

INSERVICE INSPECTION  
EXAMINATION REPORT

YANKEE ATOMIC ELECTRIC COMPANY  
YANKEE NUCLEAR POWER STATION

JUNE 23, 1990 THROUGH AUGUST 17, 1990

9011150149 901107  
PDR ADOCK 05000029  
Q PDC

TABLE OF CONTENTS

	<u>page</u>
1. Introduction	1
2. Evaluation of Data	2
3. NIS-1 Owners Data Reports	3
4. Repairs and Modifications	18
5. Conclusions	19

1.0 INTRODUCTION

This report covers the Inservice Inspections of Yankee Nuclear Power Station from June 23, 1990 to August 17, 1990. The inspections performed during this time frame constitute completion of those examinations required by ASME Section XI and the Yankee Inservice Inspection Program for the second period of the third interval.

The examination methods employed were Ultrasonics (UT), Radiography (RT), Liquid Penetrant (LP), Eddy Current (ET), Visual Inspection (VT), and Magnetic Particle (MP).

## 2.0 EVALUATION OF DATA

The 1990 NDE Inservice Inspections were performed by Ebasco Services, Inc., of New York, New York, and Zetec, Inc., of Issaquah, Washington.

All examinations were performed, evaluated, and reviewed by personnel certified to Level II in accordance with SNT-TC-1A, 1975/1980 Edition and ASME Section XI, 1977 Edition, Summer 1978 Addenda.

The examination methods, volumes, and evaluation of indications were in accordance with ASME Boiler and Pressure Vessel Code, Section XI, 1977 Edition, Summer 1978 Addenda, except for Class 1 piping ultrasonic calibration. Class 1 piping calibration was conducted in accordance with Article III-2000 of Appendix III, ASME Section XI, Summer 1976 Addenda, as required per Plant Technical Specifications.

The detailed examination data along with the calibration records, procedures, personnel and equipment certifications are maintained at the plant site.



FORM NIS-1 (back)

8. Examination Dates 6/23/90 to 8/17/90 9. Inspection Interval from 7/1/81 to 7/1/91

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. Pages 5-12

11. Abstract of Conditions Noted Pages 13-14

12. Abstract of Corrective Measures Recommended and Taken  
Pages 15-17

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Date 10/13 19 90 Signed Yankee Atomic By Wm St. Laurent  
Owner

Certificate of Authorization No. (if applicable) DPR-3 Expiration Date 7/9/2000

CERTIFICATE OF INSERVICE 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 MASS. and employed by H.S.B. I & I Co. of HARTFORD, CT. have inspected the components described in this Owners' Data Report during the period 6/23/90 to 8/17/90, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data 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 Owners' 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 11/5 19 90

Phillip T. Macdon  
Inspector's Signature

Commissions MA 1421  
National Board, State, Province and No.

Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

Commercial Service Date: 7/1/61 National Board Number for Unit: REACTOR #NB-23964

---

10. ABSTRACT OF EXAMINATIONS

<u>ASME CATEGORY</u>	<u>CODE ITM NO.</u>	<u>COMPONENTS EXAMINED</u>	<u>EXAM METHOD</u>
B-D	B3.110	Pressurizer Nozzle to Vessel Weld PRZN-12	UT
B-D	B3.110	Pressurizer Nozzle to Vessel Weld PRZN-9	UT
B-D	B3.120	Pressurizer Nozzle Inside Radius PR-IR-9	UT
B-D	B3.120	Pressurizer Nozzle Inside Radius PR-IR-10	UT
B-D	B3.120	Pressurizer Nozzle Inside Radius PR-IR-12	UT
B-E	---	feed & Bleed Heat Exchanger Nozzle to Vessel FBN-1-2	VT-2
B-F	B5.20	Pressurizer Nozzle to Safe End Weld PRZ-SE-12	RT/LP
B-F	B5.30	Steam Generator Nozzle to Safe End MC-2-6	UT/LP/RT
B-F	B5.30	Steam Generator Nozzle to Safe End MC-2-9	UT/LP/RT
B-G-1	B6.60	Pressurizer Manway Studs and Nuts - in place	UT/VT
B-G-1	B6.190	#4 Main Coolant Pump Main Flange Bolts	VT/LP/UT
B-G-2	B7.30	#4 Steam Generator Primary Manway Studs and Nuts	VT

Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of  
Authorisation (if required): DPR-3

Commercial National Board  
Service Date: 7/1/61 Number for Unit: REACTOR #NB-23964

---

10. ABSTRACT OF EXAMINATIONS

<u>ASME</u> <u>CATEGORY</u>	<u>CODE</u> <u>ITEM NO.</u>	<u>COMPONENTS</u> <u>EXAMINED</u>	<u>EXAM</u> <u>METHOD</u>
B-G-2	B7.70	Bonnet Bolting on (11) Class 1 Valves CH-MOV-524 CH-V-611A CS-MOV-537 PR-HCV-205 PR-MOV-191 PR-MOV-512 SI-MOV-22 SI-MOV-23 SI-MOV-24 SI-MOV-25 MC-V-316	VT
B-J	B9.11	(10) Class 1 Circumferential Pipe Welds 4" and greater MC-2-10 MC-2-12 MC-2-18 MC-2-4 MCB-3-5 MCB-3-6 PRS-7 SDC-4 SI-3-16 SI-3-14	LP/RT/UT
B-J	B9.21	(3) Class 1 Circumferential Welds less than 4" CH-16 CH-17 CH-18	LP
B-J	B9.32	(1) Class 1 Branch Pipe Connection Weld 2" and less DRC-3-1A	LP
B-J	B9.40	(10) Class 1 Socket Welds 2" and less BL-1-20 BL-1-21 BL-1-22 BL-1-23 DRH-4-2 PRS-206-29 PRS-206-35 SI-2-19 SI-2-22 SI-4-23	LP



Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

Commercial Service Date: 7/1/61 National Board Number for Unit: REACTOR #N3-23964

---

10. ABSTRACT OF EXAMINATIONS

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>COMPONENTS EXAMINED</u>	<u>EXAM METHOD</u>
B-K-1	B10.20	#3 Main Coolant Pump Integrally Welded Support CRM-H-21	VT/LP
B-K-2	B11.10	(7) Class 1 Piping Supports CRBH-H-1 DRH-SH-2 H-4 MCB-3-H-1 MCB-3-H-2 PRCH-SNB-4A PRSH-SNB-2	VT-3/VT-4
B-L-2 B-M-2	B12.20	#4 Main Coolant Pump Casing	VT-1
B-L-2 B-M-2	B12.40	(5) Class 1 Valve Body (internals) exceