee, Title) Date December 22, 1994

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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 6-30-94 to 12-30-94, 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.

B.J. Rice (Inspector's Signature) Commissions NO. 9635, TN. A-N-I (National Board, State, Province, and Endorsements)

Date 12-30 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 market St. (Address)
Chattanooga, TN 37402-2801 (Address)

Date December 9, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-15972-01 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 1, Main Steam

5. (a) Applicable Construction Code USAS B31.1.0 19 67 Edition, * N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Main Steam Line D Outboard Isolation Valve	Atwood and Morill Co., Inc.	(unable to determine)	N/A	2-FCV-001 -0052	N/A	Replaced	No

7. Description of Work Replaced stem assembly and two studs and nuts on 2-FCV-001-0052 (which is an ASME Code Class 1 equivalent component)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☒ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

* as amended by additional quality assurance and design requirements contained within contract 66C31-90744

FORM NIS-2 (Back)

9. Remarks In addition to performing a system leakage test, other tests conducted
Applicable Manufacturer's Data Reports to be attached
which were performed to meet ASME inservice test requirements include 2-SI-3.2.12, Verification of Fail-Safe Position for MSIVS; 2-SI-4.7.D.1.a-3, Main Steam Isolation Valves Closure Time Test; and 2-SI-4.7.A.2.i-3/1d2, Primary Containment Local Leak Rate Test Main Steam Line D Outboard: Penetration X-7D.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert System Engineer Date December 9, 1994
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 Hartford Steam Boiler Insp & Ins. Co of Hartford, Conn have inspected the components described in this Owner's Report during the period 10-18-94 to 11-10-94, 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.

George J Dean Commissions NB 7905 TN 3178
Inspector's Signature National Board, State, Province, and Endorsements

Date 1-6 1995

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801 (Address)
Date May 3, 1994
Sheet 1 of 3

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-06277-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 63, Standby Liquid Control System

5. (a) Applicable Construction Code USAS B31.1.0 19 67 Edition, * N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
2-FCV-63-008A Squib Valve	Conax Corp. Explosive Products Div.	24	N/A	Part Number 1832-117-01	1967	Replaced	No

7. Description of Work Replaced trigger assembly to squib valve 2-FCV-63-008A (ASME Code Class 2 equivalent) with like-for-like.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

* as amended by the additional procurement requirements contained within General Electric Specifications 21A5575 and 21A5576 (reference TVA contract 66C80-90744 and GE Purchase Order 205-58968).

FORM NIS-2 (Back)

9. Remarks Existing 2-FCV-63-008A experienced loss of electrical continuity alarm

Applicable Manufacturer's Data Reports to be attached

(continuity meter pegged high on increasing current), hence only the trigger assembly was required to be replaced. The new trigger assembly, Conax part No. N27006-02, was procurred under contract P-94N2S-82307E (reference sheets 2 and 3 of this Form NIS-2 for documentation of manufacturer serial numbers and National Board number as the trigger assembly is an ASME Code stamped part).

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Philip J. Milbert, System Engineer Date June 6, 19 94

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 North Carolina and employed by HSB I&I Co of Hartford, CT have inspected the components described in this Owner's Report during the period 6-10-94 to 6-21-94, 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.

Neil A. Jackson Commissions NC 869

Inspector's Signature National Board, State, Province, and Endorsements

Date June 21 19 94

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS CONTINUATION SHEET

1. Owner TENNESSEE VALLEY AUTHORITY
   1101 Market St.; Chattanooga, TN 37402-2801
2. Plant Browns Ferry Nuclear Plant
   P.O. Box 2000; Decatur, AL 35609-2000
3. Work Performed by TVA
   P.O. Box 2000; Decatur, AL 35609-2000

Date May 3, 1994
Sheet 2 of 3
Unit 2
Job No. Work Order 94-06277-00
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

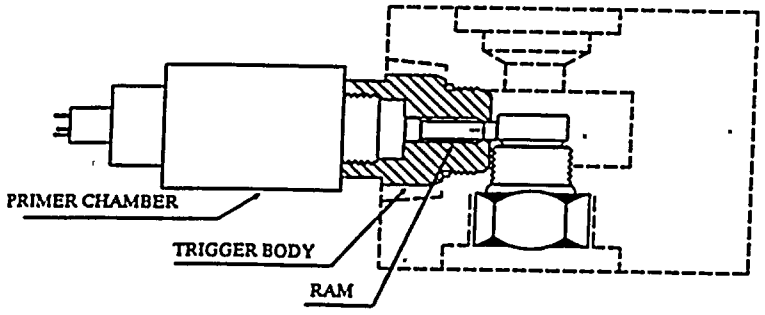
4. Identification of System System 63, Standby Liquid Control System
5. (a) Applicable Construction Code USAS B31.1.0 1967 Ed., as amended by the additional procurement requirements contained within General Electric Specifications 21A5575 and 21A5576 (reference TVA contract 66C80-90744 and GE Purchase Order 205-58968)
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Ident.	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
2-FCV-63-008A Squib Valve	Conax Corp. Explosive Products Div.	24	N/A	Part No. 1832-117-01	1967	Replaced	No

Conax Buffalo
2300 WALDEN AVENUE, BUFFALO, NY 14225-0273

Tabulation of Materials

Trigger Assembly
P/N N27006-02



Trigger Body

P/N	N38018-01
Vendor:	Vitco Nuclear Prod.
P.O. No.:	N106414
Heat No.:	12035
C/N:	16585

Primer Chamber

P/N:	N38062-01
Vendor:	Energy Steel
P.O. No.:	N105706
Heat No.:	15017
C/N:	16394
SEP S/N:	900

Ram

P/N	N39012-01
Vendor:	Carpenter Tech.
P.O. No.:	N91896
Heat No.:	53891
C/N:	16459

Trigger Subassembly S/N: 4363

Customer:	Tennessee Valley Authority
Project:	Browns Ferry Nuclear Plant
Customer P.O.:	P94N2S-82307E-001
Conax S.O.:	7KW600

Conax Quality Control: [signature] Date: [illegible]

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

Form NIS-2
Sheet 3 of 3
WO #94-06277-00
Pg. 1 of 1

1. Manufactured and certified by Conax Buffalo Corporation, 2300 Walden Avenue, Cheektowaga, NY 14225
(name and address of NPT Certificate Holder)

2. Manufactured for Tennessee Valley Authority, Knoxville, TN 37901-5500
(name and address of Purchaser)

3. Location of installation Browns Ferry Nuclear Plant, Athens, AL 35611
(name and address)

4. Type: N20000, Rev. F (drawing no.) | SA479 304SST (mat'l spec. no.) | 75 KSI (tensile strength) | N/A (CRN) | 1993 (year built)

5. ASME Code, Section III, Division 1: 77 (edition) | S77 (addenda date) | 1 (class) | N/A (Code Case no.)

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

7. Remarks: Trigger Body Subassembly for explosive actuated valve replacement kit for standby liquid control system.

Para. NB-2121 (b) is applicable to ram. Press Fit/Seal on .328 & .4375 diameters: Overall subassembly length is 2.5 .

Pneumatic Pressure Test at 2800 psi for 10 minutes.

8. Nom. thickness (in.) See Remarks Min. design thickness (in.) See Remarks Dia. ID (ft & in.) See Remarks Length overall (ft & in.) See Remarks

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

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	4360	4360
(2)	4361	4361
(3)	4362	4362
(4)	4363	4363
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

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

10. Design pressure 1400 psi. Temp. 150 °F. Hydro. test pressure See Remarks (when applicable) at temp. °F

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

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

Reprint (7/91)

Certificate Holder's Serial Nos. 4360 through 4363

CERTIFICATION OF DESIGN

Design specifications certified by Clyde T. Nieh (when applicable) P.E. State CA Reg. no. 15587

Design report* certified by Francis J. Domino (when applicable) P.E. State NY Reg. no. 36832

CERTIFICATE OF COMPLIANCE

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

NPT Certificate of Authorization No. N-1850 Expires September 2, 1995

Date 12/3/93 Name Conax Buffalo Corporation (NPT Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NY and employed by Hartford Steam Boiler Inspection & Insurance Company of Hartford, CT have inspected these items described in this Data Report on 12-6-93, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.
By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 12-6-93 Signed (Authorized Inspector) Commissions NB7754N (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date December 5, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-00227-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 68, Reactor Water Recirculation

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition,* N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Jet Pumps Supply Header Isolation Valve	Anchor/ Darling	(unable to verify)	N/A	2-FCV-68-33	N/A	Replaced	No

7. Description of Work Replaced stud and nut in 2-FCV-68-33 with like-for-like items (valve is ASME Code Class 1 equivalent)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

*as amended by the additional quality assurance and design requirements contained in contract 66C60-90744

FORM NIS-2 (Back)

9. Remarks TVA elected to replace a stud and nut on 2-FCV-68-33 to facilitate completion of field work.
Applicable Manufacturer's Data Reports to be attached

WO 94-00227-00 was written for the purpose of performing a VT-3 visual examination for corrosion of one stud and nut on this valve as a result of finding leakage at the valve's body-to-bonnet flange during the Unit 2, Cycle 6 Reactor Pressure Vessel leakage test. Approval to delay inspection of a stud/nut for one operating cycle and to inspect in accordance with Paragraph IWA-5250 of the 1992 Edition of the ASME Code was granted by the NRC in response to TVA's submittal of System Pressure Test Program Request for Relief No. SPT-7.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, System Engineer Date December 5, 1994
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 TENN and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7-15-94 to 10-21-94, 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.

Albert T Todd Commissions NB6908 TN3125
Inspector's Signature National Board, State, Province, and Endorsements

Date Dec. 6 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 16, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-09648-00
Repair Organization P.O. No., Job No., etc.

3. Work Performed by General Electric (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System Reactor Water Recirculation, System 68

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition, * N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Recirc Pipe Weld	TVA	N/A	N/A	GR-2-19	N/A	Repaired	No
Recirc Pipe Weld	TVA	N/A	N/A	GR-2-38	N/A	Repaired	No

7. Description of Work Repaired (by removal) indications in welds GR-2-19 & GR-2-38 by grinding in accordance with MCI-0-000-PRP002. Welds located on ASME Class 1 equivalent piping.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) - This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

* with supplemental requirements

FORM NIS-2 (Back)

9. Remarks Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair (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 Expiration Date N/A

Signed Phillip L Gilbert, System Engineer (Owner or Owner's Designee, Title) Date November 16, 1994

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 Hartford Steam Boiler Insp. & Ins. Co. of Hartford, Conn. have inspected the components described in this Owner's Report during the period 10-18-94 to 11-16-94 (CS 11644), 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.

George F Death (Inspector's Signature) Commissions NB 7905 TN 3178 (National Board, State, Province, and Endorsements)

Date 11-16 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 15, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-11598-01
Repair Organization P.O. No., Job No., etc.

3. Work Performed by General Electric (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System Reactor Water Recirculation System.(68)

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition, * N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Recirc Sys. Pipe Weld	TVA	N/A	N/A	GR-2-25	N/A	Repaired	No

7. Description of Work Removed indication in weld GR-2-25 by grinding in accordance with MCI-0-000-PRP002

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*with supplemental requirements

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, SYSTEM ENGINEER Date NOVEMBER 15, 19 94
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 Hartford Steam B/R. Insp & Ins. Co of Hartford, Conn have inspected the components described in this Owner's Report during the period 10-14-94 to 11-11-94, 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.

George F Dean Commissions NB 7905 TN3178
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-16 19 94

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801 (Address)

Date November 15, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-11598-02
Repair Organization P.O. No., Job No., etc.

3. Work Performed by General Electric (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System Reactor Water Recirculation, System 68

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition,* N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Recirc Sys. Pipe Weld	TVA	N/A	N/A	GR-2-52	N/A	Repaired	No

7. Description of Work Removed two indications in weld GR-2-52 by grinding in accordance with MCI-0-000-PRP-2. Weld located on ASME Class 1 equivalent piping.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*with supplemental requirements

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair (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 Expiration Date N/A

Signed Willis L. Hilbert, System Engineer Date November 15, 1994
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 TENN. and employed by HSB I & I of HARTFORD, CT. have inspected the components described in this Owner's Report during the period 10/18/94 to 11/14/94, 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.

Albert Ladd Commissions NB6908 TN 3135
Inspector's Signature National Board, State, Province, and Endorsements

Date Nov. 16 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date November 21, 1994
Sheet 1 of 3

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-13986-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by General Electric (Name)
The James Building
735 Broad Street Suite 804; Chattanooga, TN 37402 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 68, Reactor Water Recirculation (Reactor Pressure Vessel)

5. (a) Applicable Construction Code ASME Sec. III 19 65 Edition, * Summer 1965 Addenda, 1335-2, 1336 Code Case 1332-1, 1332-3, 1334
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Instrument Dry Tube	GE Reuter-Stokes	L3244	N/A	Core Location 40-21	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3242	N/A	Core Location 48-53	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3254	N/A	Core Location 24-29	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3241	N/A	Core Location 48-13	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3253	N/A	Core Location 16-45	N/A	Replacement	No

7. Description of Work Replacement of Instrument Dry Tubes

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

*and as amended by additional quality assurance and design requirements contained in contract 21042-GE-00016Q

FORM NIS-2 (Back)

9. Remarks Dry Tube replacement due to IVVI Inspection revealing unacceptable indications. A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance instruction 2-SI-3.3.1.A of which the aforementioned Instrument Dry Tubes being within the inspection boundary.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, System Engineer Date December 2, 1994
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 TENN and employed by HSB I&E of HARTFORD, CT have inspected the components described in this Owner's Report during the period 10/16/94 to 10/24/94, 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.

Albert Tadel Commissions NB6908 TN3135
Inspector's Signature National Board, State, Province, and Endorsements

Date Dec. 6 1994

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS CONTINUATION SHEET

1. Owner TENNESSEE VALLEY AUTHORITY
   1101 Market St.; Chattanooga, TN 37402-2801
2. Plant Browns Ferry Nuclear Plant
   P.O. Box 2000; Decatur, AL 35609-2000
3. Work Performed by General Electric
   The James Building
   734 Broad St. Suite 804; Chattanooga, TN 37402

Date November 21, 1994
Sheet 2 of 3
Unit 2
Job No. Work Order 94-13986-00
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 68, Reactor Water Recirculation (Reactor Pressure Vessel)
5. (a) Applicable Construction Code ASME Section III, 1965 Edition w/ Summer 1965 Addenda, 1332-1, 1332-3, 1334, 1335-2, & 1336 Code Cases, and as amended by additional quality assurance and design requirements contained in contract 21042-GE-00016Q
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identifcation	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
Instrument Dry Tube	GE Reuter-Stokes	L3247	N/A	Core Location 32-29	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3250	N/A	Core Location 40-45	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3248	N/A	Core Location 24-37	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3243	N/A	Core Location 32-37	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3245	N/A	Core Location 16-21	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3251	N/A	Core Location 16-13	N/A	Replacement	No
Instrument Dry Tube	GE Reuter-Stokes	L3252	N/A	Core Location 16-53	N/A	Replacement	No

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provisions of the ASME Code Rules

1. (a) Manufactured by GE REUTER-STOKES, INC., 8499 DARROW ROAD, TWINSBURG, OHIO 44087
(Name and address of Manufacturer of part)

(b) Manufactured for BROWNS FERRY, TVA, DECATUR, ALABAMA
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part L3241 THRU L3254 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. RS-E5-1500-201 Drawing Prepared by GE REUTER-STOKES

(b) Description of Part Inspected UNIVERSAL DRY TUBE

(c) Applicable ASME Code: Section III, Edition 1977, Addenda date SUMMER 1977, Case No. N/A Class 1

3. Remarks: DESIGN: PRESSURE 1250 PSIG, TEMPERATURE - VESSEL 575°F, FLANGE 300°F
(Brief description of service for which component was designed)
HYDROSTATIC TEST PRESSURE: 1925 PSIG

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 9-24 19 92 Signed GE REUTER-STOKES (Manufacturer) By James K. Holmes QUALITY ASSURANCE

Certificate of Authorization Expires SEPTEMBER 16, 1994 Certificate of Authorization No. N-2703

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE REUTER-STOKES TWINSBURG, OHIO CDS-C-5600-1

Stress analysis report on file at GE REUTER-STOKES TWINSBURG, OHIO CDR-C-5600-01

Design specifications certified by DOUGLAS E. BACSO Prof. Eng. State OH Reg. No. E-044071

Stress analysis report certified by SURINDER L. KAMPANI Prof. Eng. State OH Reg. No. E-034113

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of OHIO and employed by H.S.B.I. & I. Co. of HARTFORD, CT have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 9-25 19 92, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

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

Date 9-25 19 92

Jack C. Schell Commissions NB 7920 OHIO-PAWC2454-N
Inspector's Signature National Board, State, Province and No.

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date November 23, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-15880-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by General Electric (Name)
James Bldg. #804
735 Broad St.; Chattanooga, TN 37402 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 68, Reactor Water Recirculation (Reactor Vessel)

5. (a) Applicable Construction Code ASME III, CL 1 1974 Edition, Winter 75 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
In-Core Flange @ location 08-25	General Electric	N3230-2-1	ASME Cert. of Auth. N-1888	GE Part No. 107C5053G001 HT #7638N	N/A	Replaced	No
In-Core Flange cap screws @ location 08-25	General Electric	N/A	ASME Cert. of Auth. N-1888	GE Part No. 117C4515P001 HT #M51481	N/A	Replacement	No

7. Description of Work Replaced in-core flange and cap screws at location 08-25 with new components.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks Since the replacement activity involved only the disassembly and reassembly of a mechanical joint, a system pressure test of IWA-5211(a) (system leakage test) was performed per Surveillance Instruction 2-SI-3.3.1.A.

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.

repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L. Hilbert, System Engineer Date November 23, 1994

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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 10-16-94 to 11-29-94, 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.

B. J. Rice Commissions 9635, TN. 2430, A-N-I.

Inspector's Signature National Board, State, Province, and Endorsements

Date 11-29 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date November 21, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Workplan 21635-001 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by General Electric (Name)
640 Freedom Bus. Ctr.
King of Prussia, PA 19406 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 68, Reactor Water Recirculation

5. (a) Applicable Construction Code USAS B31.1.0 19 67 Edition, * N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Recirc Pipe Weld	N/A	N/A	N/A	Pipe Weld GR-2-64 (OL)	N/A	Repaired	No

7. Description of Work Applied a full structural weld overlay to repair Recirc pipe weld GR-2-64 (Code Class 1 equivalent) per Design Change Notice (DCN) W21635A.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*with supplements

FORM NIS-2 (Back)

9. Remarks TVA elected to invoke ASME Code Case N-504-1 as an acceptable alternative
Applicable Manufacturer's Data Reports to be attached
in repairing Recirc weld GR-2-64 by application of a full structural weld overlay. This alternative was subsequently approved by the NRC as an acceptable means of repair. Since the pressure boundary was not penetrated while applying the overlay, the Code Case requirement of performing a pressure test in accordance with IWA-5000 was met by performing a system leakage test per Surveillance Instruction 2-SI-3.3.1.A.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, System Engineer Date November 24, 1994
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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 10-17-94 to 11-6-94, 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.

B. J. Rice Commissions 9635, TN. 2430, A-N-T.
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-29 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801
Date December 12, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-01951-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 71, Reactor Core Isolation Cooling

5. (a) Applicable Construction Code USAS B31.1.0 19 67 Edition, N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
RCIC Steam Supply Line Snubber	Bergen-Paterson Pipesupport Corp.	G56410-4R (TVA Serial No: M0346)	N/A	2-SNUB-071-5010	N/A	Replaced	No

7. Description of Work Replaced cylinder on snubber 2-SNUB-071-5010 with like-for-like item (snubber is an ASME Code Class 2 equivalent component)

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

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

(12/82) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 4/93

FORM NIS-2 (Back)

9. Remarks None

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Willis L. Gilbert, System Engineer Date December 15, 19 94
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 TENN. and employed by HARTFORD STM. BLR. INSP. & INS. CO. of HARTFORD, CONN. have inspected the components described in this Owner's Report during the period 10-7-94 to 12-29-94, 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.

B. F. Rice Commissions NO. 9635 TN. A-N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 12-29 19 94

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date December 4, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 93-02108-00
Repair Organization P.O. No., Job No., etc.

3. Work Performed by TVA (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

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

4. Identification of System System 74, Residual Heat Removal

5. (a) Applicable Construction Code USAS B31.1.0 19 67 Edition, * N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
RHR Sys II Discharge Cross-tie Valve to U-3	William Powell	(unable to verify)	N/A	2-FCV-74-101	N/A	Replaced	No

7. Description of Work Replaced valve's gate (wedge) with like-for-like item (valve is ASME Code Class 2 equivalent)

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

* as amended by additional quality assurance and design requirements contained within contract 68C37-91062

FORM NIS-2 (Back)

9. Remarks Although wedge was originally procurred QA Level 0 per contract 75P52-49395, the wedge was upgraded to QA Level 2 per PEG Evaluation 9300009438A0 and contract P-93NJV-81108E.

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 repair or replacement ASME Code, Section XI.

Type Code Symbol Stamp N/A

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

Signed Phillip L. Gilbert, System Engineer Date December 5, 19 94
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 TENN and employed by HSB I & I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 10/6/94 to 10/23/94, 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.

Albert Tadd Commissions NB6908 TN3135
Inspector's Signature National Board, State, Province, and Endorsements

Date Dec. 6 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date November 15, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-09648-01 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by General Electric (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System Residual Heat Removal, System 74

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition,* N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
RHR Pipe Weld	TVA	N/A	N/A	DRHR-2-07	N/A	Repaired	No

7. Description of Work Repaired (by removal) indication in weld DRHR-2-07 by grinding in accordance with MCI-0-000-PRP002. Weld located on ASME Class 1 equivalent piping.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

* with supplemental requirements

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, SYSTEM ENGINEER Date NOVEMBER 15, 1994

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 TENN. and employed by HSB I&T of HARTFORD, CT have inspected the components described in this Owner's Report during the period 10/19/94 to 11/14/94, 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.

Albert Tadd Commissions NB6908 TN3135

Inspector's Signature National Board, State, Province, and Endorsements

Date NOV 17 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date November 15, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-11598-03 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by General Electric (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System Residual Heat Removal, System 74

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition,* N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
RHR Pipe Weld	TVA	N/A	N/A	DRHR-2-04	N/A	Repaired	No

7. Description of Work Removed indication in weld DRHR-2-04 by grinding/buffing in accordance with MCI-0-000-PRP002. Weld located on ASME Class 1 equivalent piping.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

* with supplemental requirements

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair (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 Expiration Date N/A

Signed Phillip L Gilbert, SYSTEM ENGINEER (Owner or Owner's Designee, Title) Date NOVEMBER 15, 1994

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 TENN. and employed by HSB I&T of HARTFORD, CT have inspected the components described in this Owner's Report during the period 10/19/94 to 11/14/94, 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.

Albert Tackett (Inspector's Signature) Commissions NB6908 TN3135 (National Board, State, Province, and Endorsements)

Date NOV. 16 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date November 16, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-09980-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by General Electric (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System Core Spray, System 75

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition,* N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
CS Pipe Weld	TVA	N/A	N/A	DCS-2-05	N/A	Repaired	No
CS Pipe Weld	TVA	N/A	N/A	DCS-2-14	N/A	Repaired	No

7. Description of Work Repaired (by removal) indications in welds DCS-2-05 & DCS-2-14 by grinding in accordance with MCI-0-000-PRP002. Welds located on ASME Class 1 equivalent piping.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

* with supplemental requirements

FORM NIS-2 (Back)

9. Remarks _____

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Philip L Gilbert, System Engineer Date November 16, 1994
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 Hartford Steam Blr Insp. & Ins. Co. of Hartford, Conn have inspected the components described in this Owner's Report during the period 10-14-94 to 11-16-94, 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.

George F Deaton Commissions NB 7905 TN 3178
Inspector's Signature National Board, State, Province, and Endorsements

Date 11-16 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 20, 1994

Sheet 1 of 4

2. Plant Browns Ferry nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-00
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19____ Edition,____ Addenda,____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 02-39	General Electric	A5381	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 02-39	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed
Applicable Manufacturer's Data Reports to be attached
per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L. Gilbert, System Engineer Date November 20, 19 94
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 TENN. and employed by HSB I & I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Todd Commissions NB6908 TN 3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV 23 19 94

Form NIS-2 Attachment
Sheet 2 of 4
WO # 94-10308-00

6022-2797

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5381 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 07/29/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (SC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Biorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 5/26, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

7/29/1992 Inspector's Signature NC 1231, Ohio, WC 3686 PA
Date National Board, State, Province And No.

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

(07/90)

6022-2798

FORM N-2 (back)

FORM N-2 ATTACHMENT
SHEET 3 OF 4
WO# 94-10308-00

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used ____ (Material, Spec. No., T.S. Size Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)
Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ inches or gage. Number ____ Type ____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

14. Design pressure[2] ____ psi at ____ °F at temp of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

1 - If Postweld Heat-Treated.
2 - Use other internal or external pressure with coincident temperature when applicable.

FORM NIS-2 ATTACHMENT
SHEET 4 OF 4

6022-2799

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO # 94-10308-00

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5381 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

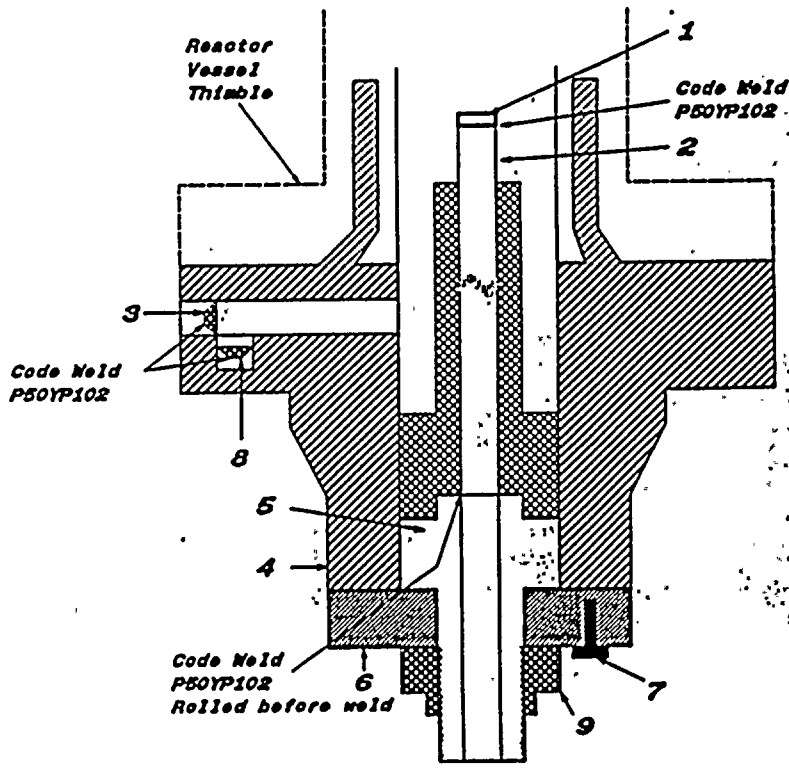
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801

Date November 20, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-01 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19 ____ Edition, ____ Addenda, ____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 06-19	General Electric	A4442	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 06-19	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Philip L Hilbert JR System Engineer Date November 20, 1994
Owner or Owner's Designee, Title
RLH 11/20/94

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 TENN. and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Ladd Commissions NB6908 TN 3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV. 23 1994

SHEET 2 of 4
FORM NIS-2 ATTACHMENT
WO # 94-10308-01

5022.5190

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4442 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 09/10/92 Signed GE-NEBG-NF & CM-QA By
(NPT Certificate Holder) (GE QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Biorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 8/25, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

9/10, 1992 Jerome P Ewer NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

5022.5191

SHEET 3 OF 4
FORM NIS-2 ATTACHMENT
WO # 94-10308-01

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ Inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____%
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM NIS-2 ATTACHMENT
SHEET 4 OF 4
WO # 94-10308-01

6022.5192

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GENF&CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4442 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev. 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

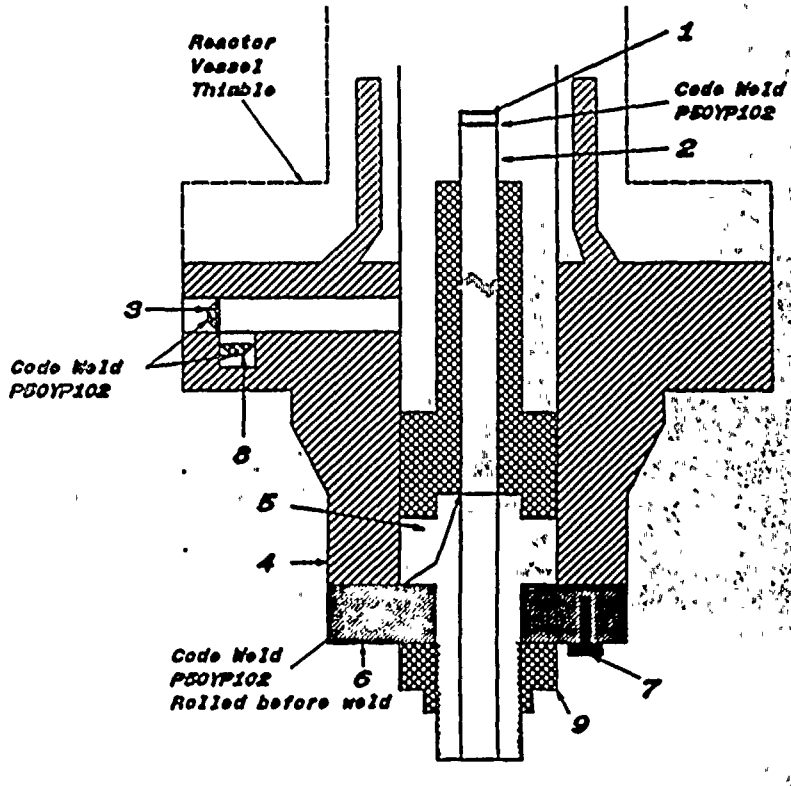
5. Baco 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 19, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-02
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19____ Edition,____ Addenda,____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 10-23	General Electric	A5486	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 10-23	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed
Applicable Manufacturer's Data Reports to be attached
per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L. Hilbert, System Engineer Date November 19, 19 94
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 TENN. and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Tadd Commissions NB6908 TN3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV. 23 19 94

6022.4289

FORM NIS-2 ATTACHMENT SHEET 1 OF 4
WO # 94-10308-02

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5486 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 9/14/92 Signed GE-NEBG-NF & CM-QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design Information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 9/2, 1992 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

9/14/92 Jerome P Evans NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

6022.4290

Form NIS-2 Attachment
Sheet 3 of 4
WO # 94-10308-02

FORM U-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ Inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDER'S DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO #94-10308-02

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder.)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5486 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III, Edition 1974 Addenda Date W75 Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi min.
(Brief description of service for which component was designed.)

Sheet 2 of 2

1. Cap 16639274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 16639313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.035" max. dia.

3. Plug 150A1170P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 918D610P001 (718E474)
SA182 - F304
2.37" thick x 9 5/8" OD

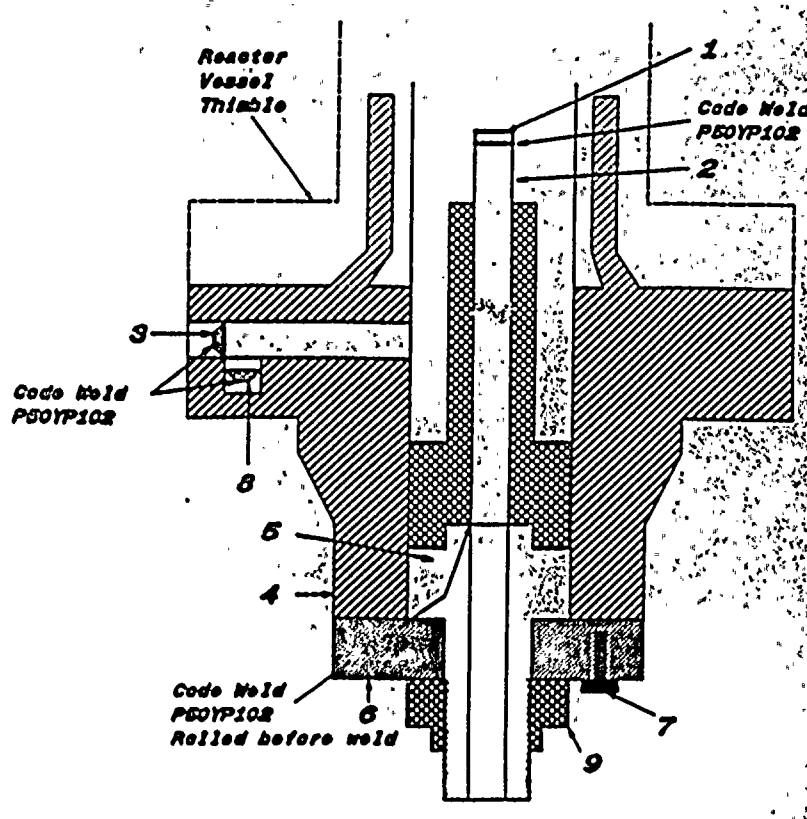
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114D5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B8
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7631P001
SA182 - F304
0.37" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 19, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-03
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19____ Edition,____ Addenda,____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 10-31	General Electric	A3831	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 10-31	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Philip L Gilbert, System Engineer (Owner or Owner's Designee, Title) Date November 19, 1994

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 TENN and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Todd (Inspector's Signature) Commissions NB6908 TN 3135 (National Board, State, Province, and Endorsements)

Date NOV. 23 19 94

FORM NIS-2 ATTACHMENT SHEET 2 OF 4

WO # 94-10308-03

6022.5300

FORM NIS-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* as required by the Provision of the ASME Code Rules, Section III, Div. 1

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A3831 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 09/10/92 Signed GE-NEBG-NF & CM-QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 8/25, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

9/10, 1992 Inspector's Signature NC 1231, Ohio, WC 3686 PA
Date National Board, State, Province And No.

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

(07/90)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ Inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[1] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

Form TVA-2 Attachment
SHEET 4 of 4

5022-5302

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO # 94-1038-03

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A3831 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev. 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B0274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.005" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 910D610P001 (718E474)
SA182 - F304
3.37" thick x 9 5/8" OD

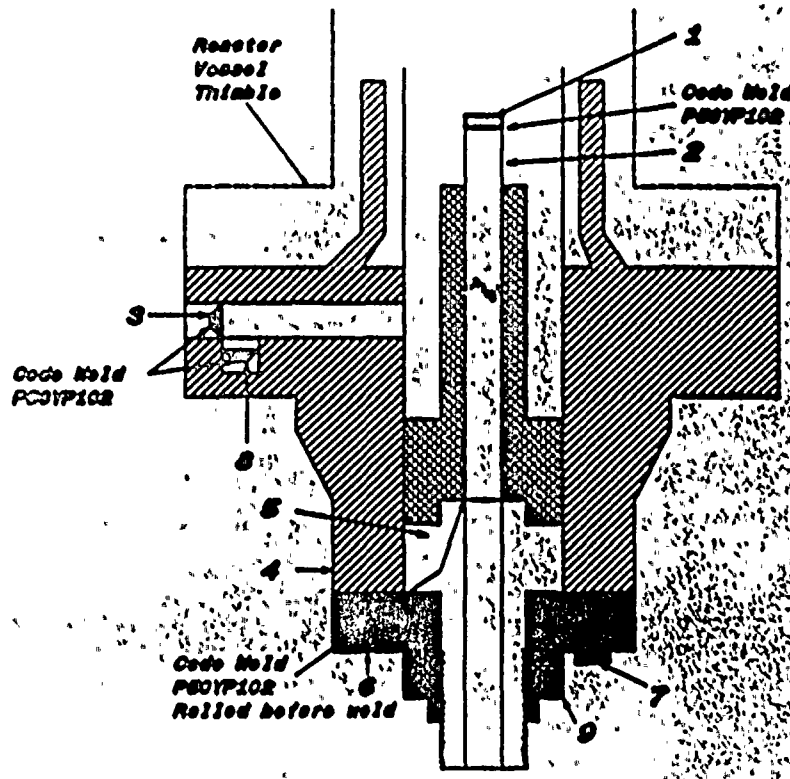
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.078" dia.

6. Ring Flange 114D5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - C8
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 178A7031P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801

Date November 19, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-04
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19 ____ Edition, ____ Addenda, ____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 10-35	General Electric	A4255	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 10-35	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

(Applicable Manufacturer's Data Reports to be attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Philip L Gilbert, System Engineer (Owner or Owner's Designee, Title) Date November 19, 19 94

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 TENN and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert T Tedd (Inspector's Signature) Commissions NB6908 TN3135 (National Board, State, Province, and Endorsements)

Date Nov. 23 19 94

5022.5168

SHEET 2 OF 4
FORM NIS-2 ATTACHMENT
WO #94-10308-04

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4255 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 09/10/92 Signed GE-NEBG-NF & CM-QA By
(NPT Certificate Holder) (NPT QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 9/9, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

9/10, 1992 Inspector's Signature NC 1231, Ohio, WC 3686 PA
Date National Board, State, Province And No.

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

(07/90)

5022:5169

FORM NIS-2 ATTACHMENT
SHEET 3 OF 4
WO # 94-10308-04

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.
2 - Use other internal or external pressure with coincident temperature when applicable.

FORM NIS-2 ATTACHMENT SHEET 4 OF 4

6022.5170

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. 1

WO # 94-10308-04

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4255 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 , Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

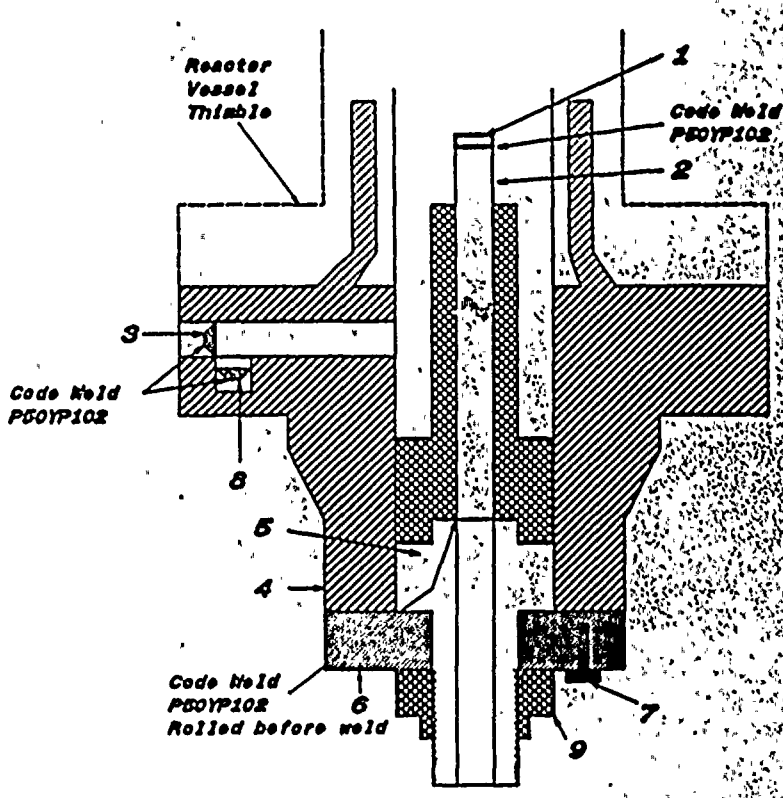
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 19, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-05
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19____ Edition,____ Addenda,____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 14-39	General Electric	A5434	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 14-39	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.

Applicable Manufacturer's Data Reports to be attached

Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

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.

repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L Hilbert System Engineer Date November 19, 19 94

Owner or Owner's Designed, 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 TENN and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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 NB6908 TN3135

National Board, State, Province, and Endorsements

Date NOV. 23 19 94

FORM NIS-2 ATTACHMENT
SHEET 2 OF 4
WO # 94-10308-05

6022-4311

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(3) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5434 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 9/14/92 Signed GE-NEBG-NF & CM-QA By
(NPT Certificate Holder) (GE QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Biorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 9/8, 1992 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

9/14/92 Jerome P Evers NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

6022.4312

FORM N-2 (back)

FORM NIS-2 ATTACHMENT
SHEET 3 OF 4
WO # 94-10308-05

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used _____ (Material, Spec. No., T.S. Size Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ (Kind & Spec. No.) Dia. _____ (Subject to pressure) Thickness ___ in. Attachment _____ (Welded, Bolted)
Floating. Material _____ Dia. _____ Thickness ___ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness ___ in. Corrosion Allowance ___ in. Dia. ___ ft. ___ in. Length ___ ft. ___ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.[1] _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.[1] _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a)_____ (b)_____ (c)_____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____
Charpy Impact _____ ft-lb

14. Design pressure[2] _____ psi at _____ °F at temp of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached _____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDER'S DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. 1

WO # 94-10308-05

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5434 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive ; Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

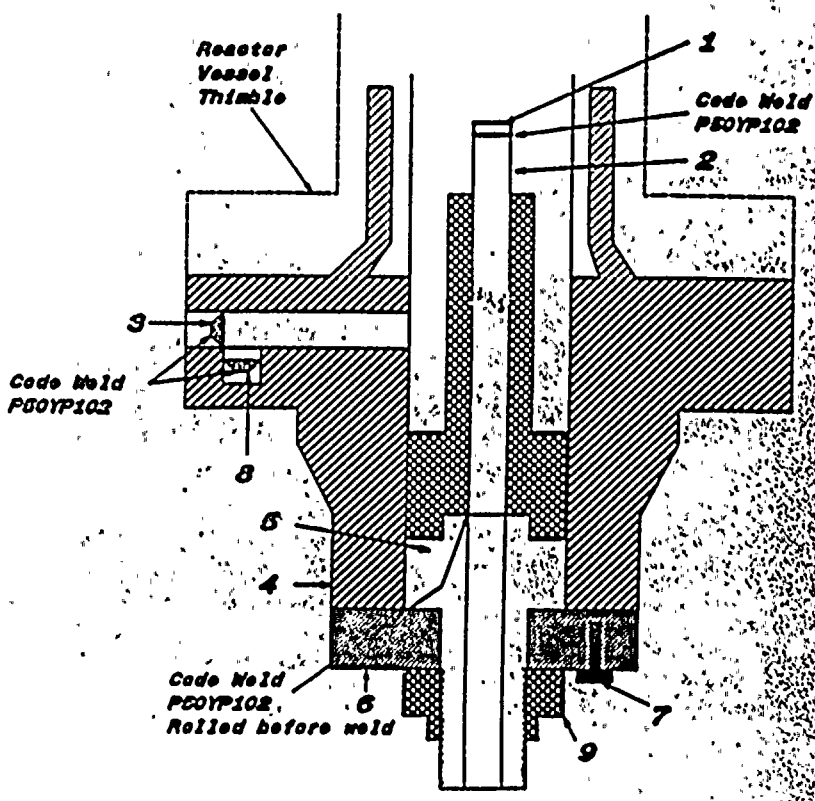
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B8
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801 (Address)

Date November 19, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-06
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19 ____ Edition, ____ Addenda, ____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 14-55	General Electric	A5608	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 14-55	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed
Applicable Manufacturer's Data Reports to be attached
per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Philip L. Gilbert, System Engineer Date November 19, 1994
Owner or Owner's Designee, Title
RLG 11/19/94

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 TENN. and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Todd Commissions NB6908 TN 3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV 23 19 94

FORM NIS-2 ATTACHMENT
SHEET 2 OF 4
WO # 94-10308-06

6022.3215

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

Identification - Certificate Holder's S/N of Part : A5608 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 07/29/92 Signed GE-NEBG-NF & CM-QA By
(NPT Certificate Holder) (SC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/31, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this Inspection.

7/29/1992 Inspector's Signature NC 1231, Ohio, WC 3686 PA
Date National Board, State, Province And No.

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

(07/90)

5022.3216

FORM NIS-2 ATTACHMENT
SHEET 3 of 4
WO #94-10308-06

FORM H-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used ____ (Material, Spec. No., T.S. Size Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)
Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ Inches or gage. Number ____ Type ____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

14. Design pressure[2] ____ psi at ____ °F at temp of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM NIS-2 ATTACHMENT
SHEET 4 OF 4

6022:3217

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO # 94-10308-06

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5608 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

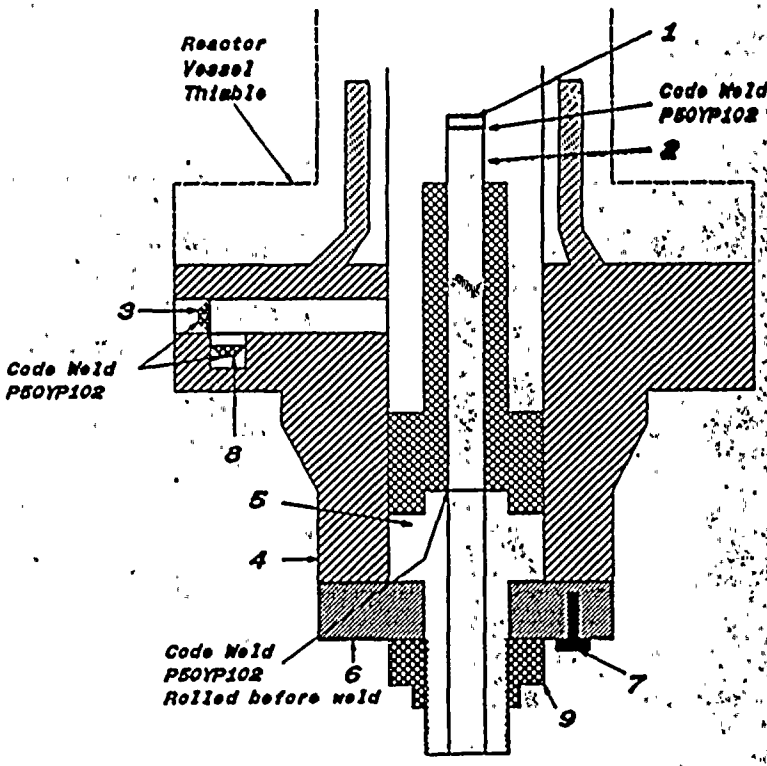
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 19, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-07
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19 ____ Edition, ____ Addenda, ____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 18-11	General Electric	A3543	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD Location 18-11	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L. Hilbert, System Engineer (Owner or Owner's Designee, Title) Date November 19, 1994

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 TENN. and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11-23-94, 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.

Albert Tadd (Inspector's Signature) Commissions NB6908 TN3135 (National Board, State, Province, and Endorsements)

Date NOV. 23 1994

5022.3193.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A3543 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 07/29/92 Signed GE - NEBG - NF & CM - QA By _____
(NPT Certificate Holder) (GE QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng. State Calif. Reg. No. 15570 .

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/29, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

7/29, 1992 _____ NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

5022.3194

SHEET 3 OF 4
FORM NIS-2 ATTACHMENT
WO # 94-10308-07

FORM H-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.
(a)									
(b)									

If removable, bolts used ____ (Material, Spec. No., T.S. Size Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)
Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ Inches or gage. Number ____ Type ____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

14. Design pressure[2] ____ psi at ____ °F at temp of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

6022-3195

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO #94-10308-07

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A3543 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive ; Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

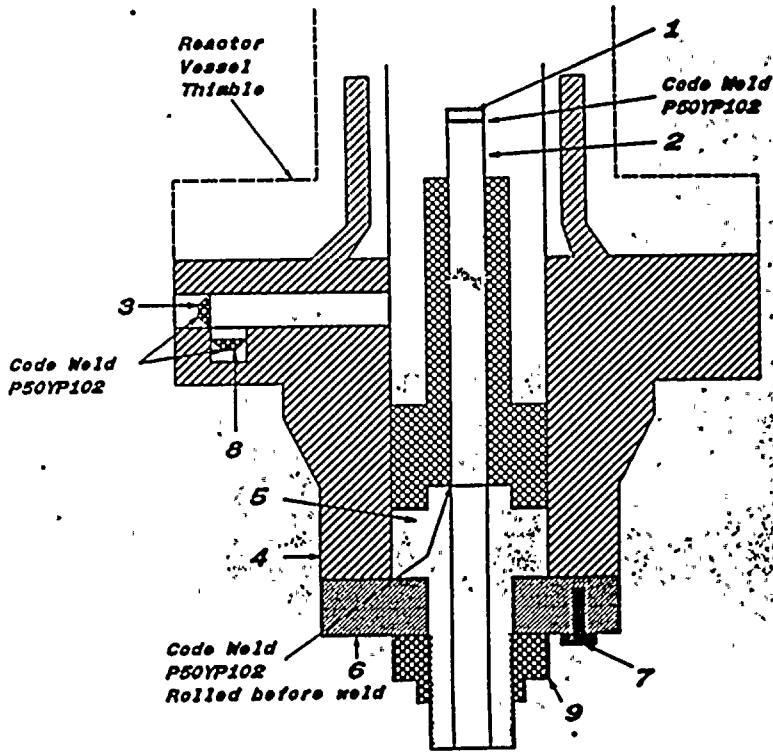
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 19, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-08
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19____ Edition,____ Addenda,____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Control Rod Drive @ location 18-19	General Electric	A4130	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 18-19	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per
Applicable Manufacturer's Data Reports to be attached
Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L Tilbert, System Engineer (Owner or Owner's Designee, Title) Date November 19, 1994

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 TENN and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Todd (Inspector's Signature) Commissions NB6908 TN3135 (National Board, State, Province, and Endorsements)

Date NOV 23 1994

6022.4772

SHEET 2 of 4
FORM NIS-2 ATTACHMENT.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO# 94-10308-08

1. Manufactured / Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4130 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 9/14/92 Signed GE-NEBG-NF & CM-QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/18/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 9/8, 1992 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

9/14/92 Jerome P. Evers NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

6022.4773

FORM NIS-2 ATTACHMENT
SHEET 3 of 4
WO # 94-10308-08

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____%
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used ____ (Material, Spec. No., T.S. Size Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)
Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ inches or gage. Number ____ Type ____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____%
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a) Top, bottom, ends								
(b) Channel								

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

14. Design pressure[2] ____ psi at ____ °F at temp of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. 1

FORM NIS-2 ATTACHMENT

WO.# 94-10308-08

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4130 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W75, Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

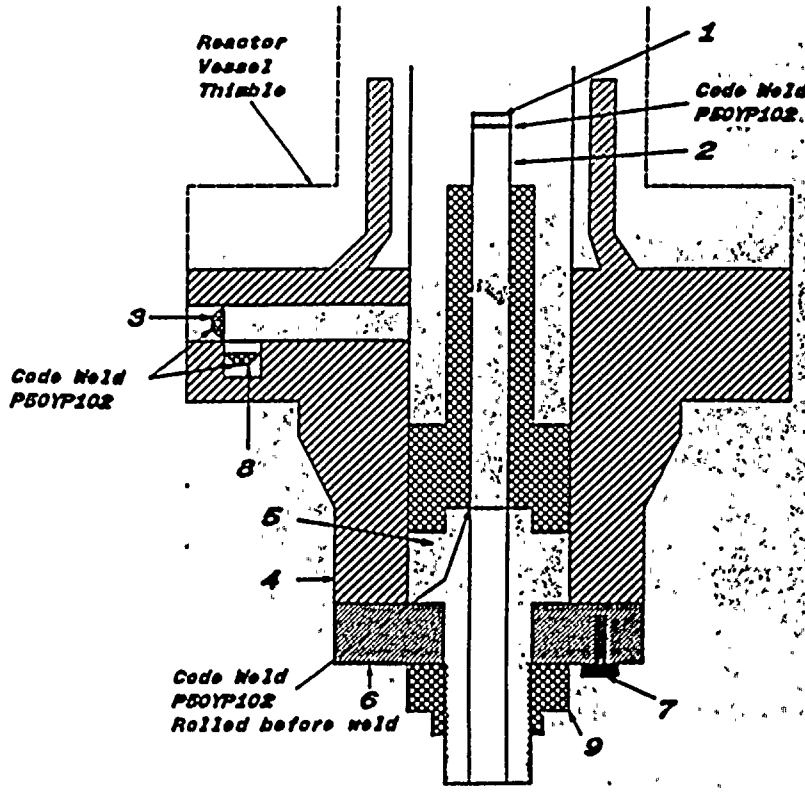
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B8
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 20, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-09
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19____ Edition,____ Addenda,____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 18-35	General Electric	A5436	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 18-35	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Philip L Gilbert, System Engineer Date November 20, 19 94
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 TENN. and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Todd Commissions NB6908 TN 3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV. 23 19 94

SHEET 2 OF 4
FORM NIS-2 ATTACHMENT
WO 94-10308-09

5062.4257

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5436 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 9/14/92 Signed GE-NEBG-NF & CM-QA By
(NPT Certificate Holder) (ASC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis repor rtified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 9/2, 1992 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

9/14/92 Jerome P Evans NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

[redacted]

SHEET 3 OF 4
FORM NIS-2 ATTACHMENT
WO 94-10308-09

[redacted]

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used ____ (Material, Spec. No., T.S. Bolt Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____
(Describe as edge and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)
Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10 Tubes: Material ____ O.D. ____ in. Thickness ____ Inches or gage. Number ____ Type ____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

14. Design pressure[2] ____ psi at ____ °F at temp of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17 Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

1 - If Postweld Heat-Treated.
2 - Last other internal or external pressure with concident temperature when applicable.

[redacted]

SHEET 4 OF 4
FORM NIS-2 ATTACHMENT
WO 94-10308-09

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5436 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive , Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

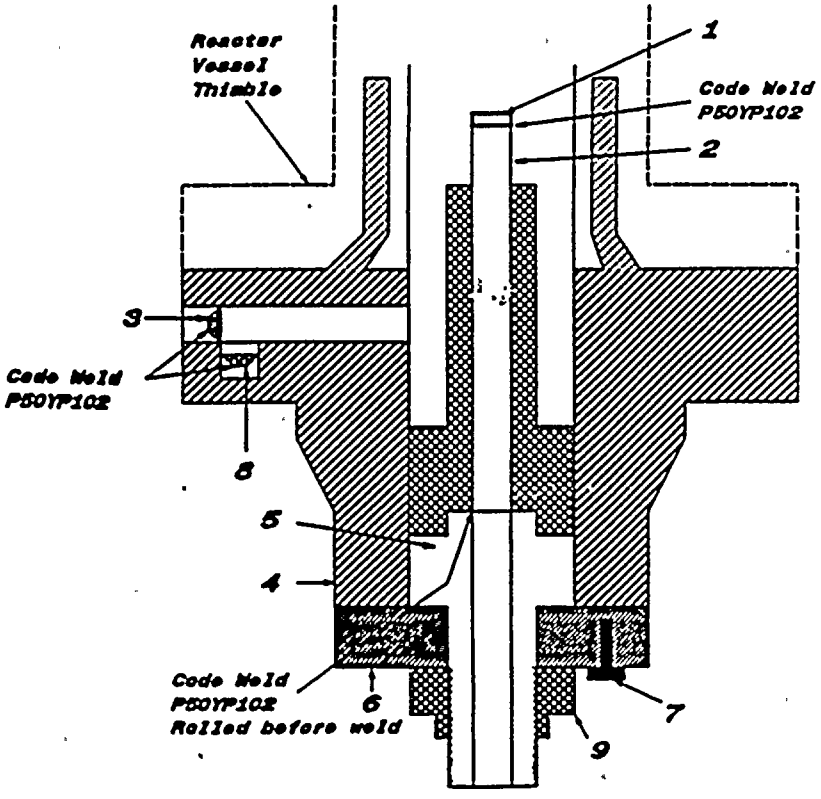
5. Base 137C5311P00
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801

Date November 20, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-10
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19____ Edition,____ Addenda,____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 18-59	General Electric	A4494	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 18-59	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replace Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.

Applicable Manufacturer's Data Reports to be attached

Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L. Hilbert, System Engineer (Owner or Owner's Designee, Title) Date November 20, 1994

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 TENN and employed by HSB I & I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Ladd (Inspector's Signature) Commissions NB6908 TN3135 (National Board, State, Province, and Endorsements)

Date NOV. 23 1994

SHEET 2 of 4

6022.2819

FORM NIS-2 ATTACHMENT

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO # 94-10308-10

1. (a) Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4494 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson .

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 07/29/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (SC QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design Information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

OC22A6253 Rev. 1
Design specification certified by Biorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

OC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

7/29/1992 Jerome P Evers NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

6022.2820

SHEET 3 OF 4
FORM NIS-2 ATTACHMENT
WO # 94-10308-10

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used ____ (Material, Spec. No., T.S. Size Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)
Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ Inches or gage. Number ____ Type ____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Concial Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

14. Design pressure[2] ____ psi at ____ °F at temp of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

50PP 2821

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO # 94-10308-10

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4494 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

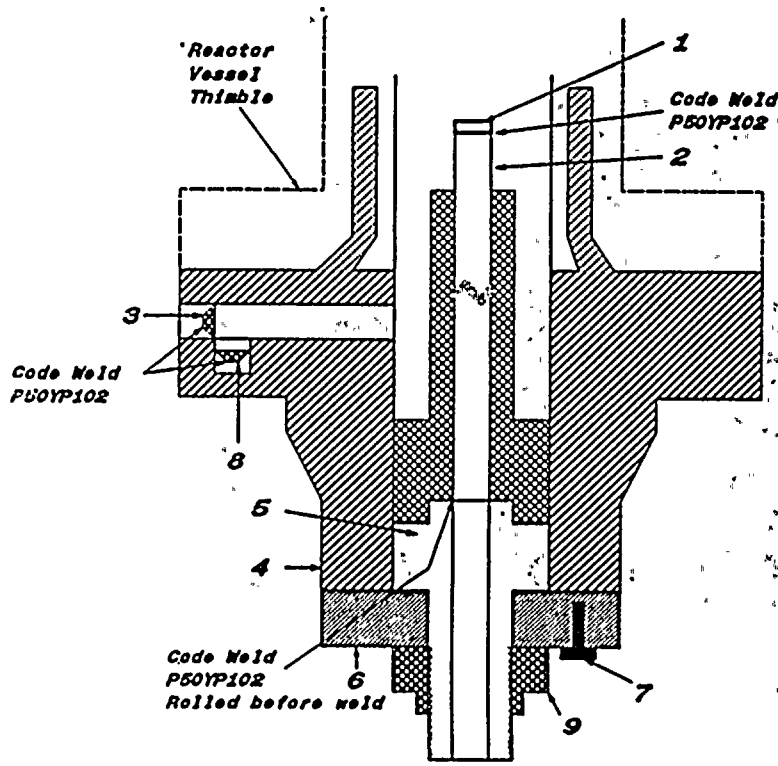
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XA - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801
Date November 20, 1994
Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-10308-11 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19 Edition, Addenda, Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 22-19	General Electric	A5463	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 22-19	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replace Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed

Applicable Manufacturer's Data Reports to be attached

per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.

Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1: Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Philip L Gilbert, System Engineer (Owner or Owner's Designee, Title) Date November 20, 1994

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 TENN. and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Tadd (Inspector's Signature) Commissions NB6908 TN 3135 (National Board, State, Province, and Endorsements)

Date NOV. 23 1994

SHEET 2 OF 4
FORM NIS-2 ATTACHMENT

6022.2841

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO # 94-10308-11

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

Identification - Certificate Holder's S/N of Part : A5463 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 07/29/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (GE QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

OC22A6253 Rev. 1
Design specification certified by Bjorn Haaberg Prof. Eng: State Calif. Reg. No. 15570

OC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/26, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

7/27/1992 Inspector's Signature — NC 1231, Ohio, WC 3686 PA
Date — National Board, State, Province And No.

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

(07/90)

5022-2842

FORM NIS-2 ATTACHMENT
SHEET 3 of 4
WO # 94-10308-11

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used ____ (Material, Spec. No., T.S. Size Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)
Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ inches or gage. Number ____ Type ____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ T.S. ____ Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

14. Design pressure[2] ____ psi at ____ °F at temp of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

1 - If Postweld Heat-Treated.
2 - Use other internal or external pressure with coincident temperature when applicable.

FORM NPT-2 ATTACHMENT
6022-2843 SHEET 4 of 4

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I
WO # 94-10308-11

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5463 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

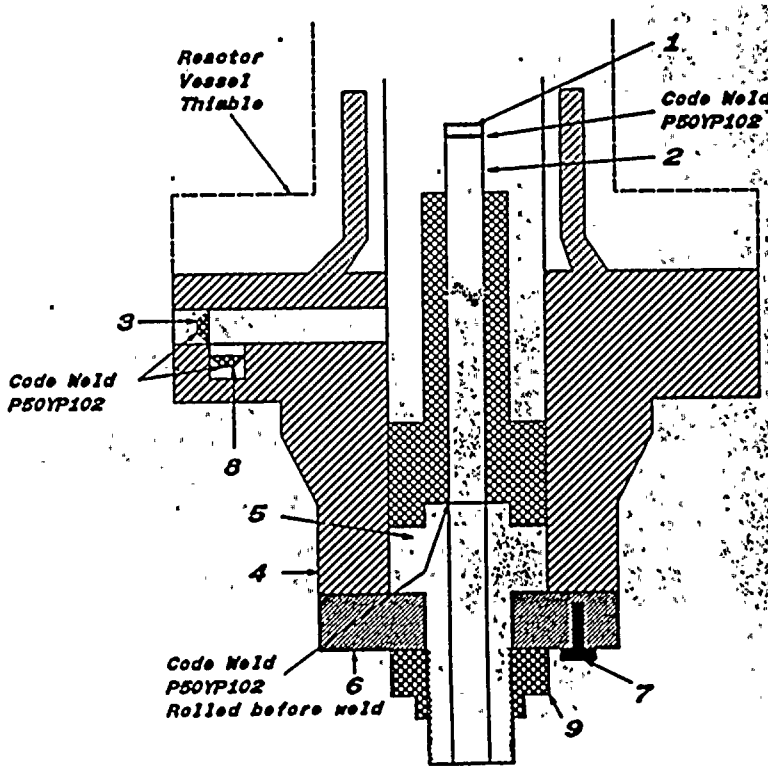
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7981P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801 (Address)

Date November 20, 1994

Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-12
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19 ____ Edition, ____ Addenda, ____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

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)
Control Rod Drive @ location 38-23	General Electric	A4280	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 38-23	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Electric Installation Specification 22A2125.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Phillip L. Gilbert, System Engineer Date November 20, 1994
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 TENN and employed by HSB I & I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Todd Commissions NB6908 TN3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV. 23 19 94

FORM NIS-2 ATTACHMENT
SHEET 2 OF 4
WO # 94-10308-12

6022-5146

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4280 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III, Edition 1974, Addenda Date W'75, Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 09/10/92 Signed GE-NEBG-NF & CM-QA By
(NPT Certificate Holder) (GE QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N-1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Blom Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina, and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 9/24, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

9/10, 1992 Jerome P Evans NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

5022-5147

FORM NIS-2 ATTACHMENT SHEET 3 OF 4
WO # 94-10308-12

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used ____ (Material, Spec. No., T.S. Size Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)
Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ inches or gage. Number ____ Type ____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____ %
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

14. Design pressure[2] ____ psi at ____ °F at temp of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

6022.5148

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO #94-10308-12

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road; Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A4280 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

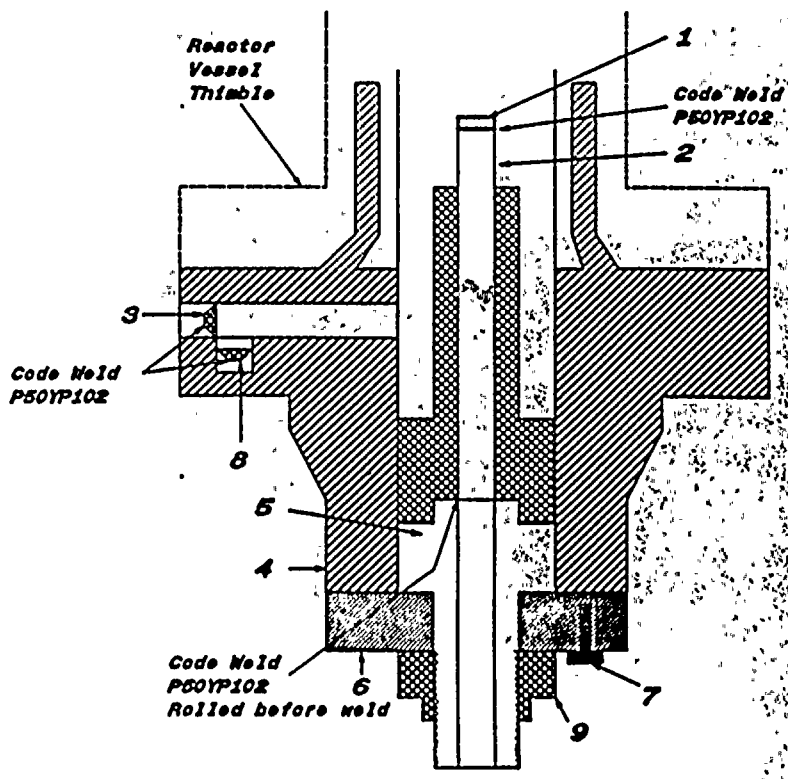
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801
Date November 20, 1994
Sheet 1 of 4

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-10308-13 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code (see Remarks) 19 Edition, Addenda, Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

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)
Control Rod Drive @ location 38-31	General Electric	A5342	N/A	P/N 768E534G008	1992	Replacement	Yes
Bolting (8 ea) for CRD location 38-31	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced Code Class 1 equivalent Control Rod Drive Mechanism and bolting material on Control Rod Drive Mechanism flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °F

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

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed
Applicable Manufacturer's Data Reports to be attached
per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.
Applicable Constr. Code - CRDM: ASME Sec. III Class 1, 1974 Edition w/ W'75 Addenda, Code Case No. N207 1361-2 Class 1; Bolting Material: USAS B31.1.0 1967 Edition as augmented by General Eelectric Installation Specification 22A2125.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Philip L Hilbert, System Engineer Date November 20, 1994
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 TENN and employed by HSB I & I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 7/6/94 to 11/23/94, 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.

Albert Tackett Commissions NB6908 TN3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV. 23 19 94

FORM NIS-2 ATTACHMENT
6022:3237 SHEET 2 OF 4

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO # 94-10308-13

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5342 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D.L. Peterson

(b) Description of Part Inspected: Control Rod Drive, Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard pa:1 for use with Reactor, Hydrostatically tested at 1825 psi, min.
(Brief description of service for which component was designed)

Sheet 1 of 2

We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASME Code Section III. (The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report).

Date: 07/29/92 Signed GE - NEBG - NF & CM - QA By
(NPT Certificate Holder) (GE QA Representive)

Certificate of Authorization Expires: 6/16/93 Certification of Authorization No. : NPT N - 1151

Certification of Design for Appurtenance

Design information on file at GE Company, San Jose, California

Stress analysis report on file at GE Company, San Jose, California

DC22A6253 Rev. 1
Design specification certified by Biorn Haaberg Prof. Eng. State Calif. Reg. No. 15570

DC22A6254 Rev 1
Stress analysis report certified by Edward Yoshio Prof. Eng. State Calif. Reg. No. M018646

Certification of Shop Inspection

I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/13, 1992, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from or connected with this inspection.

7/29, 1992 Jerome P. Evers NC 1231, Ohio, WC 3686 PA
Date Inspector's Signature National Board, State, Province And No.

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

(07/90)

6022.3238

FORM NIS-2 ATTACHMENT SHEET 3 OF 4
WO # 94-10308-13

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers.

4. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

5. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____%
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

6. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location (Top Bottom, Ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)									
(b)									

If removable, bolts used ____ (Material, Spec. No., T.S. Size Number) Other fastening ____ (Describe or attach sketch)

7. Jacket Closure: ____ (Describe as ogee and weld, bar, etc. If bar give dimensions, if bolts, describe or sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

8. Design pressure[2] 1250 psi at 575 °F at temp of ____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material ____ (Kind & Spec. No.) Dia. ____ (Subject to pressure) Thickness ____ in. Attachment ____ (Welded, Bolted)
Floating. Material ____ Dia. ____ Thickness ____ in. Attachment ____

10. Tubes: Material ____ O.D. ____ in. Thickness ____ inches or gage. Number ____ Type ____ (Str. or U)

Items 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material ____ (Kind & Spec. No.) T.S. ____ (Min. of Range Specified) Nominal Thickness ____ in. Corrosion Allowance ____ in. Dia. ____ ft. ____ in. Length ____ ft. ____ in.

12. Seams: Long ____ H.T.[1] ____ R.T. ____ Efficiency ____%
Girth ____ H.T.[1] ____ R.T. ____ No. of Courses ____

13. Heads: (a) Material ____ T.S. ____ (b) Material ____ T.S. ____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (conv. or conc.)
(a)	Top, bottom, ends								
(b)	Channel								

If removable, bolts used (a) ____ (b) ____ (c) ____ Other fastening ____ (Describe or attach sketch)

Drop Weight ____
Charpy Impact ____ ft-lb

14. Design pressure[2] ____ psi at ____ °F at temp of ____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number ____ Size ____ Location ____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Openings: Manholes, No. ____ Size ____ Location ____
Handholes, No. ____ Size ____ Location ____
Threaded, No. ____ Size ____ Location ____

18. Supports: Skirt ____ (Yes or No) Lugs ____ (Number) Legs ____ (Number) Other ____ (Describe) Attached ____ (Where & How)

1 - If Postweld Heat-Treated.
2 - List other internal or external pressure with coincident temperature when applicable.

FORM NIS-2 ATTACHMENT

6022:3239 SHEET 4 OF 4

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*
As required by the Provision of the ASME Code Rules, Section III, Div. I

WO # 94-10308-13

1. Manufactured & Certified by : General Electric Company Nuclear Fuel & Components Manufacturing (GE NF & CM)
2117 Castle Hayne Road, Wilmington, North Carolina 28401
(Name and Address of NPT Certificate Holder)

(b) Manufactured for : TVA Chattanooga, Tennessee 37402-2127
(Name and Address of N Certificate Holder for completed nuclear component)

2. Identification - Certificate Holder's S/N of Part : A5342 Nat'l Bd. No. N/A

(a) Constructed According to Drawing No: 768E534G008 Rev 9 Dwg. Prepared by D. L. Peterson

(b) Description of Part Inspected: Control Rod Drive Model # 7RDB144FG005

(c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date W'75 , Case No. N207 1361-2 Class 1

3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psi. min.
(Brief description of service for which component was designed)

Sheet 2 of 2

1. Cap 166B9274P001
SA182 - F304
3/8" thick x 1 1/16" OD

2. Indicator Tube 166B9313P001
SA312 - TP316
3/4" sch 40 - seamless pipe
0.113" wall thickness
1.065" max. dia.

3. Plug 159A1176P001
SA182 - F304
1/4" thick x 0.812" OD

4. Flange 919D610P001 (719E474)
SA182 - F304
3.37" thick x 9 5/8" OD

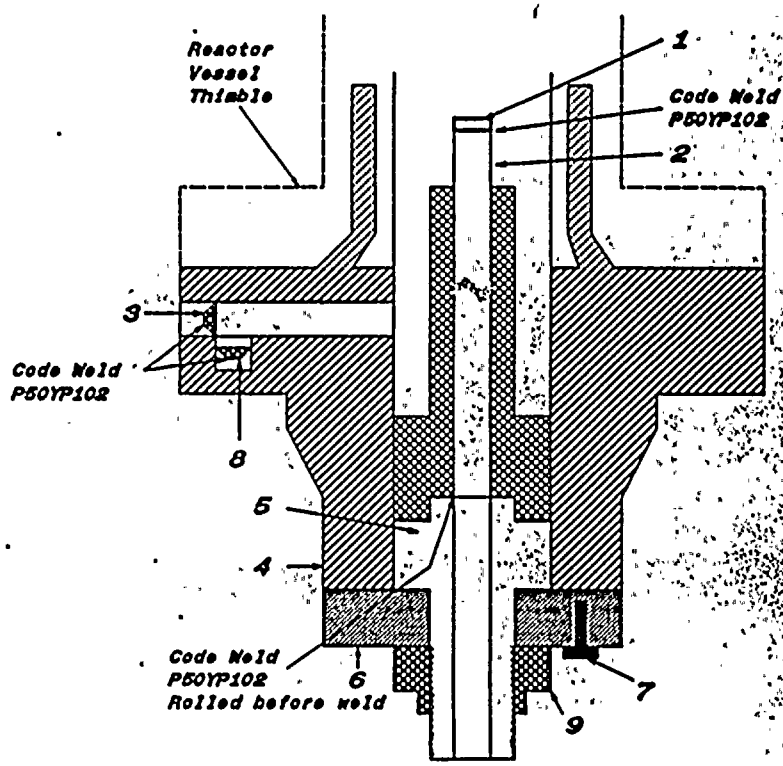
5. Base 137C5311P001
SA182 - F304
7/8" thick x 2.875" dia.

6. Ring Flange 114B5122P002, P003
137C8151P001, P002
SA182 - F304
1" thick x 5.0" OD x 1.75" ID

7. Cap Screw 117C4516P002
SA193 - B6
6 ea. 1/2" dia. on 4 1/8" bolt circle

8. Plug 175A7961P001
SA182 - F304
0.38" thick x 1.307" dia.

9. Nut 137C5934P001
XM - 19 SA479
1.30" thick x 2.62" dia.



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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St. (Address)
Chattanooga, TN 37402-2801

Date November 20, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-16
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition,* N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Bolting (8 ea) for CRD location 42-47	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced bolting material on Code Class 1 equivalent Control Rod Drive Mechanism 42-47 flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

*as augmented by General Electric Installation Specification 22A2125

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.

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.

repair or replacement

Type Code Symbol Stamp N/A

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

Signed Philip L. Gilbert, System Engineer Date November 20, 19 94

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 TENN and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 10/5/94 to 11/22/94, 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.

Albert Tadd Commissions NB6908 TN 3135

Inspector's Signature National Board, State, Province, and Endorsements

Date NOV. 22 19 94

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date November 20, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-10308-17 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition,* N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Bolting (8 ea) for CRD location 06-27	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced bolting material on Code Class 1 equivalent Control Rod Drive Mechanism 06-27 flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*as augmented by General Electric Installation Specification 22A2125

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L. Gilbert, System Engineer Date November 20, 1994
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 TENN and employed by HSB I&T of HARTFORD, CT. have inspected the components described in this Owner's Report during the period 10/5/94 to 11/22/94, 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.

Albert Todd Commissions NB6908 TN3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV. 22 19 94

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date November 20, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-10308-18 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code USAS B31.1.0 19 67 Edition, * N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Bolting (8 ea) for CRD location 18-39	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced bolting material on Code Class 1 equivalent Control Rod Drive Mechanism 18-39 flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*as augmented by General Electric Installation Specification 22A2125

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, System Engineer Date November 20, 1994
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 TENN. and employed by HSB I & I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 10/5/94 to 11/22/94, 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.

Albert Ladd Commissions NB6908 TN 3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV. 22 1994

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)

Date November 20, 1994

Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)

Unit 2

Work Order 94-10308-19
Repair Organization P.O. No., Job No., etc.

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)

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

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition,* N/A Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Bolting (8 ea) for CRD location 26-59	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced bolting material on Code Class 1 equivalent Control Rod Drive Mechanism 26-59 flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

*as augmented by General Electric Installation Specification 22A2125

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed Phillip L Gilbert, System Engineer Date November 20, 19 94
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 TENN. and employed by HSB I & I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 10/5/94 to 11/22/94, 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.

Albert Ladd Commissions NB6908 TN 3135
Inspector's Signature National Board, State, Province, and Endorsements

Date NOV. 22 19 94

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

1. Owner TENNESSEE VALLEY AUTHORITY (Name)
1101 Market St.
Chattanooga, TN 37402-2801 (Address)
Date November 20, 1994
Sheet 1 of 1

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609-2000 (Address)
Unit 2
Work Order 94-10308-20 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Nuclear Energy Services (Name)
Shelter Rock Road; Danbury, CT 06810 (Address)
Type Code Symbol Stamp N/A
Authorization No. N/A
Expiration Date N/A

4. Identification of System System 85, Control Rod Drive

5. (a) Applicable Construction Code USAS B31.1.0 1967 Edition, N/A* Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1986

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Bolting (8 ea) for CRD location 34-59	Vitco Nuclear Products, Inc	N/A	N/A	P/N 137C9293P001 HT # 61811	N/A	Replaced	No

7. Description of Work Replaced bolting material on Code Class 1 equivalent Control Rod Drive Mechanism 34-59 flange.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure N/A psi Test Temp. N/A °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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*as augmented by General Electric Installation Specification 22A2125

FORM NIS-2 (Back)

9. Remarks A system leakage test of the Reactor Pressure Vessel and associated piping was performed per Surveillance Instruction 2-SI-3.3.1.A of which the aforementioned CRDM being within the inspection boundary.

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.

repair or replacement

Type Code Symbol Stamp N/A

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

Signed Philip L. Gilbert, System Engineer Date November 20, 1994

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 TENN and employed by HSB I&I of HARTFORD, CT have inspected the components described in this Owner's Report during the period 10/5/94 to 11/22/94, 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.

Albert Todd Commissions NB6908 TN3135

Inspector's Signature National Board, State, Province, and Endorsements

Date NOV 22 19 94

ENCLOSURE 3

BROWNS FERRY NUCLEAR PLANT

UNIT 2 CYCLE 7

ASME SECTION XI

PRESERVICE INSPECTION REPORT

Owner:	TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant:	Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit:	Two	Certificate of Authorization:	Not Required
Commercial Service Date: March 1, 1975			
National Board Number For Unit: Not Required			

The following printout is an Outage Preservice Inspection (PSI) report designed to meet the reporting requirements of IWA-6000 of the ASME Section XI Code. This report contains PSI data for Class 1 and Class 2 components. A legend is given in Appendix 5 of the NIS-1 Report which will describe the abbreviations and features found in the PSI report. No augmented or voluntary examinations are contained in this report.

Class 3 PSI reports are contained in the Browns Ferry Preservice Inspection Plant Report.

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R25-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 1
REVISION 0002
DATE 01/12/95

SYSTEM : MSS MAIN STEAM SYSTEM - 001
ISOMETRIC NUMBER : MSG-0021-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
DHS-2-15	PIPE -ELBOW	C-F-2 C5.51	R00000455			MT	19941022	PASS	YES			

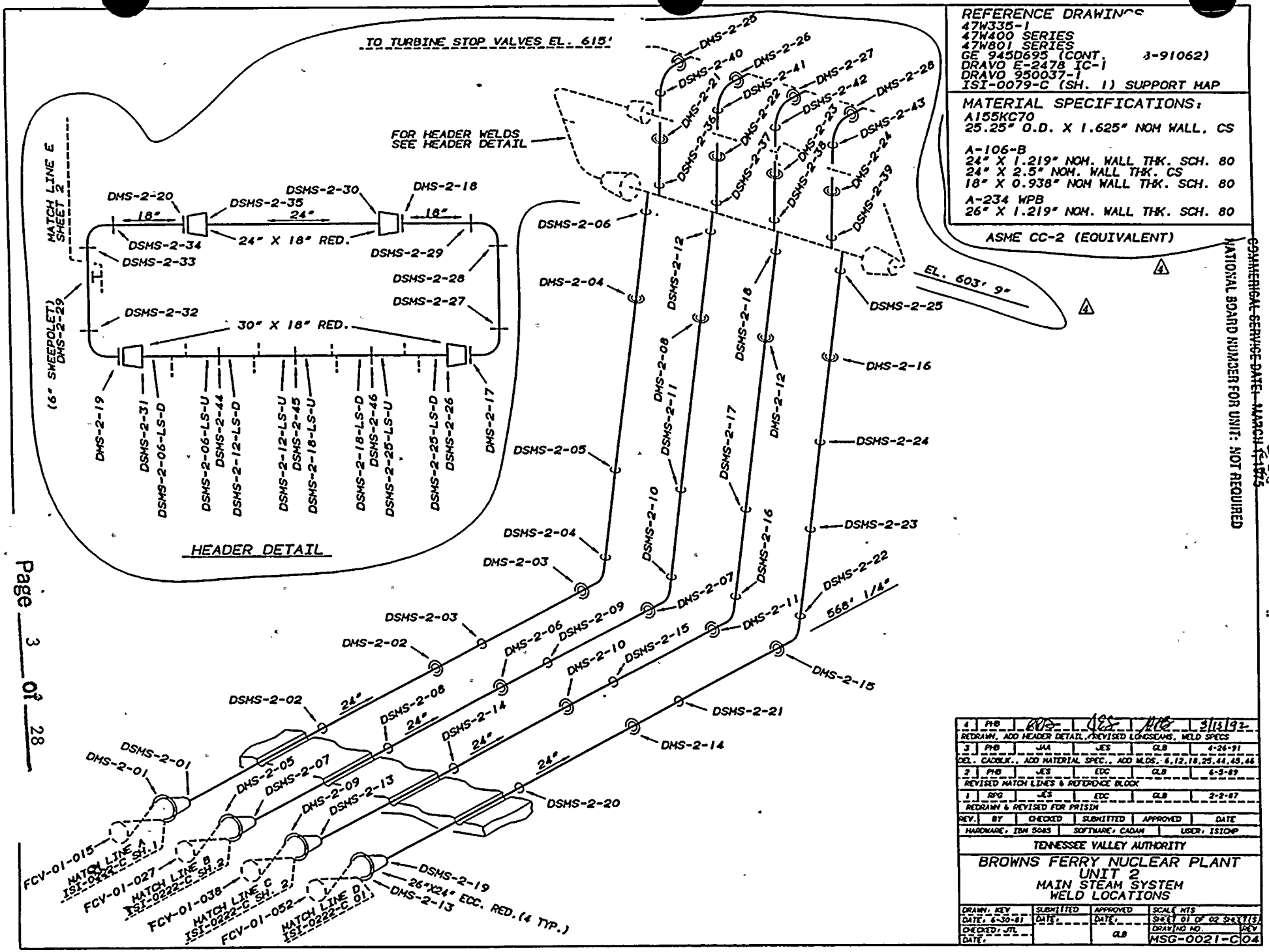
NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R17-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 1
REVISION 0002
DATE 01/12/95

SYSTEM : MSS MAIN STEAM SYSTEM - 001
ISOMETRIC NUMBER : ISI-0412-C SHEET : 02

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
47B2401-03	MSNUB-2	F-A F1.30C	R00000451			VT-3	19941114	PASS	YES			
47B2401-51	MSNUB-2	F-A F1.30C	R00000304			VT-3	19941019	PASS	YES			



REFERENCE DRAWINGS
47W335-1
47W400 SERIES
47W801 SERIES
GE 945D695 (CONT. 3-91062)
DRAVO E-2478 IC-1
DRAVO 950037-1
ISI-0079-C (SH. 1) SUPPORT MAP

MATERIAL SPECIFICATIONS:
A155KC70
25.25" O.D. X 1.625" NOM WALL, CS

A-106-B
24" X 1.219" NOM. WALL THK. SCH. 80
24" X 2.5" NOM. WALL THK. CS
18" X 0.938" NOM WALL THK. SCH. 80

A-234 WPB
26" X 1.219" NOM. WALL THK. SCH. 80

ASME CC-2 (EQUIVALENT)

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

COMMERCIAL SERVICE DATE: MARCH 1, 1975

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

REV.	BY	CHECKED	SUBMITTED	APPROVED	DATE
4	PHB	BDS	JES	MLC	3/15/92
REDRAWN, ADD HEADER DETAIL, REVISED LONGSEAMS, WELD SPECS					
3	PHB	JAA	JES	GLB	4-26-91
DCL. CADBLK., ADD MATERIAL SPEC., ADD MLDS. 6,12,18,25,44,45,44					
2	PHB	JES	EDC	GLB	6-5-89
REVISED MATCH LINES & REFERENCE BLOCK					
1	RPG	JES	EDC	GLB	2-2-87
REDRAWN & REVISED FOR PRISIN					
HARDWARE; IBM 5085		SOFTWARE; CADAM		USER; ISIONP	

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
MAIN STEAM SYSTEM
WELD LOCATIONS

DRAWN, KEV	SUBMITTED	APPROVED	SCALE NTS
DATE, 6-30-81	DATE,	DATE,	SHEET 01 OF 02 SHEET(S)
CHECKED, JTL		GLB	DRAWING NO. MSG-0021-C REV 04
DATE,			

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

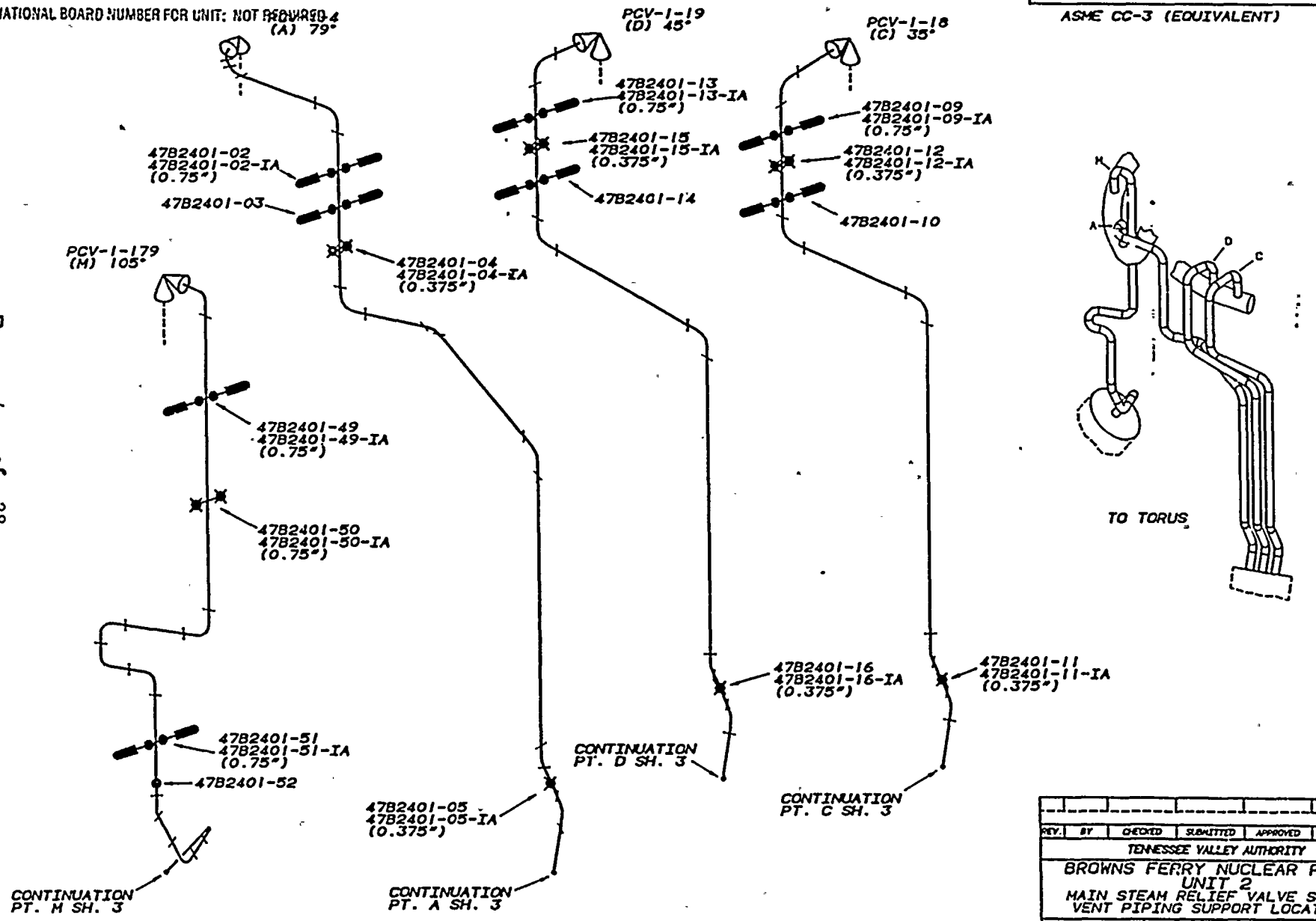
COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

REFERENCE DRAWINGS
47W401 SERIES

LEGEND
- VARIABLE SUPPORT
- MECHANICAL SNUBBER

ASME CC-3 (EQUIVALENT)



Page 4 of 28

REV.	BY	CHECKED	SUBMITTED	APPROVED	DATE

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
MAIN STEAM RELIEF VALVE SYSTEM
VENT PIPING SUPPORT LOCATIONS

DRAWN: PHB	DATE: 7/1/92	SCALE: NTS	CAD/M/ISTOP
CHECKED: RJB	APPROVED:	SHEET 02 OF 09	REV
SUBMITTED:		ISI-0412-C	00

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R20-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 1
REVISION 0002
DATE 01/12/95

SYSTEM : MSS MAIN STEAM SYSTEM - 001
ISOMETRIC NUMBER : ISI-0222-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
FCV-01-052	VAL INT	B-M-2 B12.50	R00000388			VT-1	19941022	PASS	YES			

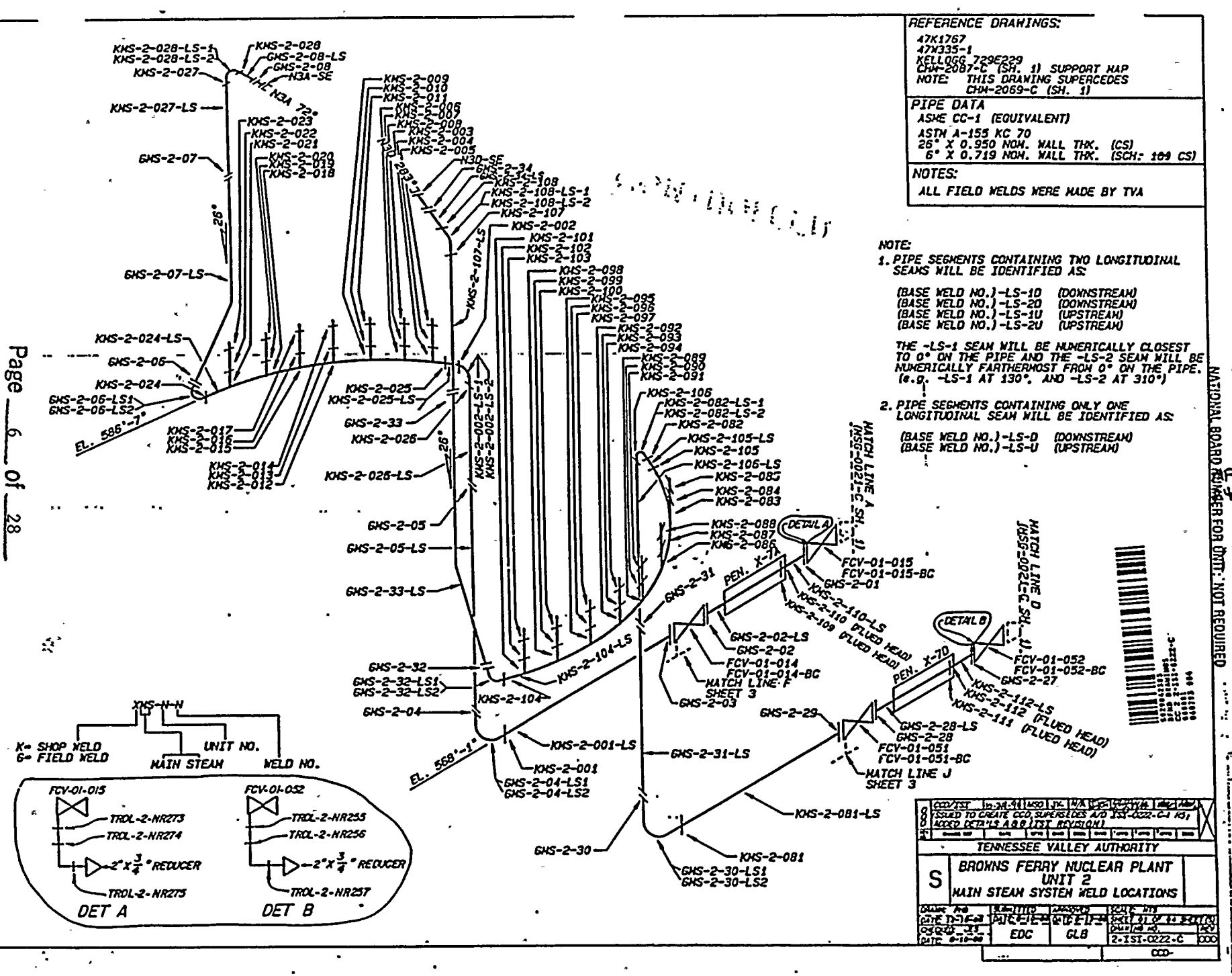
NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R19-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 1
REVISION 0002
DATE 01/12/95

SYSTEM : MSS MAIN STEAM SYSTEM - 001
ISOMETRIC NUMBER : ISI-0222-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
FCV-01-052-BC	VALBLTG	B-G-2 B7.70	R00000432			VT-1	19941022	PASS	YES			


REFERENCE DRAWINGS:
47K1767
47W335-1
KELLOGG 729E229
CHM-2087-C (SH. 1) SUPPORT MAP
NOTE: THIS DRAWING SUPERCEDES CHM-2069-C (SH. 1)
PIPE DATA
ASME CC-1 (EQUIVALENT)
ASTM A-155 KC 70
26" X 0.950 NOM. WALL THK. (CS)
6" X 0.719 NOM. WALL THK. (SCH: 160 CS)
NOTES:
ALL FIELD WELDS WERE MADE BY TVA
NOTE:
1. PIPE SEGMENTS CONTAINING TWO LONGITUDINAL SEAMS WILL BE IDENTIFIED AS:
(BASE WELD NO.)-LS-1D (DOWNSTREAM)
(BASE WELD NO.)-LS-2D (DOWNSTREAM)
(BASE WELD NO.)-LS-1U (UPSTREAM)
(BASE WELD NO.)-LS-2U (UPSTREAM)
THE -LS-1 SEAM WILL BE NUMERICALLY CLOSEST TO 0° ON THE PIPE AND THE -LS-2 SEAM WILL BE NUMERICALLY FARTHERMOST FROM 0° ON THE PIPE. (e.g. -LS-1 AT 130°, AND -LS-2 AT 310°)
2. PIPE SEGMENTS CONTAINING ONLY ONE LONGITUDINAL SEAM WILL BE IDENTIFIED AS:
(BASE WELD NO.)-LS-D (DOWNSTREAM)
(BASE WELD NO.)-LS-U (UPSTREAM)
KMS-N-N
K= SHOP WELD
6= FIELD WELD
UNIT NO.
MAIN STEAM
WELD NO.
DET A
DET B
TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT
UNIT 2
MAIN STEAM SYSTEM WELD LOCATIONS
EDC
GLB
2-IST-0222-C
OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402
PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602
UNIT: TWO
COMMERCIAL SERVICE DATE: MARCH 1, 1975
CERTIFICATE OF AUTHORIZATION: NOT REQUIRED
NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM
BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2.
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R23-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1
PAGE 2
REVISION 0002
DATE 01/12/95

SYSTEM : RECIR REACTOR WATER RECIRCULATING SYSTEM - 068
ISOMETRIC NUMBER : ISI-0270-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
GR-2-19	SWPOLET -PIPE	B-J B9.11	R00000294			PT	19941018	PASS	YES			
GR-2-25	PIPE -VALVE	B-J B9.11	R00000324			PT	19941018	PASS	YES			

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM
BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R23-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1
PAGE 3
REVISION 0002
DATE 01/12/95

SYSTEM : RECIR REACTOR WATER RECIRCULATING SYSTEM - 068
ISOMETRIC NUMBER : ISI-0270-C SHEET : 02

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
GR-2-38	SWPOLET -PIPE	B-J B9.11	R00000353			PT	19941020	PASS	YES			
GR-2-52	VALVE -PIPE	B-J B9.11	R00000456			PT	19941020	PASS	YES			
GR-2-64(OL)	OVERLAY	B-J B9.11	R00000433			PT	19941028	PASS	YES			
			R00000434	C00000317	BF-83	UT-0	19941028	PASS	YES			
			R00000434	C00000328	BF-83	UT-0L	19941030	PASS	YES			
			R00000434	C00000318	BF-83	UT-60L	19941025	PASS	YES		SUBSURF, ROU EVALUATED,OK	
											SUBSURF, ROU EVALUATED,OK	
			R00000434	C00000327	BF-83	UT-60L	19941030	PASS	YES			
			R00000434	C00000319	BF-83	UT-70L	19941026	PASS	YES		SUBSURF, ROU EVALUATED,OK	
											SUBSURF, ROU EVALUATED,OK	

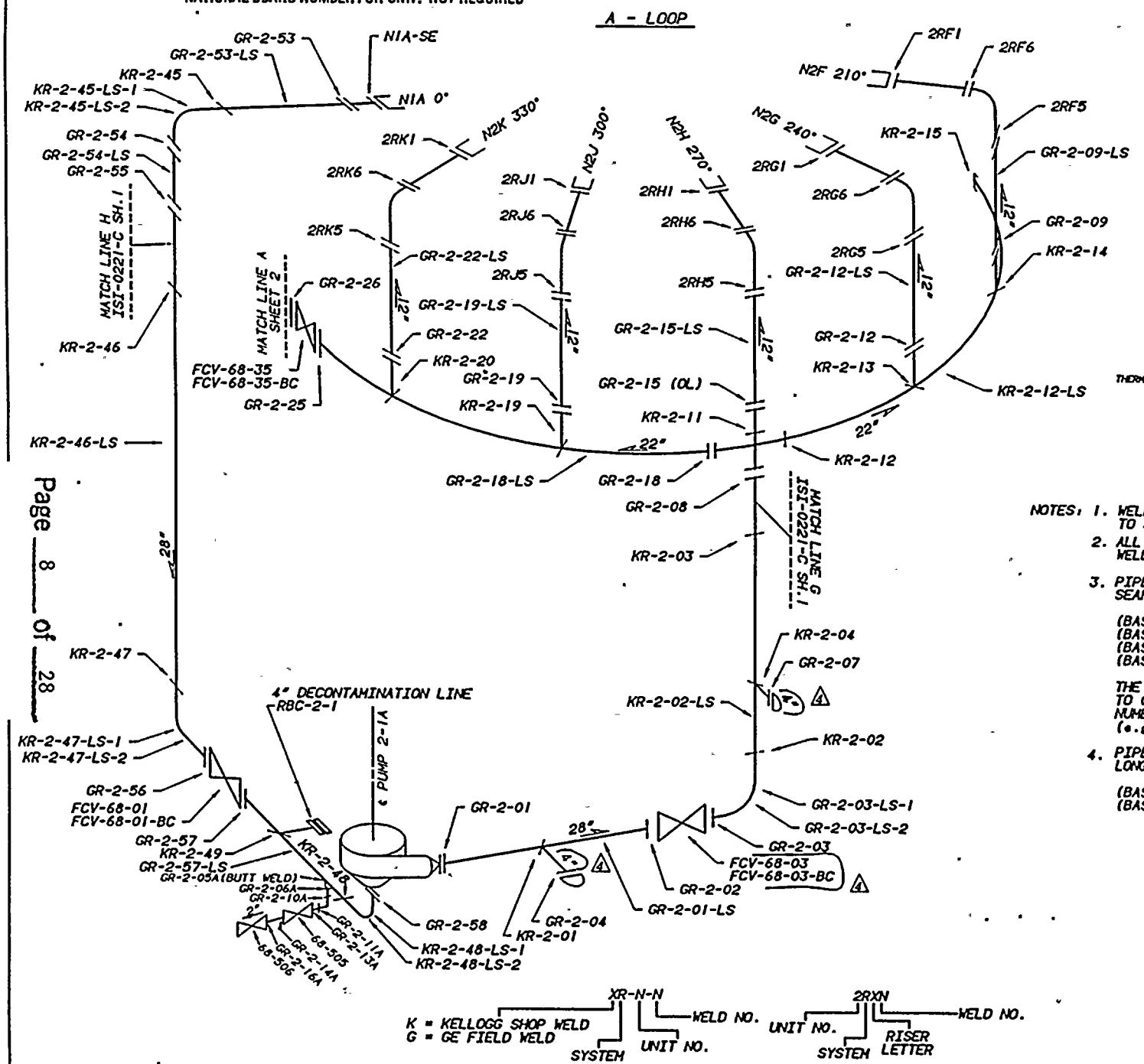
OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO — CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED



K = KELLOGG SHOP WELD
G = GE FIELD WELD

XR-N-N
SYSTEM
UNIT NO.
WELD NO.

2RXN
UNIT NO.
SYSTEM
RISER LETTER
WELD NO.

REFERENCE DRAWING

47W2408-8,9 (S.E. &
GE 769E963 (S.E. REPL.
TVA 47K1544-2
GE 153F754
KELLOGG BF 2-180
NOTE: THIS DRAWING SUPERSEDES CHM-2068-C ALL SHEETS

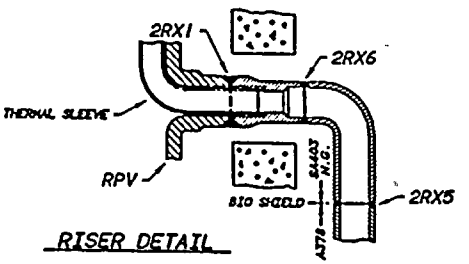
MATERIAL SPECIFICATIONS:

A358, TP 304
4" X 0.337" NOM WALL THK. (SS)
12" X 0.569" NOM. WALL THK. (SS)
22" X 1.030" NOM. WALL THK. (SS)
28" X 1.138" NOM. WALL THK. (SS) SUCTION
28" X 1.322" NOM. WALL THK. (SS) DISCHARGE

2" SCH. 80 A-376, TP304
2" FITTINGS A-182, F304

SAFE END REPLACEMENT
12" X 0.688 NOM. WALL THK. (SS)
SA 403 WP 316 N.G.

ASME CC-1 (EQUIVALENT)



RISER DETAIL

NOTES:
1. WELDS 2RX1 ARE THE NOZZLE TO SAFE-END WELDS
2. ALL 2" WELDS ARE SOCKET WELDED EXCEPT WHERE NOTED.
3. PIPE SEGMENTS CONTAINING TWO LONGITUDINAL SEAMS WILL BE IDENTIFIED AS:

   (BASE WELD NO.)-LS-1D (DOWNSTREAM)
   (BASE WELD NO.)-LS-2D (DOWNSTREAM)
   (BASE WELD NO.)-LS-1U (UPSTREAM)
   (BASE WELD NO.)-LS-2U (UPSTREAM)

   THE -LS-1 SEAM WILL BE NUMERICALLY CLOSEST TO 0° ON THE PIPE, AND THE -LS-2 SEAM WILL BE NUMERICALLY FARTHERMOST FROM 0° ON THE PIPE. (e.g. -LS-1 AT 130°, AND -LS-2 AT 310°)

4. PIPE SEGMENTS CONTAINING ONLY ONE LONGITUDINAL SEAM WILL BE IDENTIFIED AS

   (BASE WELD NO.)-LS-D (DOWNSTREAM)
   (BASE WELD NO.)-LS-U (UPSTREAM)

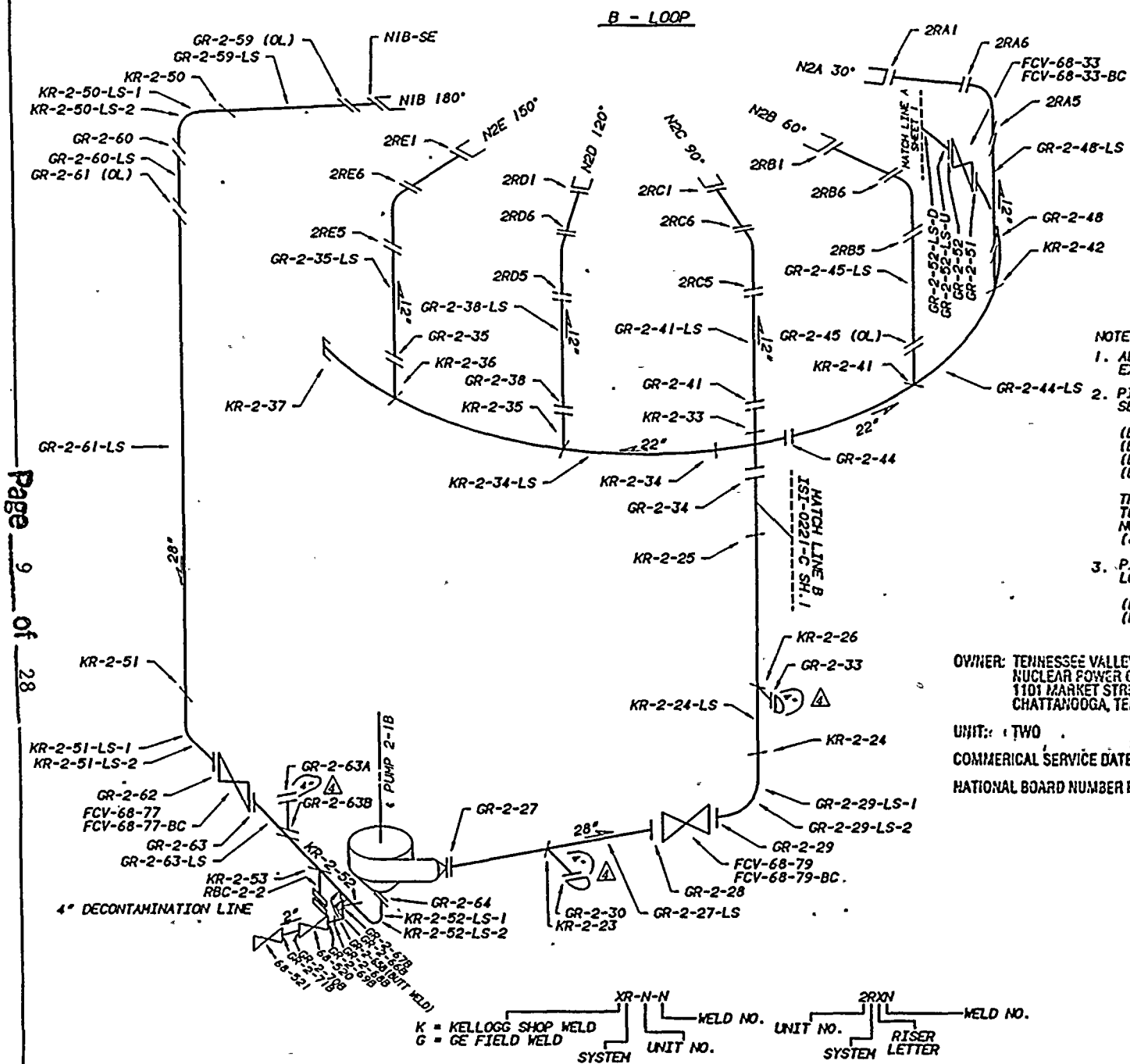
REV	BY	DATE	DESCRIPTION	CK'D	SUB	APP
04	PHB	6-15-94	DEL ONE BC NOTE FROM VALVE IDENTIFIER ADD 4" NOTE	DPS	L-3	GLB
03	PHB	3-13-92	ADD LONGSEAM IDENTIFIER NOTES	RPC	JES	GLB
02	PHB	9-20-91	DEL CADBLK, ADD 2" LINE, MTL. SPEC.	JAA	JES	GLB
01	PHB	3-28-89	REDRAWN INTO TWO SHEETS	JES	EDC	GLB

HARDWARE: IBM 5085 | SOFTWARE: CADAM | USER: ISIOMP

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
RECIRCULATION SYSTEM
WELD LOCATIONS

DRAWN: PHB	SUBMITTED	APPROVED	SCALE: NTS
DATE: 9-10-87	DATE 6-14-88	DATE 6-14-88	SHEET 1 OF 2 SHEET(S)
CHECKED: JES	EDC	GLB	DRAWING NO. TSI-0270-C REV 04
DATE: 6-14-88			



REFERENCE DRAW.

47W2408-8,9 (S.E. [illegible]ENT)
GE 769E963 (S.E. REPLACEMENT)
TVA 47K1544-2
GE 153F754
KELLOGG BF 2-180
NOTE: THIS DRAWING SUPERSEDES CHM-2068-C ALL SHEETS

MATERIAL SPECIFICATIONS:

A358, TP 304
4" X 0.337" NOM WALL THK. (SS)
12" X 0.569" NOM. WALL THK. (SS)
22" X 1.030" NOM. WALL THK. (SS)
28" X 1.138" NOM. WALL THK. (SS) SUCTION
28" X 1.322" NOM. WALL THK. (SS) DISCHARGE

2" SCH. 80, A376, TP304
2" FITTINGS A182,F304

SAFE END REPLACEMENT
12" X 0.688 NOM. WALL THK. (SS)
SA 403 WP 316 N.G.

ASME CC-1 (EQUIVALENT)

NOTES:

1. ALL 2" WELDS ARE SOCKET WELDED EXCEPT WHERE NOTED.
2. PIPE SEGMENTS CONTAINING TWO LONGITUDINAL SEAMS WILL BE IDENTIFIED AS:

   (BASE WELD NO.)-LS-1D (DOWNSTREAM)
   (BASE WELD NO.)-LS-2D (DOWNSTREAM)
   (BASE WELD NO.)-LS-1U (UPSTREAM)
   (BASE WELD NO.)-LS-2U (UPSTREAM)

   THE -LS-1 SEAM WILL BE NUMERICALLY CLOSEST TO 0° ON THE PIPE, AND THE -LS-2 SEAM WILL BE NUMERICALLY FARTHERMOST FROM 0° ON THE PIPE. (e.g. -LS-1 AT 130°, AND -LS-2 AT 310°)

3. PIPE SEGMENTS CONTAINING ONLY ONE LONGITUDINAL SEAM WILL BE IDENTIFIED AS

   (BASE WELD NO.)-LS-D (DOWNSTREAM)
   (BASE WELD NO.)-LS-U (UPSTREAM)

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

REV	BY	DATE	DESCRIPTION	CK'D	SUB	APP
04	PHB	12-1-93	ADD 4" LINE SIZES			
03	PHB	3-13-92	ADD LONGSEAM IDENTIFIER NOTES MODIFY LONGSEAM WELD ID'S	RPG	JES	GLB
02	PHB	9-20-91	DEL CADBLK, ADD 2" LINE, MATL. SPEC.	JAA	JES	GLB
01	PHB	11-9-89	CORRECT VALVE NO. FCV-68-79	JES	EDC	GLB

HARDWARE: IBM 5085 | SOFTWARE: CADAM | USER: ISICHP

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
RECIRCULATION SYSTEM
WELD LOCATIONS

DRAWN: PHB	SUBMITTED	APPROVED	SCALE NTS
DATE: 3-28-89	DATE 5-2-89	DATE 5-17-89	SHEET 2 OF 2 SHEET(S)
CHECKED: JES	EDC	GLB	DRAWING NO. TSI-0270-C
DATE: 5-3-89			REV 04

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM
BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R19-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1
PAGE 3
REVISION 0002
DATE 01/12/95

SYSTEM : RPV REACTOR PRESSURE VESSEL (NUCLEAR BOILER) - 068
ISOMETRIC NUMBER : ISI-0292-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
CRDN-2-0239-BC	BOLTS	B-G-2 B7.80	R00000253			VT-1	19941012	PASS	YES			
CRDN-2-0619-BC	BOLTS	B-G-2 B7.80	R00000252			VT-1	19941012	PASS	YES			
CRDN-2-0627-BC	BOLTS	B-G-2 B7.80	R00000257			VT-1	19941012	PASS	YES			
CRDN-2-1023-BC	BOLTS	B-G-2 B7.80	R00000251			VT-1	19941012	PASS	YES			
CRDN-2-1031-BC	BOLTS	B-G-2 B7.80	R00000262			VT-1	19941012	PASS	YES			
CRDN-2-1035-BC	BOLTS	B-G-2 B7.80	R00000256			VT-1	19941012	PASS	YES			
CRDN-2-1439-BC	BOLTS	B-G-2 B7.80	R00000261			VT-1	19941012	PASS	YES			
CRDN-2-1455-BC	BOLTS	B-G-2 B7.80	R00000267			VT-1	19941012	PASS	YES			
CRDN-2-1811-BC	BOLTS	B-G-2 B7.80	R00000266			VT-1	19941012	PASS	YES			
CRDN-2-1819-BC	BOLTS	B-G-2 B7.80	R00000265			VT-1	19941012	PASS	YES			
CRDN-2-1835-BC	BOLTS	B-G-2 B7.80	R00000260			VT-1	19941012	PASS	YES			

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM
BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R19-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1
PAGE 2
REVISION 0002
DATE 01/12/95

SYSTEM : RECIR REACTOR WATER RECIRCULATING SYSTEM - 068
ISOMETRIC NUMBER : ISI-0270-C SHEET : 02

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
FCV-68-33-BC	VALBLTG	B-G-2 B7.70	R00000365			VT-1	19941021	PASS	YES			

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

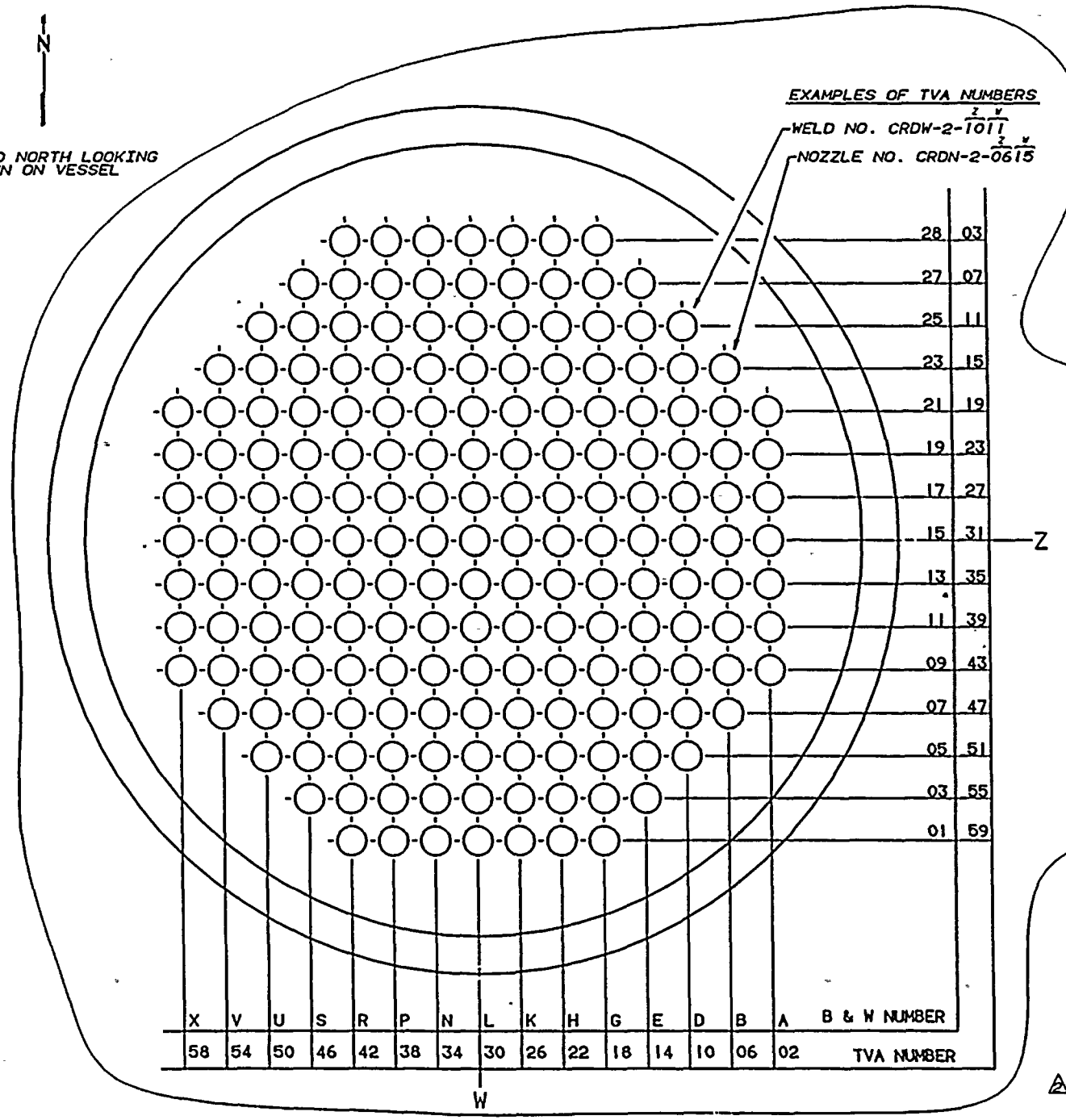
N

ASSUMED NORTH LOOKING DOWN ON VESSEL

EXAMPLES OF TVA NUMBERS

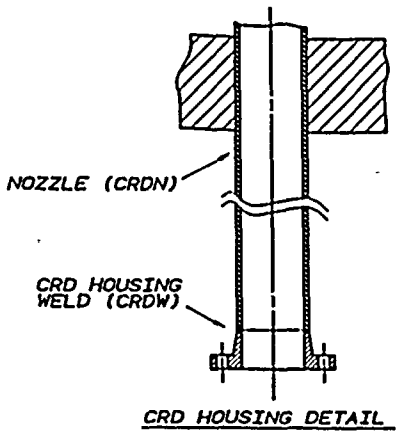
WELD NO. CRDW-2-$\frac{Z}{10}\frac{W}{11}$

NOZZLE NO. CRDN-2-$\frac{Z}{06}\frac{W}{15}$



NOTES:

1. THIS DRAWING SUPERSEDES CHM-2002-C (UNIT 2)
2. NOZZLES ARE SPECIFIED BY CRDN-2-"Z""W".
3. WELDS ARE SPECIFIED BY CRDW-2-"Z""W"



CRD HOUSING DETAIL

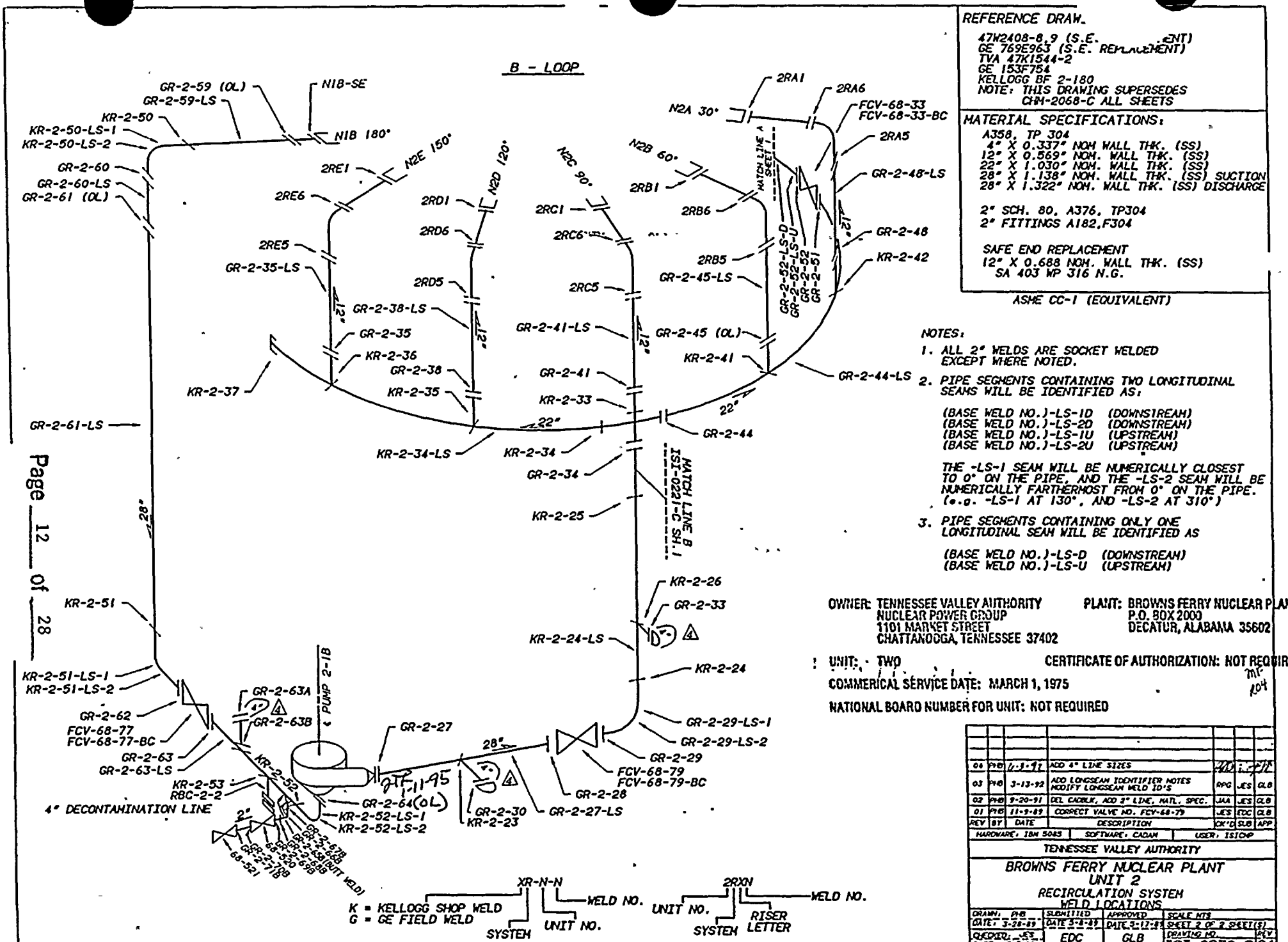
REV	BY	DATE	DESCRIPTION	CK'D	SUB	APP
2	PHB	3/6/92	ADD SHEET 2, REVISE TITLE, MODIFY GUIDE LINES, ADD HOUSING DETAIL	JAA	JES	GLB
1	PHB	9-20-91	REDRAW ADD NOTES, CORRECT NORTH	JAA	JES	GLB

HARDWARE: IBM 3083 | SOFTWARE: CADAM | USER: ISICMP

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
REACTOR VESSEL PENETRATIONS
CONTROL ROD DRIVE

DRAWN: PHB	SUBMITTED	APPROVED	SCALE: NTS
DATE: 2-13-89	DATE: 5-5-89	DATE: 5-17-89	SHEET 01 OF 02
CHECKED: JES	EDC	GLB	DRAWING NO. 1GI-0292-C REV 02
DATE: 5-17-89			



REFERENCE DRAW.

47W2408-8,9 (S.E. .ENT)
GE 769E963 (S.E. REPLACEMENT)
TVA 47K1544-2
GE 153F754
KELLOGG BF 2-180
NOTE: THIS DRAWING SUPERSEDES CHM-2068-C ALL SHEETS

MATERIAL SPECIFICATIONS:

A358, TP 304
4" X 0.337" NOM WALL THK. (SS)
12" X 0.569" NOM. WALL THK. (SS)
22" X 1.030" NOM. WALL THK. (SS)
28" X 1.138" NOM. WALL THK. (SS) SUCTION
28" X 1.322" NOM. WALL THK. (SS) DISCHARGE

2" SCH. 80, A376, TP304
2" FITTINGS A182, F304

SAFE END REPLACEMENT
12" X 0.688 NOM. WALL THK. (SS)
SA 403 WP 316 N.G.

ASME CC-1 (EQUIVALENT)

NOTES:

1. ALL 2" WELDS ARE SOCKET WELDED EXCEPT WHERE NOTED.
2. PIPE SEGMENTS CONTAINING TWO LONGITUDINAL SEAMS WILL BE IDENTIFIED AS:

   (BASE WELD NO.)-LS-1D (DOWNSTREAM)
   (BASE WELD NO.)-LS-2D (DOWNSTREAM)
   (BASE WELD NO.)-LS-1U (UPSTREAM)
   (BASE WELD NO.)-LS-2U (UPSTREAM)

   THE -LS-1 SEAM WILL BE NUMERICALLY CLOSEST TO 0° ON THE PIPE, AND THE -LS-2 SEAM WILL BE NUMERICALLY FARTHERMOST FROM 0° ON THE PIPE. (e.g. -LS-1 AT 130°, AND -LS-2 AT 310°)
3. PIPE SEGMENTS CONTAINING ONLY ONE LONGITUDINAL SEAM WILL BE IDENTIFIED AS

   (BASE WELD NO.)-LS-D (DOWNSTREAM)
   (BASE WELD NO.)-LS-U (UPSTREAM)

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

REV	BY	DATE	DESCRIPTION	CK'D	SUB	APP
04	PHB	6-3-91	ADD 4" LINE SIZES			
03	PHB	3-13-92	ADD LONGSEAM IDENTIFIER NOTES MODIFY LONGSEAM WELD ID'S	RPG	JES	GLB
02	PHB	9-20-91	DEL CADBLK, ADD 3" LINE, MATL. SPEC.	JAA	JES	GLB
01	PHB	11-9-89	CORRECT VALVE NO. FCV-68-79	JES	EDC	GLB

HARDWARE: IBM 5085 | SOFTWARE: CADAM | USER: ISIDAP

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
RECIRCULATION SYSTEM
WELD LOCATIONS

DRAWN: PHB	SUBMITTED	APPROVED	SCALE NTS
DATE: 3-28-89	DATE 5-8-89	DATE 5-17-89	SHEET 2 OF 2 SHEET(S)
CHECKED: JES	EDC	GLB	DRAWING NO. ISI-0270-C
DATE: 5-3-89			REV 04

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R01-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 2
REVISION 0002
DATE 01/12/95

SYSTEM : RECIR REACTOR WATER RECIRCULATING SYSTEM - 068
ISOMETRIC NUMBER : ISI-0278-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
2-47B408S0056	CFORCE2	F-A F1.40C	R00000167			VT-3	19941006	PASS	YES			
2-47B408S0066	C FORCE	F-A F1.40C	R00000448			VT-3	19941104	PASS	YES			

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

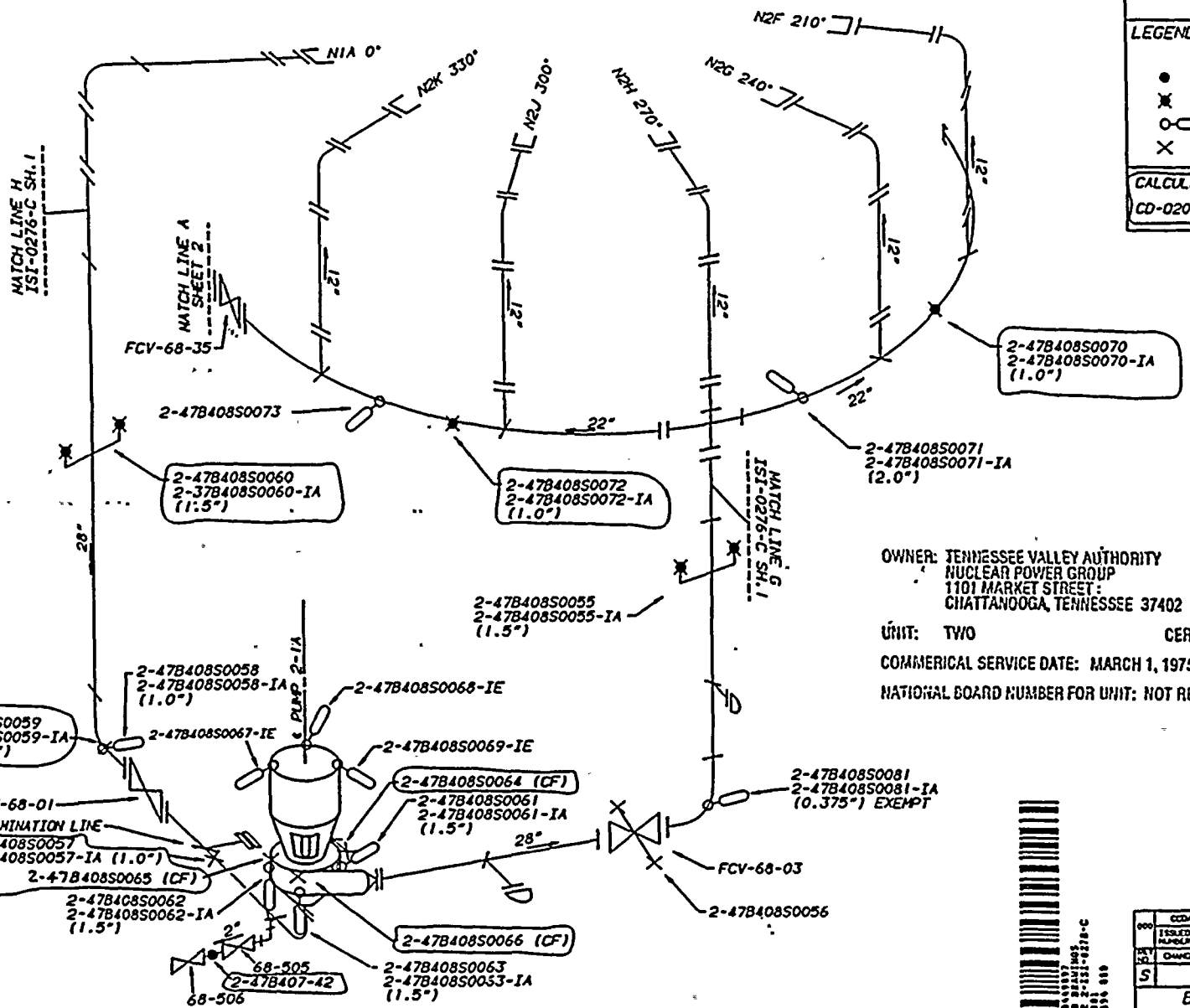
BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R19-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 4
REVISION 0002
DATE 01/12/95

SYSTEM : RPV REACTOR PRESSURE VESSEL (NUCLEAR BOILER) - 068
ISOMETRIC NUMBER : ISI-0292-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
CRDN-2-1839-BC	BOLTS	B-G-2 B7.80	R00000250			VT-1	19941012	PASS	YES			
CRDN-2-1859-BC	BOLTS	B-G-2 B7.80	R00000259			VT-1	19941012	PASS	YES			
CRDN-2-2219-BC	BOLTS	B-G-2 B7.80	R00000264			VT-1	19941012	PASS	YES			
CRDN-2-2659-BC	BOLTS	B-G-2 B7.80	R00000255			VT-1	19941012	PASS	YES			
CRDN-2-3459-BC	BOLTS	B-G-2 B7.80	R00000249			VT-1	19941012	PASS	YES			
CRDN-2-3823-BC	CH BLTG	B-G-2 B7.80	R00000258			VT-1	19941012	PASS	YES			
CRDN-2-3831-BC	BOLTS	B-G-2 B7.80	R00000263			VT-1	19941012	PASS	YES			
CRDN-2-4247-BC	BOLTS	B-G-2 B7.80	R00000254			VT-1	19941012	PASS	YES			
FLUXMON-2-23-BC	BOLTS	B-G-2 B7.10	R00000311.			VT-1	19941019	PASS	YES			

A - LOOP



REFERENCE DRAWINGS:

2-47W2408-8,9 (S.E. REPL [illegible]NT)
GE 769E963 (S.E. REPLAC
TVA 47K1544-2
2-153F754
KELLOGG BF 2-180
NOTE: THIS DRAWING SUPERSEDES CHM-2068-C ALL SHEETS

LEGEND:

- RIGID HANGER
- VARIABLE SUPPORT
- HYDRAULIC SNUBBER
- CONSTANT FORCE SUPPORT (CF)

CALCULATION BRANCH/PROJECT IDENTIFIER:
CD-02068-871118

ASME CC-1 (EQUIVALENT)

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET:
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

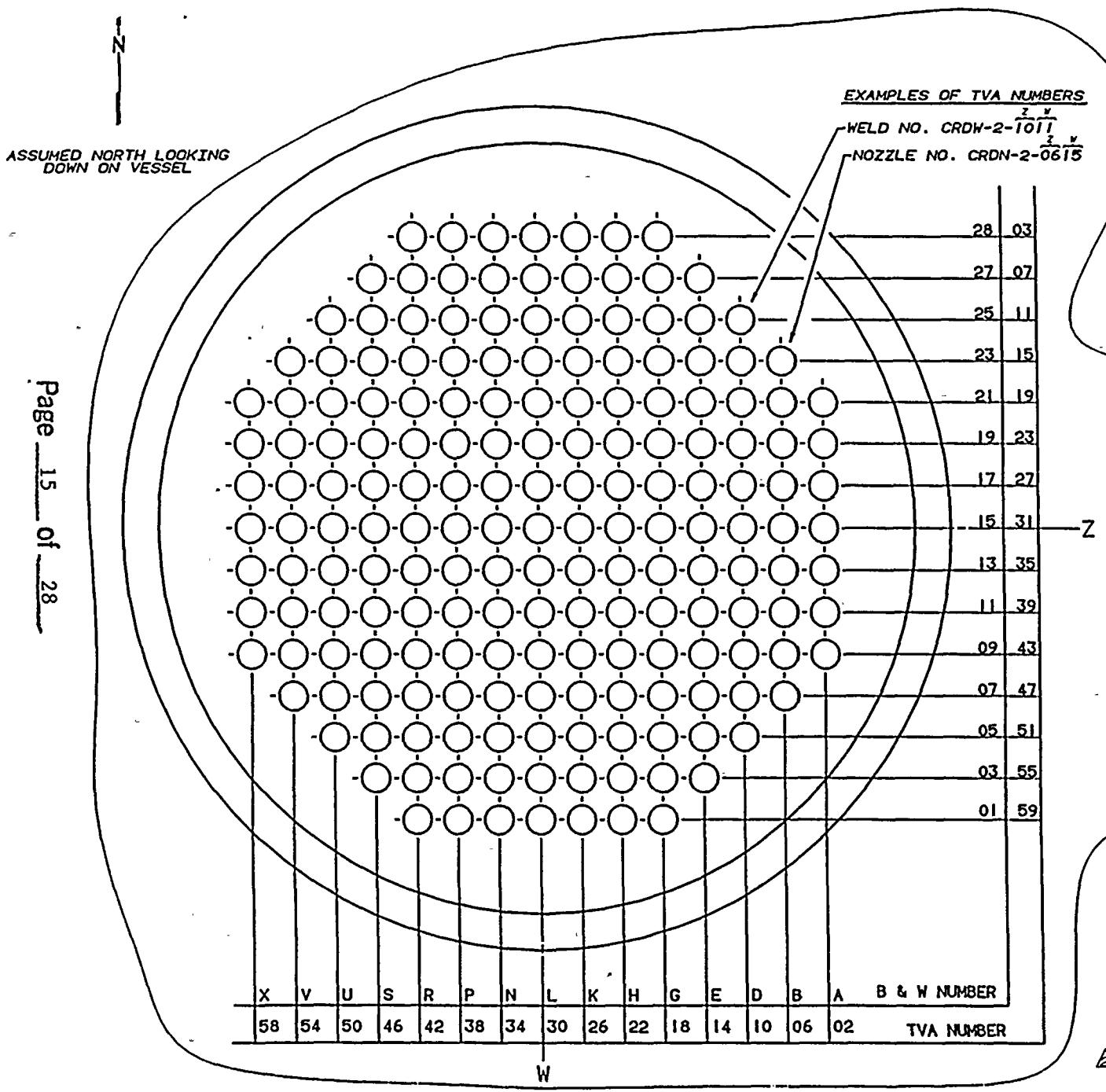
CONTROLLED

000	CCD ISI	11-10-94	MPT	JJC	N/A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	ISSUED TO CREATE CCD, SUPERSEDES A/D ISI-0278-C-1 &2R1; REVISED SUPPORT NUMBERS AND ADDED CALCULATION REFERENCE. (SEE REVISION)										
REV	CHANGE NOT	DATE	CPTR	CHKR	DSGN	DWNR	APPD	APPD	APPD	ISSD	
S	TENNESSEE VALLEY AUTHORITY										

BROWNS FERRY NUCLEAR PLANT
UNIT 2
RECIRCULATION SYSTEM
SUPPORT LOCATIONS

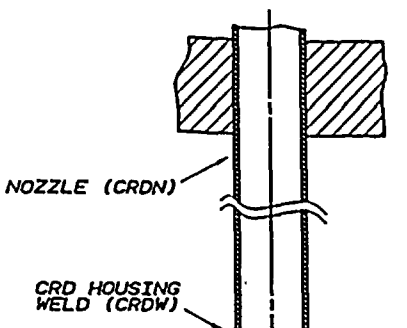
DRAWN: MAB	SUBMITTED	APPROVED	SCALE NTS
DATE: 9-22-87	DATE 6-10-88	DATE 6-13-88	SHEET 1 OF 2 SHEET(S)
CHECKED: EDC	EDC	GLB	DRAWING NO. 2-ISI-0278-C REV 000
DATE: 6-10-88			CCD

ASME CC-1 (EDITION)



NOTES:

1. THIS DRAWING SUPERSEDES CHM-2002-C (UNIT 2)
2. NOZZLES ARE SPECIFIED BY CRDN-2-"Z""W".
3. WELDS ARE SPECIFIED BY CRDW-2-"Z""W"



CRD HOUSING DETAIL

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERCIAL SERVICE DATE: MARCH 1, 1975

REV	BY	DATE	DESCRIPTION	CK'D	SUB	APP
2	PHB	3/13/92	ADD SHEET 2, REVISE TITLE, MODIFY GUIDE LINES, ADD HOUSING DETAIL	JHA	JES	GLB
1	PHB	9-20-91	REDRAW ADD NOTES, CORRECT NORTH	JHA	JES	GLB

HARDWARE: IBM 3083 | SOFTWARE: CADAM | USER: ISTOMP

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
REACTOR VESSEL PENETRATIONS
CONTROL ROD DRIVE

DRAWN: PHB	SUBMITTED	APPROVED	SCALE: NTS
DATE: 2-13-89	DATE 3-3-89	DATE 3-17-89	SHEET 01 OF 01 02 SHEET(S)
CHECKED: JES	EDC	GLB	DRAWING NO. 1X1-0292-C 02
DATE 3-4-89			

Owner:	TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant:	Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit:	Two	Certificate of Authorization:	Not Required
Commercial Service Date:	March 1, 1975		
National Board Number For Unit:	Not Required		

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R02-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 1
REVISION 0002
DATE 01/12/95

SYSTEM : RECIR REACTOR WATER RECIRCULATING SYSTEM - 068
ISOMETRIC NUMBER : ISI-0278-C SHEET : 02

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
2-47B408S0051	C FORCE	F-A F1.40C	R00000447			VT-3	19941104	PASS	YES			

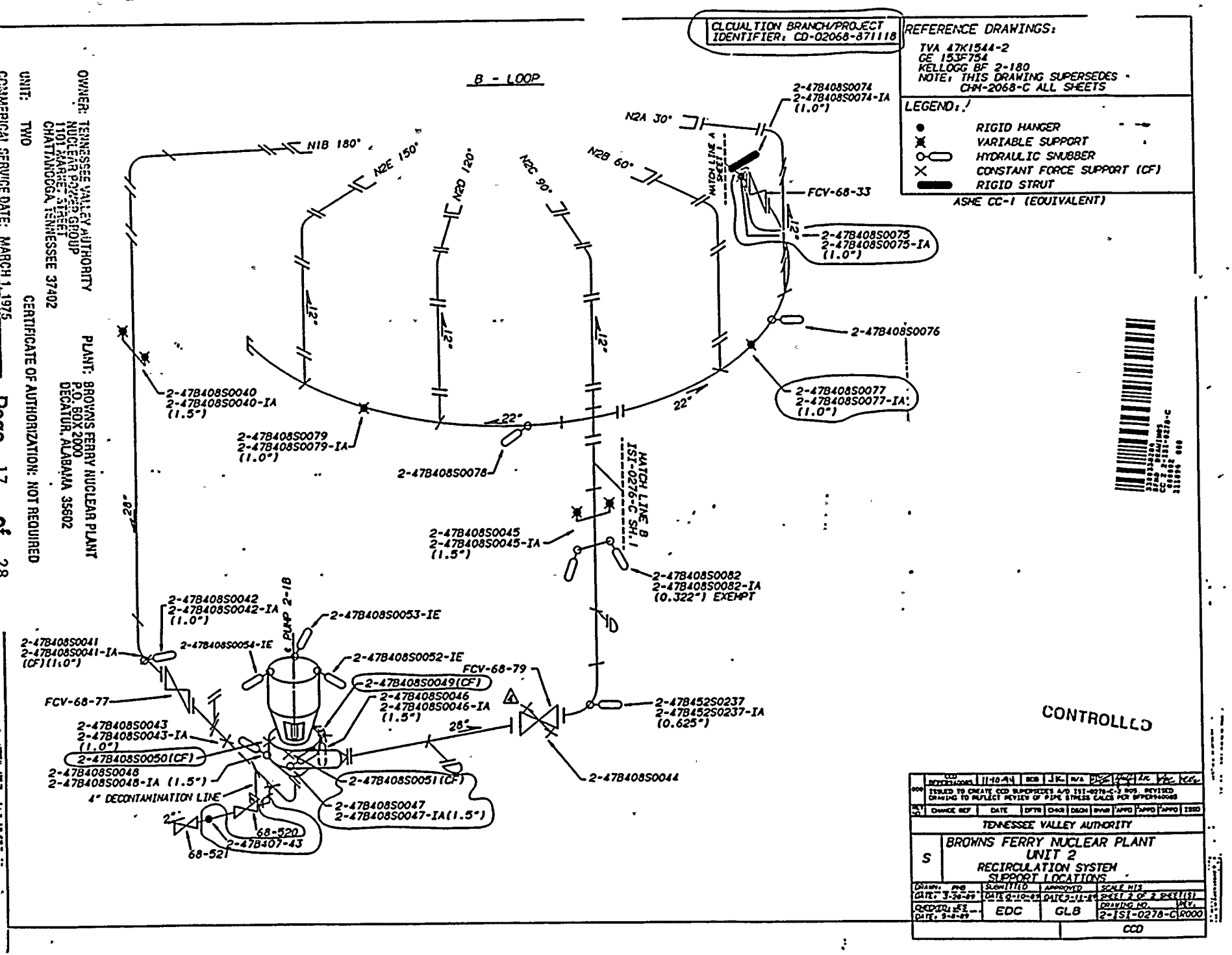
NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R06-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 1
REVISION 0002
DATE 01/12/95

SYSTEM : RPV REACTOR PRESSURE VESSEL (NUCLEAR BOILER) - 068
ISOMETRIC NUMBER : ISI-0292-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
CRDN-2-0619-BC	BOLTS	B-G-2 B7.80	R00000383			HT	19941026	PASS	YES			
CRDN-2-0627-BC	BOLTS	B-G-2 B7.80	R00000430			HT	19941026	ENGR	YES		SURF, LINEAR	ANALYZED, OK
CRDN-2-1835-BC	BOLTS	B-G-2 B7.80	R00000384			HT	19941026	ENGR	YES		SURF, LINEAR	ANALYZED, OK
CRDN-2-1839-BC	BOLTS	B-G-2 B7.80	R00000386			HT	19941026	ENGR	YES		SURF, LINEAR	ANALYZED, OK
CRDN-2-2219-BC	BOLTS	B-G-2 B7.80	R00000385			HT	19941026	ENGR	YES		SURF, LINEAR	ANALYZED, OK



OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

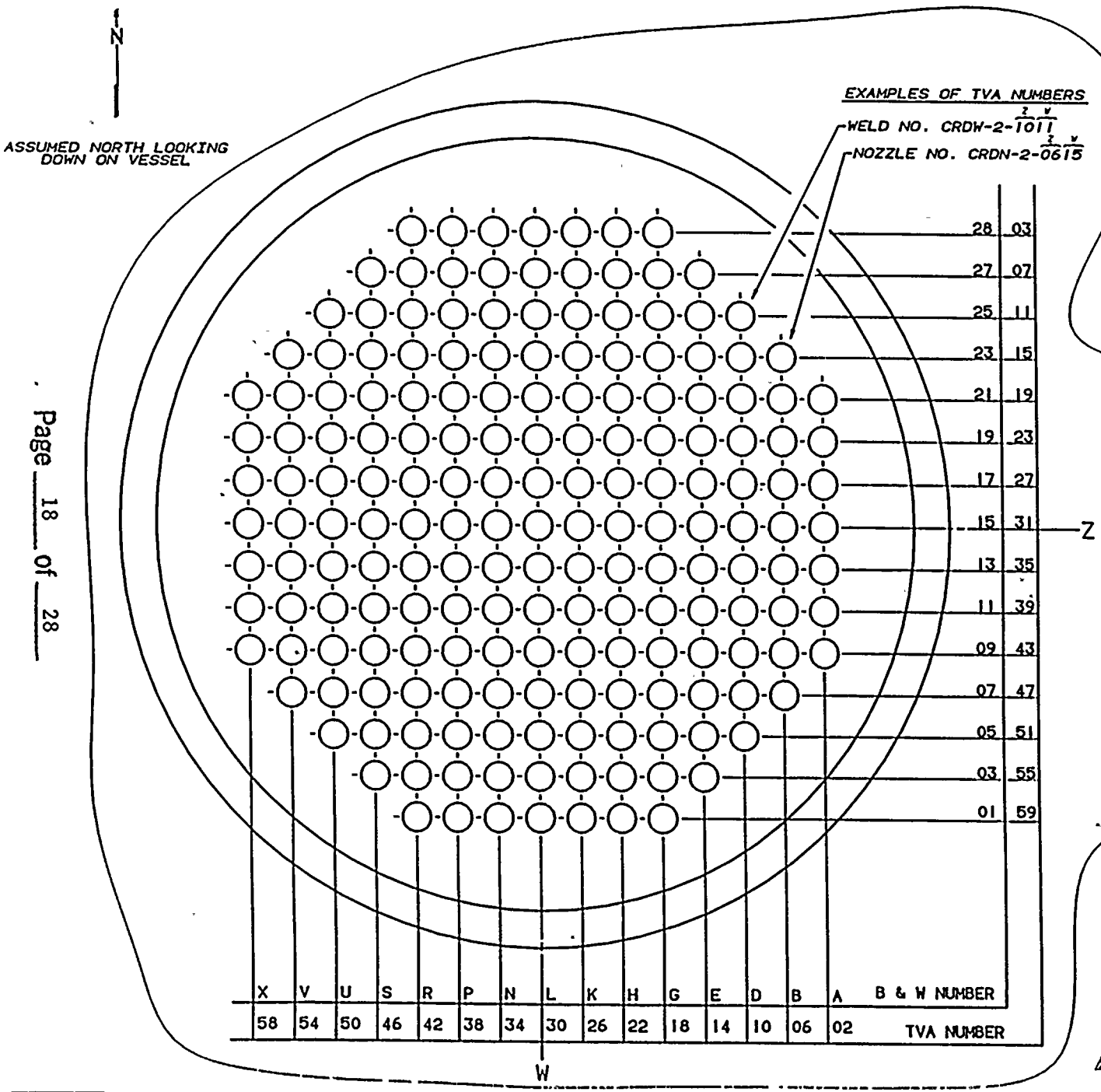
UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

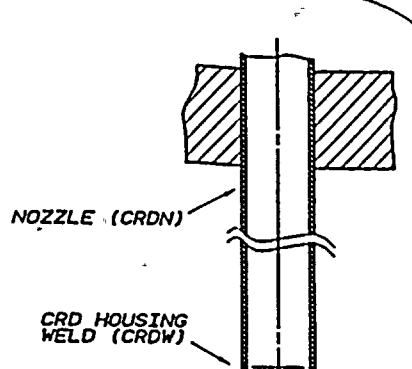
NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

ASME CC-1 (EQUIVALENT)



NOTES:

1. THIS DRAWING SUPERSEDES CHM-2002-C (UNIT 2)
2. NOZZLES ARE SPECIFIED BY CRDN-2-"Z""W".
3. WELDS ARE SPECIFIED BY CRDW-2-"Z""W"



CRD HOUSING DETAIL

REV	BY	DATE	DESCRIPTION
2	PHB	3/10/92	ADD SHEET 2, REVISE TITLE, MODIFY GUIDE LINES, ADD HOUSING DETAIL
1	PHB	9-20-91	REDRAW ADD NOTES, CORRECT NORTH

HARDWARE: IBM 9083 | SOFTWARE: CADAM | USER: ISTOMP

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
REACTOR VESSEL PENETRATIONS
CONTROL ROD DRIVE

DRAWN PHB DATE 2-13-89	SUBMITTED DATE 3-8-89	APPROVED DATE 3-17-89
CHECKED JAS DATE 3-17-89	EDC	[illegible]

SCALE NTS
SHEET 01 OF 02
DRAWING NO. TVA-0292-C REV 02

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

Owner:	TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant:	Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit:	Two	Certificate of Authorization:	Not Required
Commercial Service Date:	March 1, 1975		
National Board Number For Unit:	Not Required		

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R15-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 1
REVISION 0002
DATE 01/12/95

SYSTEM : RWCUS REACTOR WATER CLEANUP SYSTEM - 069
ISOMETRIC NUMBER : ISI-0274-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
2-47B406S0012	RIG HGR	F-A F1.10B	R00000213			VT-3	19941013	PASS	YES			
2-47B406S0018	VSPRING	F-A F1.10C	R00000218			VT-3	19941012	PASS	YES			

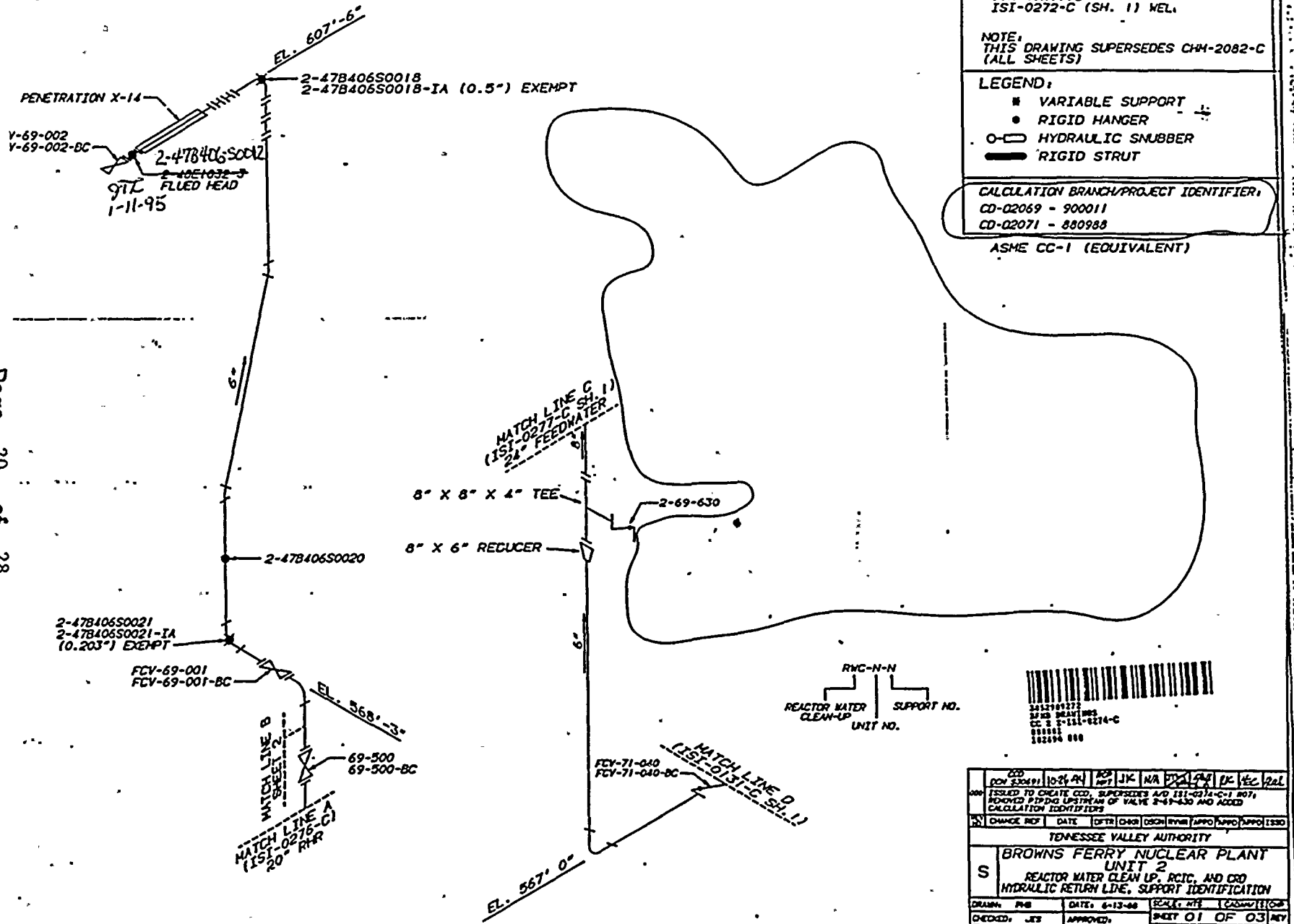
NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R23-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 5
REVISION 0002
DATE 01/12/95

SYSTEM : RWCUS REACTOR WATER CLEANUP SYSTEM - 069
ISOMETRIC NUMBER : ISI-0272-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
DRWC-2-02	ELBOW -VALVE	B-J B9.11	R00000139			PT	19941004	PASS	YES			
DSRWC-2-01	PIPE -ELBOW	B-J B9.11	R00000140			PT	19941004	PASS	YES			
DSRWC-2-01A	PIPE -ELBOW	B-J B9.11	R00000141			PT	19941004	PASS	YES			
DSRWC-2-02	ELBOW -PIPE.	B-J B9.11	R00000142			PT	19941004	PASS	YES			
DSRWC-2-06	ELBOW -PIPE	B-J B9.11	R00000143			PT	19941004	PASS	YES			



OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

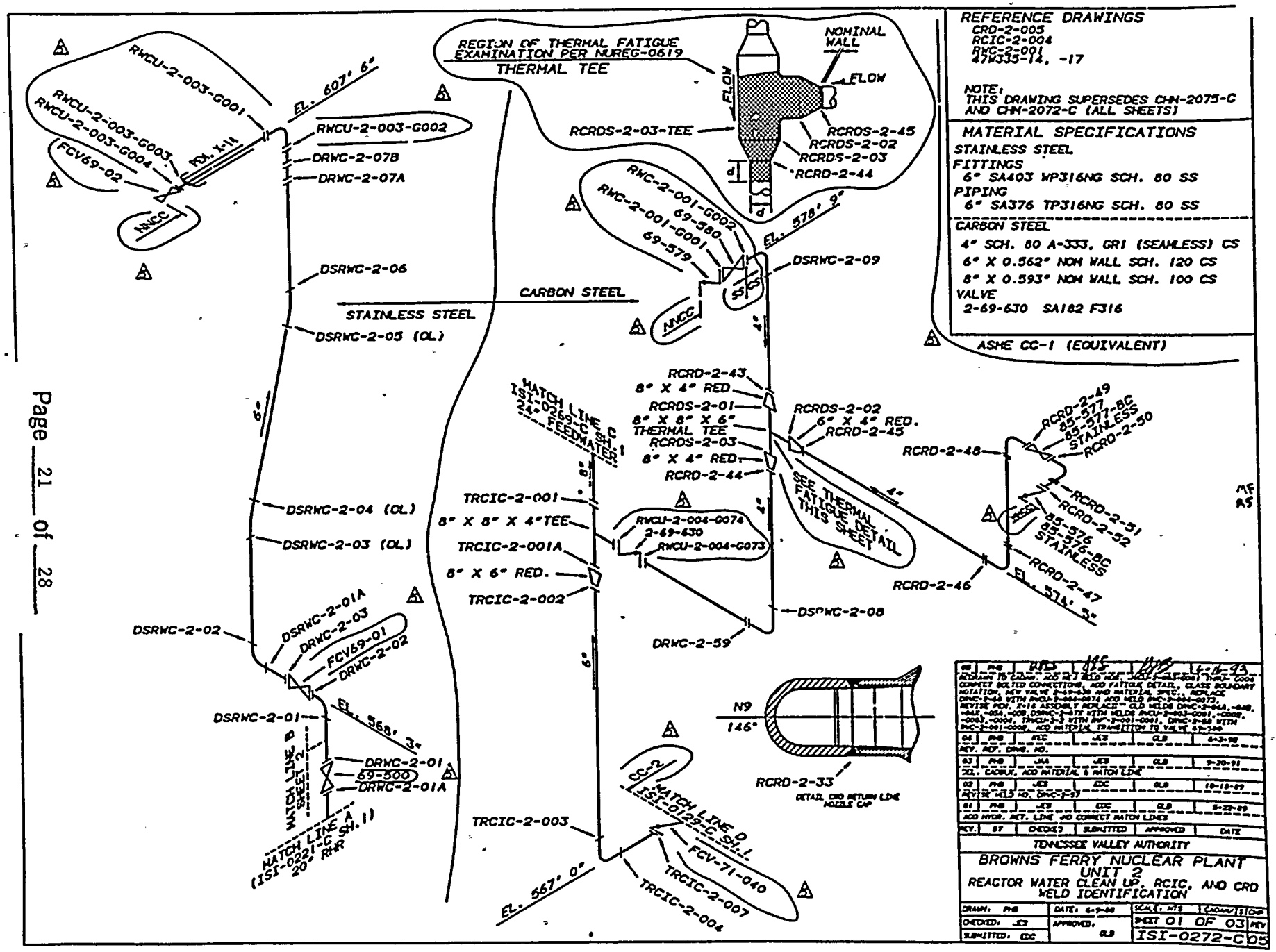
PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED



OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2

ISI DATA BASE

POST OUTAGE EXAMINATION RESULTS REPORT

EXAM REQUIREMENT : R01-02 CYCLE : 07

INTERVAL : 02 PERIOD : 1

PAGE 1

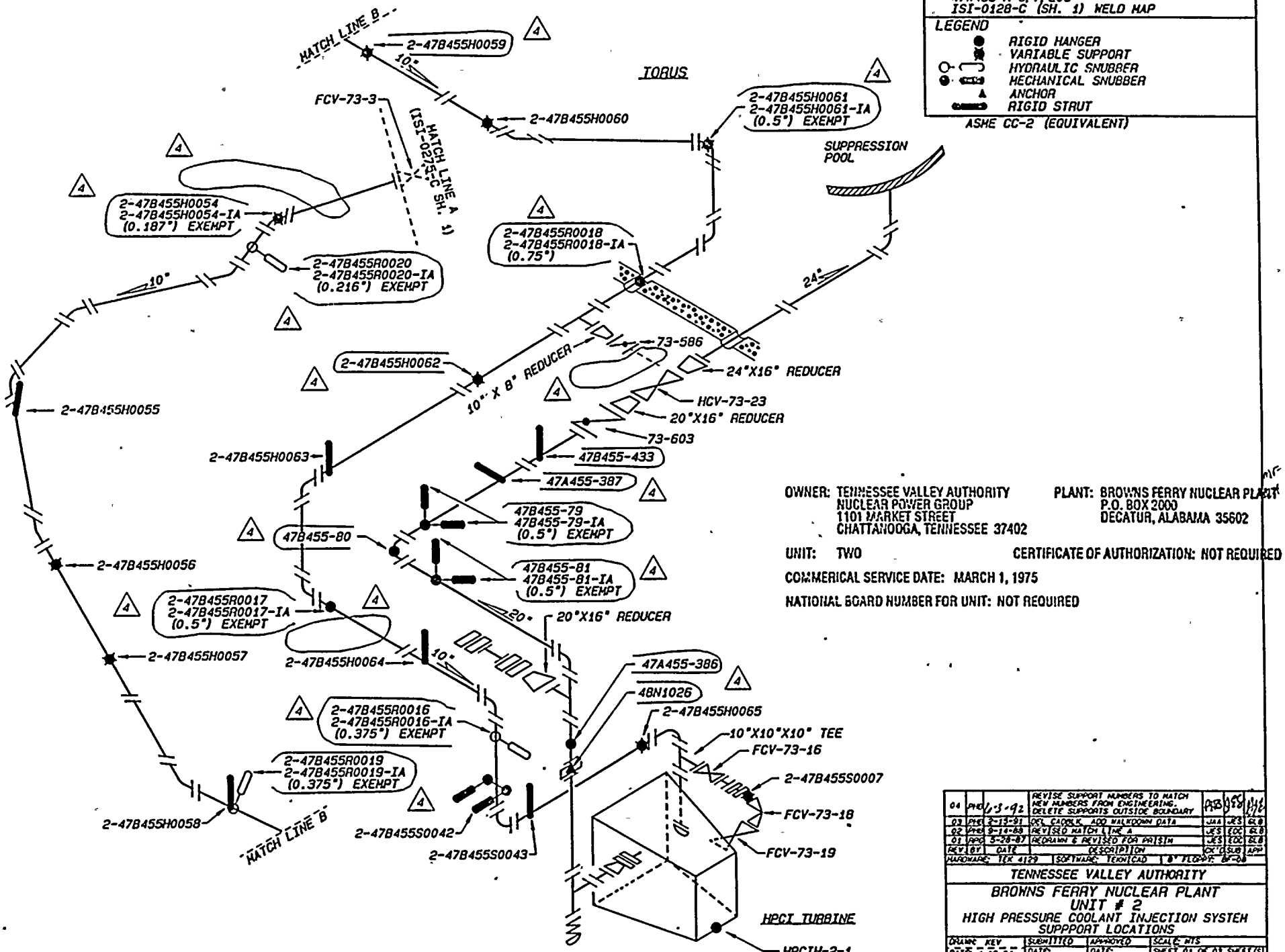
REVISION 0002

DATE 01/12/95

SYSTEM : HPCIS HIGH PRESSURE COOLANT INJECTION SYSTEM - 073

ISOMETRIC NUMBER : ISI-0130-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
2-47B455H0056	VSPRING	F-A F1.20C	R00000222 R00000449			VT-3 VT-3	19941014 19941104	FAIL PASS	YES YES		INC SETTING	COMP RESET
2-47B455H0059	VSPRING	F-A F1.20C	R00000223			VT-3	19941014	PASS	YES			
2-47B455H0060	VSPRING	F-A F1.20C	R00000224			VT-3L	19941014	PASS	YES			
2-47B455H0062	VSPRING	F-A F1.20C	R00000214			VT-3	19941013	PASS	YES.			



OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

REV	BY	DATE	DESCRIPTION	CK'D	SUB	APP
04	PKG	6-3-92	REVISE SUPPORT NUMBERS TO MATCH NEW NUMBERS FROM ENGINEERING. DELETE SUPPORTS OUTSIDE BOUNDARY	JAB	JES	GLB
03	PKG	2-15-91	DCN. CADDLK. ADD WALKDOWN DATA	JAA	JES	GLB
02	PKG	9-14-88	REVISED MATCH LINE A	JES	EOC	GLB
01	APG	5-28-87	REDRAWN & REVISED FOR PRINT	JES	EOC	GLB

HARDWARE: TEK 4129 SOFTWARE: TECHNICAD 8" FLOPPY: BF-08

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT # 2
HIGH PRESSURE COOLANT INJECTION SYSTEM
SUPPPORT LOCATIONS

DRAWN KEY	SUBMITTED	APPROVED	SCALE: NTS
DATE 4-19-91	DATE	DATE	SHEET 01 OF 03 SHEET(S)
CHECKED JTL		GLB	DRAWING NO. ISI-0130-C REV 04
DATE			

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R17-C2 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 2
REVISION 0002
DATE 01/12/95

SYSTEM : RHRS RESIDUAL HEAT REMOVAL SYSTEM - 074
ISOMETRIC NUMBER : ISI-0324-C SHEET : 05

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
2-47B452R0077	H SNUB	F-A F1.20C	R00000087			VT-3	19940713	PASS	YES			

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R23-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 4
REVISION 0002
DATE 01/12/95

SYSTEM : RHRS RESIDUAL HEAT REMOVAL SYSTEM - 074
ISOMETRIC NUMBER : ISI-0221-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
DRHR-2-04	PENPIPE -ELBOW	B-J B9.11	R00000317			PT	19941021	PASS	YES			
DRHR-2-07	ELBOW -VALVE	B-J B9.11	R00000297			PT	19941019	PASS	YES			

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

COMMERCIAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

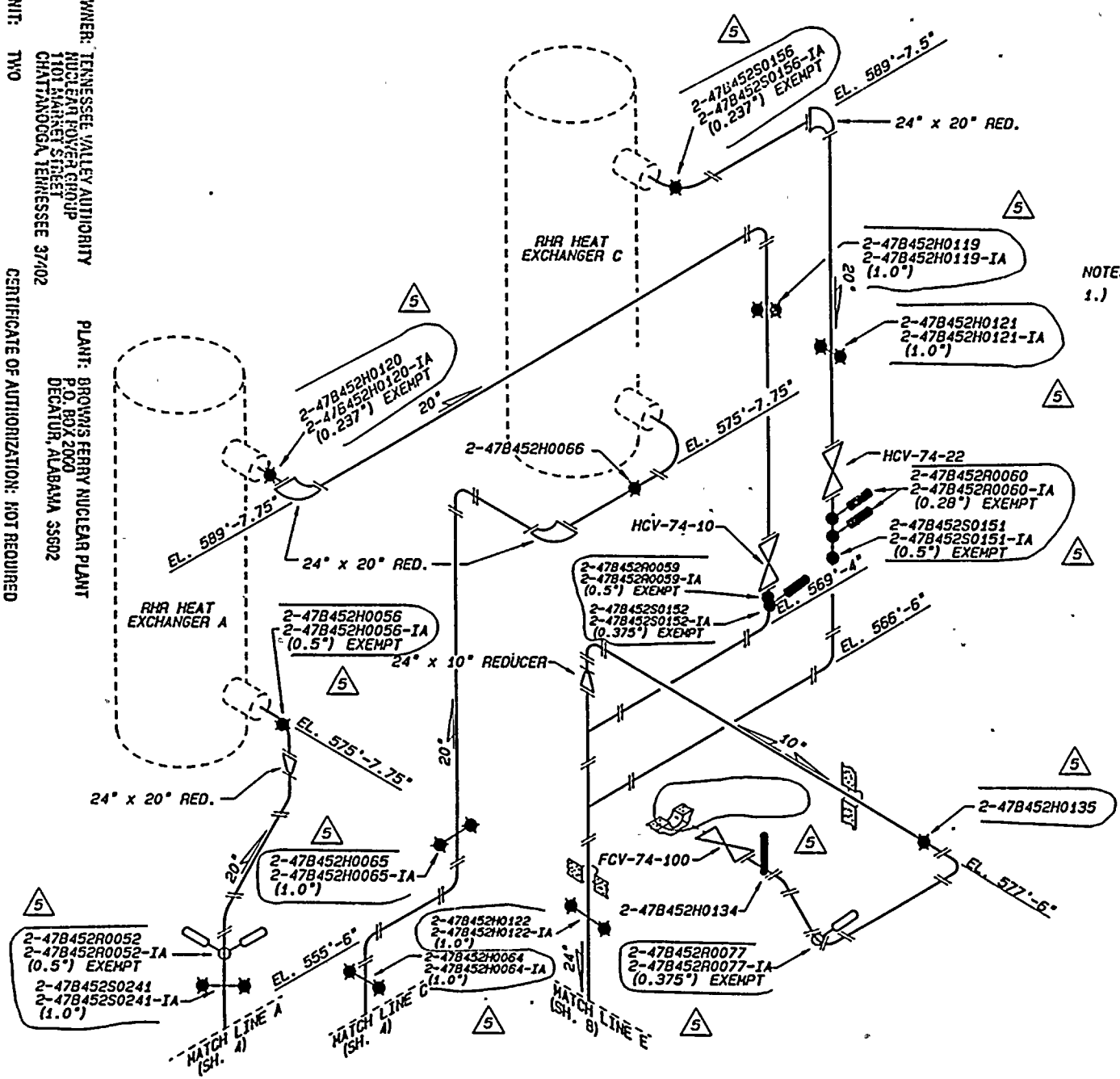
CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

REFERENCE DRAWINGS
47W452 SERIES
47W335-7
MSG-0018-C (SH. 5) WELD MAP
THIS DRAWING SUPERSEDES MSG-0023-C SH.2
(SEE NOTE 1)

LEGEND:
- RIGID HANGER
- VARIABLE SUPPORT
- HYDRAULIC SNUBBER
- MECHANICAL SNUBBER
- RIGID STRUT

ASME CC-2 (EQUIVALENT)

NOTES:
1.) DRAWINGS ISI-0324-C SH. 4-7 MAKE UP SUPERCEDED DRAWING MSG-0023-C (SH. 2)



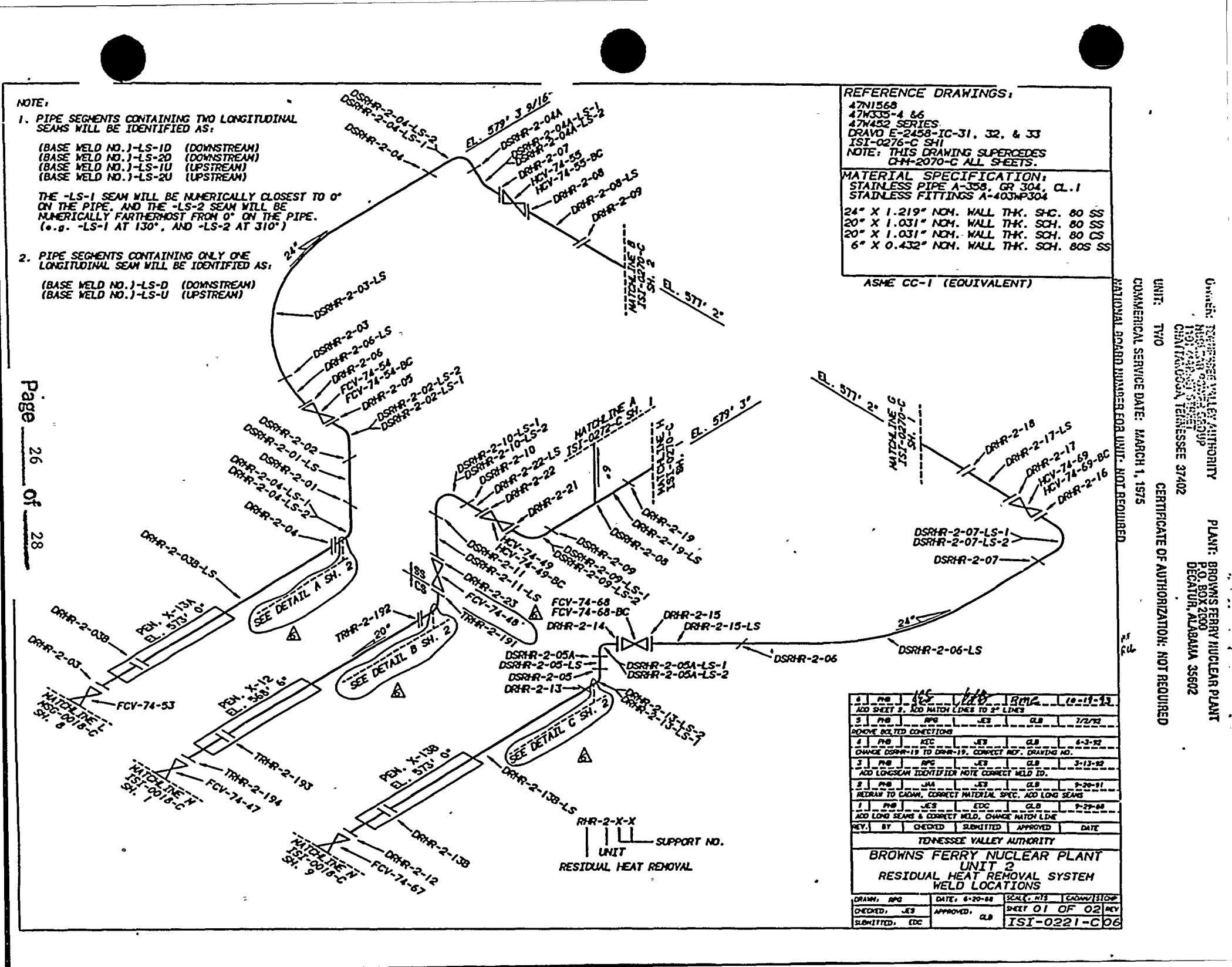
REV	BY	DATE	DESCRIPTION	CK'D	QA'D	APP'D
05	PHB	4-5-91	REVISE SUPPORT NUMBERS TO MATCH NEW NUMBERS FROM ANALYSIS, ADD/DELETE SUPPORTS OUTSIDE BOUNDARY	PHB	MCC	MC
04	PHB	3-15-91	ADD WALKDOWN DATA & SH. 10	JAA	JES	GLB
03	PHB	6-28-90	MODIFY SUPPORTS, REMOVE CADBLOCK	JAA	JES	GLB
02	PHB	1-8-90	ADD NEW SUPPORT 10'S ARBORV. REQ.	JES	EDC	GLB
01	PHB	4-4-89	REMOVED MTG. SNUBBER & ADDED MECH. SNUBBER, NEW SUPPORT & NOTE, AND REVISED SUPPORT LOCATIONS	JES	EDC	GLB

HARDWARE: TEK 4129 | SOFTWARE: TKM CAD | 8" PLOT#: 8"=1"

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
RESIDUAL HEAT REMOVAL SYSTEM
SUPPORT LOCATIONS

DRAWN: PHB	SUBMITTED	APPROVED	SCALE: NTS
DATE:	DATE:	DATE:	SHEET 3 OF 13 SHEET(S)
CHECKED: JES	EDC	GLB	DRAWING NO. ISI-0324-C
DATE:			REV 05


NOTE:
1. PIPE SEGMENTS CONTAINING TWO LONGITUDINAL SEAMS WILL BE IDENTIFIED AS:
(BASE WELD NO.)-LS-1D (DOWNSTREAM)
(BASE WELD NO.)-LS-2D (DOWNSTREAM)
(BASE WELD NO.)-LS-1U (UPSTREAM)
(BASE WELD NO.)-LS-2U (UPSTREAM)
THE -LS-1 SEAM WILL BE NUMERICALLY CLOSEST TO 0° ON THE PIPE. AND THE -LS-2 SEAM WILL BE NUMERICALLY FARTHERMOST FROM 0° ON THE PIPE. (e.g. -LS-1 AT 130°, AND -LS-2 AT 310°)
2. PIPE SEGMENTS CONTAINING ONLY ONE LONGITUDINAL SEAM WILL BE IDENTIFIED AS:
(BASE WELD NO.)-LS-D (DOWNSTREAM)
(BASE WELD NO.)-LS-U (UPSTREAM)
REFERENCE DRAWINGS:
47N1568
47W335-4 &6
47W452 SERIES
DRAVO E-2458-IC-31, 32, & 33
ISI-0276-C SHI
NOTE: THIS DRAWING SUPERCEDES CHM-2070-C ALL SHEETS.
MATERIAL SPECIFICATION:
STAINLESS PIPE A-358, GR 304, CL.1
STAINLESS FITTINGS A-403WP304
24" X 1.219" NOM. WALL THK. SCH. 80 SS
20" X 1.031" NOM. WALL THK. SCH. 80 SS
20" X 1.031" NOM. WALL THK. SCH. 80 CS
6" X 0.432" NOM. WALL THK. SCH. 80S SS
ASME CC-1 (EQUIVALENT)
EL. 579' 3 9/16"
EL. 579' 3"
EL. 577' 2"
EL. 571' 2"
24"
20"
DSRHR-2-04
DSRHR-2-04-LS-1
DSRHR-2-04-LS-2
DSRHR-2-04A
DSRHR-2-04A-LS-1
DSRHR-2-04A-LS-2
DSRHR-2-07
DRHR-2-07
HCV-74-55
HCV-74-55-BC
DRHR-2-08
DRHR-2-08-LS
DRHR-2-09
MATCHLINE B ISI-0276-C SH. 2
DRHR-2-03-LS
DSRHR-2-03
DRHR-2-06-LS
DRHR-2-06
FCV-74-54
FCV-74-54-BC
DRHR-2-05
DSRHR-2-02-LS-2
DSRHR-2-02-LS-1
DSRHR-2-02
DSRHR-2-01-LS
DSRHR-2-01
DRHR-2-04-LS-1
DRHR-2-04-LS-2
DRHR-2-04
DRHR-2-03B-LS
PEN. X-13A EL. 573' 0"
DRHR-2-03B
DRHR-2-03
MATCHLINE L MSP-0018-C SH. 8
FCV-74-53
SEE DETAIL A SH. 2
DSRHR-2-10-LS-1
DSRHR-2-10-LS-2
DSRHR-2-10
DRHR-2-22-LS
DRHR-2-22
DRHR-2-21
MATCHLINE A ISI-0272-C SH. 1
MATCHLINE C ISI-0276-C SH. 1
DRHR-2-19
DRHR-2-19-LS
DSRHR-2-09
DSRHR-2-09-LS-1
DSRHR-2-09-LS-2
HCV-74-49
HCV-74-49-BC
DSRHR-2-11
DSRHR-2-11-LS
DRHR-2-23
FCV-74-48
TRHR-2-192
TRHR-2-191
SEE DETAIL B SH. 2
FCV-74-68
FCV-74-68-BC
DRHR-2-14
DRHR-2-15
DRHR-2-15-LS
DSRHR-2-06
DSRHR-2-06-LS
DSRHR-2-05A
DSRHR-2-05-LS
DSRHR-2-05
DRHR-2-13
DSRHR-2-05A-LS-1
DSRHR-2-05A-LS-2
DRHR-2-13-LS-2
DRHR-2-13-LS-1
SEE DETAIL C SH. 2
PEN. X-12 EL. 568' 6"
TRHR-2-193
TRHR-2-194
FCV-74-47
MATCHLINE N ISI-0018-C SH. 1
PEN. X-13B EL. 573' 6"
DRHR-2-13B-LS
DRHR-2-13B
FCV-74-67
MATCHLINE N ISI-0018-C SH. 9
DRHR-2-12
RHR-2-X-X
SUPPORT NO.
UNIT
RESIDUAL HEAT REMOVAL
DRHR-2-18
DRHR-2-17-LS
DRHR-2-17
HCV-74-69
HCV-74-69-BC
DRHR-2-16
DSRHR-2-07-LS-1
DSRHR-2-07-LS-2
DSRHR-2-07
DSRHR-2-06-LS
Owner: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402
PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602
UNIT: TWO
COMMERCIAL SERVICE DATE: MARCH 1, 1975
CERTIFICATE OF AUTHORIZATION: NOT REQUIRED
NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED
6 PHB JES CLB RMC 10-19-93 ADD SHEET 2, ADD MATCH LINES TO 3" LINES
5 PHB RPG JES CLB 7/2/92 REMOVE BOLTED CONECTIONS
4 PHB KEC JES CLB 6-3-92 CHANGE DSRHR-19 TO DRHR-19. CORRECT REF. DRAWING NO.
3 PHB RPG JES CLB 3-13-92 ADD LONGSEAM IDENTIFIER NOTE CORRECT WELD ID.
2 PHB JAA JES CLB 9-20-91 REDRAW TO CADAM, CORRECT MATERIAL SPEC. ADD LONG SEAMS
1 PHB JES EDC CLB 9-29-88 ADD LONG SEAMS & CORRECT WELD, CHANGE MATCH LINE
REV. BY CHECKED SUBMITTED APPROVED DATE
TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT UNIT 2
RESIDUAL HEAT REMOVAL SYSTEM WELD LOCATIONS
DRAWN: RPG DATE: 6-20-88 SCALE: NTS CADAM/STORE
CHECKED: JES APPROVED: CLB SHEET 01 OF 02 REV
SUBMITTED: EDC ISI-0221-C 06
Page 26 of 28

Owner: TENNESSEE VALLEY AUTHORITY Nuclear Power Group 1101 Market Street Chattanooga, TN 37402-2801	Plant: Browns Ferry Nuclear Plant P.O. Box 2000 Decatur, AL 35609-2000
Unit: Two	Certificate of Authorization: Not Required
Commercial Service Date: March 1, 1975	
National Board Number For Unit: Not Required	

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R23-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 1
REVISION 0002
DATE 01/12/95

SYSTEM : CSS CORE SPRAY SYSTEM - 075
ISOMETRIC NUMBER : ISI-0271-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
DCS-2-05	PIPE -VALVE	B-J B9.11	R00000325			PT	19941015	PASS	YES			

NUTECH — TENNESSEE VALLEY AUTHORITY — PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R22-02 CYCLE : 07
INTERVAL : 02 PERIOD : 1

PAGE 1
REVISION 0002
DATE 01/12/95

SYSTEM : CSS CORE SPRAY SYSTEM - 075
ISOMETRIC NUMBER : ISI-0271-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
TCS-2-405	VALVE -ELBOW	B-F B5.130	R00000138			PT	19941004	PASS	YES			
TCS-2-406	PIPE -VALVE	B-F B5.130	R00000137			PT	19941004	PASS	YES			

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

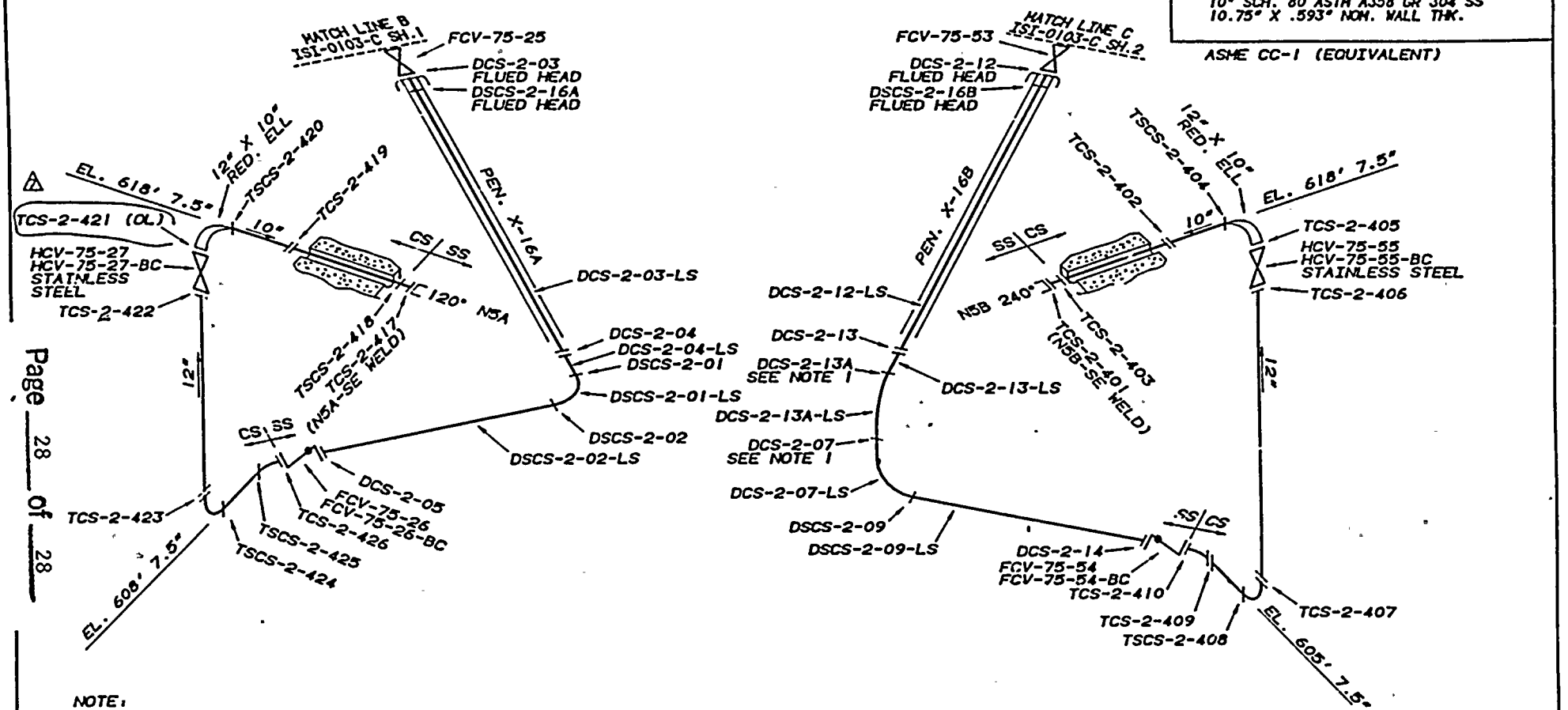
COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

REFERENCE DRAWINGS
DRAVO E-2450-IC-34
DRAVO E-2458-IC-35
NOTE: THIS DRAWING SUPERSEDES CHM-2071-C ALL SHEETS

MATERIAL SPECIFICATIONS
12" SCH. 80 SA 333 GR6 CS
12.75" X .687" NOM. WALL THK.
12" SCH. 80 ASTM A358 GR 304 SS
12.75" X .687" NOM. WALL THK.
10" SCH. 80 SA 333 GR6 CS
10.75" X .593" NOM. WALL THK.
10" SCH. 80 ASTM A358 GR 304 SS
10.75" X .593" NOM. WALL THK.

ASME CC-1 (EQUIVALENT)



NOTE:

1. WELDS DCS-2-07 AND DCS-2-13A ARE DRAVO SHOP WELDS.
2. PIPE SEGMENTS CONTAINING ONLY ONE LONGITUDINAL SEAM WILL BE IDENTIFIED AS:

(BASE WELD NO.)-LS-D (DOWNSTREAM)
(BASE WELD NO.)-LS-U (UPSTREAM)

DXCS - N - N
CORE SPRAY
WELD NO.
UNIT NO.
D=DRAVO FIELD WELD
DS=DRAVO SHOP WELD
T=TVA FIELD WELD
TS=TVA SHOP WELD

REV.	BY	CHECKED	SUBMITTED	APPROVED	DATE
03	PHB	JES	EDC	GLB	4-23-90
	ADD CS & SS BOUNDARY, CS SPEC, DEL CADBUX				
02	PHB	JES	EDC	GLB	1-4-90
	ADD NOTE 2				
01	PHB	JES	EDC	GLB	12-15-88
	ADD LONGSEAM WELD TSCS-2-424-LS, CORRECT MATERIAL SPECS				
7	PHB	[illegible]	[illegible]	[illegible]	11/AR/93
	ADD (OL) TO TCS-2-421 PER FCDT-93-110				
6	PHB	JES	GLB	RME	2/11/93
	DELETE LONG SEAMS TCS-2-403-LS-1, -403-LS-2, -410-LS, -421-LS-1, -421-LS-2, -426-LS, TSCS-2-408-LS, -424-LS, REVISED REF. DRAWINGS, ADD FLUED HEAD LOADS DSCS-2-16A, -16B, DELETED BOLTED CONNECTIONS FCV-75-25-BC, -53-BC, REDRAW TO CADAM, ADD NOTE 1 REF.				
5	PHB	RPG	JES	GLB	3-13-92
	ADD LONGSEAM IDENTIFIER NOTE				
4	PHB	JAA	JES	GLB	9-20-91
	MODIFY MATERIAL SPECS., ADD LONG SEAMS				

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT
UNIT 2
CORE SPRAY SYSTEM
WELD LOCATIONS

DRAWN: PHB | DATE: 5-17-89 | SCALE: NTS | CADAM | SYS | CAP
CHECKED: JES | APPROVED: GLB | SHEET 01 OF 01 | REV
SUBMITTED: EDC | ISI-0271-C | 07

ENCLOSURE 4

BROWNS FERRY NUCLEAR PLANT

CORRECTIONS TO THE

UNIT 2 CYCLE 6

NIS-1 AND NIS-2 REPORTS

DESCRIPTION OF THE CORRECTIONS TO BFN UNIT 2 CYCLE 6 NIS-1 AND NIS-2 REPORTS

This enclosure contains corrections to the BFN Unit 2 Cycle 6 NIS-1 and NIS-2 reports. The corrections are described below:

- Deleted ASME credit for RPV instrument nozzles N-11A and N-11B examination category B-E, item number B4.13.
- Deleted ASME credit for RWCU valve 69-580 examination category B-M-2, item number B12.50. Revised to show that a VT-2 examination of valve 69-580 was performed after repair/replacement. The VT-2 was performed during the pressure test.
- Revised item number for RPV stud examination from B6.30 to B6.20.
- Added ASME credit for VT-2 examination for RHR nozzle weep holes examination category C-B, item number C2.33.
- Revised NIS-2 for RWCU pipe/valve replacement to delete reference to code exception for RWCU-2-004-G073 and RWCU-2-004-74, since construction code volumetric examination (radiography) was utilized for preservice examination in conjunction with ASME Section XI ultrasonic examination to achieve the code required examination volume.

SYSTEM : RHRSW RHR SERVICE WATER SYSTEM - 023
ISOMETRIC NUMBER : N/A SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
2-SI-3.3.13	HYDRO	D-B D2.10	R00000313			VT-2	19930419	PASS	YES			

SYSTEM : RPV REACTOR PRESSURE VESSEL (NUCLEAR BOILER) - 068
ISOMETRIC NUMBER : CHM-2046-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
~~N11A~~	~~INC-NOZ~~	~~B-E B4.13~~	~~R00000323~~			~~VT-2~~	~~19930511~~	~~PASS~~	~~YES~~			
~~N11B~~	~~INC-NOZ~~	~~B-E B4.13~~	~~R00000322~~			~~VT-2~~	~~19930511~~	~~PASS~~	~~YES~~			

JTK 11/1/95
1-5-95

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

SYSTEM : RWCUS REACTOR WATER CLEANUP SYSTEM - 069
ISOMETRIC NUMBER : ISI-0272-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
FCV-69-001	VAL INT	B-M-2 B12.50	R00000198			VT-3	19930312	PASS	YES			
TRWCU-2-2	VALVE -VALVE	B-J B9.11	R00000259			MT	19930325	PASS	YES			
			R00000260	C00000129	BF-01	UT-45	19930325	PASS	YES		GEOMETRIC	NON-RELEVANT
											GEOMETRIC	NON-RELEVANT
											GEOMETRIC	NON-RELEVANT
			R00000260	C00000130	BF-01	UT-45L	19930325	PASS	YES			
			R00000260	C00000131	BF-01	UT-60	19930325	PASS	YES			
69-580	VAL INT	~~B-M-2 B12.50~~	R00000333			VT-2	19930520	PASS	YES			

STR 1-6-95

9/1/1995

SYSTEM : RWCUS REACTOR WATER CLEANUP SYSTEM - 069
ISOMETRIC NUMBER : ISI-0272-C SHEET : 02

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
2-RDL-2	PIPE -ELBOW	B-J B9.40	R00000075			PT	19930218	PASS	YES			

OWNER: TENNESSEE VALLEY AUTHORITY
NUCLEAR POWER GROUP
1101 MARKET STREET
CHATTANOOGA, TENNESSEE 37402

PLANT: BROWNS FERRY NUCLEAR PLANT
P.O. BOX 2000
DECATUR, ALABAMA 35602

UNIT: TWO

CERTIFICATE OF AUTHORIZATION: NOT REQUIRED

COMMERICAL SERVICE DATE: MARCH 1, 1975

NATIONAL BOARD NUMBER FOR UNIT: NOT REQUIRED

NUTECH | TENNESSEE VALLEY AUTHORITY | PRISIM

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : R27-02 CYCLE : 06
INTERVAL : 02 PERIOD : 1

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DATE 01/03/95

SYSTEM : RWCUS REACTOR WATER CLEANUP SYSTEM - 069
ISOMETRIC NUMBER : ISI-0272-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
69-580	VAL INT	B-P B15.10	R00000333			VT-2	19930520	PASS	YES			

John T. Lewis 1-6-95

Albert Todd 1/18/95
ANII

SYSTEM : RPV REACTOR PRESSURE VESSEL (NUCLEAR BOILER) - 068
ISOMETRIC NUMBER : ISI-0266-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
RPV-STUDS-2-08	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-10	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES		GEOMETRIC	NON-RELEVANT
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-12	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-14	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-16	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-20	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-26	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-28	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-30	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-32	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-34	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20										

John T. Lewis 1-5-95

ANII 1/19/95

SYSTEM : RPV REACTOR PRESSURE VESSEL (NUCLEAR BOILER) - 068
ISOMETRIC NUMBER : ISI-0266-C SHEET : 01.

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
RPV-STUDS-2-34	CH BLTG	B-G-1	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
		B6. 20										
RPV-STUDS-2-36	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-38	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-40	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-43	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-44	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES			
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-46	CH BLTG	B-G-1	R00000035	C00000004	BF-73	UT-CRP	19930131	PASS	YES		GEOMETRIC	NON-RELEVANT
		B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
RPV-STUDS-2-52	CH BLTG	B-G-1	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
		B6. 20	R00000035	C00000006	BF-73	UT-90	19930131	PASS	YES			
RPV-STUDS-2-54	CH BLTG	B-G-1	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
		B6. 20	R00000035	C00000006	BF-73	UT-90	19930131	PASS	YES			
RPV-STUDS-2-56	CH BLTG	B-G-1	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
		B6. 20	R00000035	C00000006	BF-73	UT-90	19930131	PASS	YES			
RPV-STUDS-2-58	CH BLTG	B-G-1	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
		B6. 20										

SYSTEM : RPV REACTOR PRESSURE VESSEL (NUCLEAR BOILER) - 068
ISOMETRIC NUMBER : ISI-0266-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
RPV-STUDS-2-58	CH BLTG	B-G-1 B6. 20	R00000035	C00000006	BF-73	UT-90	19930131	PASS	YES			
RPV-STUDS-2-60	CH BLTG	B-G-1 B6. 20	R00000035	C00000003	BF-73	UT-60	19930131	PASS	YES			
			R00000035	C00000006	BF-73	UT-90	19930131	PASS	YES			

John T. Lewis 1-5-95

Albert T. Todd 1/19/95
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TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2
ISI DATA BASE
POST OUTAGE EXAMINATION RESULTS REPORT
EXAM REQUIREMENT : 86E-02 CYCLE : 06
INTERVAL : 02 PERIOD : 1

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SYSTEM : RHRS RESIDUAL HEAT REMOVAL SYSTEM - 074
ISOMETRIC NUMBER : ISI-0406-C SHEET : 01

FEATURE NUMBER	COMPONENT DESCRIPT.	CATGORY/ ITEM NO.	EXAMINATION REPORT NO.	CAL. REPORT NO.	CAL. STD.	EXAM TYPE	EXAM DATE	EXAM RESULT	SEC XI CREDIT	RELIEF REQST.	INDICATION TYPE	INDICATION RESOLUTION
RHRG-2-05-A	VES NOZ	C-B C2.33	R00000315			VT-2	19930423	PASS	YES			
RHRG-2-06-A	VES NOZ	C-B C2.33	R00000315			VT-2	19930423	PASS	YES			

J. Lewis 1-5-95

4/19/95
ANII

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

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

Date June 14, 1993

Sheet 1 of 8

2. Plant Browns Ferry Nuclear Plant (Name)
P.O. Box 2000; Decatur, AL 35609 (Address)

Unit 2
Work Orders 93-00754-00, 93-00754-01, and noted Work Plans for DCN W18298
Repair Organization P.O. No., Job No., etc.

3. Work Performed by General Electric Company (Name)
640 Freedom Business Center
King of Prussia, PA 19406 (Address)

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

4. Identification of System System 69, Reactor Water Cleanup

* 5. (a) Applicable Construction Code _____ 19 ____ Edition, _____ Addenda, _____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

* 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)

7. Description of Work Replaced various portions of the RWCU piping, removed and replaced two hangers, and installed new check valve 2-69-630

8. Tests Conducted: Hydrostatic [X] Pneumatic [ ] Nominal Operating Pressure [ ]
Other [ ] Pressure 1150/1110 psi Test Temp. 78/71 °F
per WO 93-00754-00 and 93-00754-01 respectively

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.

(12/82) This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

*For information required in Items 5 and 6, see attached sheets 2 through 8.

FORM NIS-2 (Back)

9. Remarks Work Order 93-00754-00 was performed by TVA personnel which hydrostatically pressure tested the RWCU piping between valves 2-FCV-69-2, 2-69-500, and 2-10-505. TVA personnel also performed the hydrostatic pressure test of check valve 2-69-630 and associated welds per WO 93-00754-01 following installation by General Electric. Both tests fulfilled the hydrostatic pressure test requirements for ASME Code Class 1 equivalent components.

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

~~. . . with the exception as noted below.*~~ RLH 12/8/94 AFT 1/19/95

Type Code Symbol Stamp N/A

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

Signed ~~T. L. Gilbert~~ System Engineer (Owner or Owner's Designee, Title) Date June 14, 19 93

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 Tenn. and employed by Hartford Stm. Blr. Insp. & Ins. Co. of Hartford, Conn. have inspected the components described in this Owner's Report during the period 4-16-93 to 6-16-93, 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.

B. F. Rice (Inspector's Signature) Commissions 9635, Tenn. - A-N-I (National Board, State, Province, and Endorsements)

Date 6-16 19 93

~~Exception~~ to Code requirement - Preservice examination for welds RWCU-2-004-G073 and RWCU-2-004-G074 ~~were unable to be~~ 100% volumetrically examined as documented in Work Plan 2554-92; percent coverage was ~~limited to~~ 87.2% and 32.0% respectively. Request for Relief is pending submittal to NRC as ~~previously~~ agreed to with Site Licensing.

Albert Tabb ANII N66908 TN3135 Page 9 of 9 RLH 12/8/94 AFT 1/19/95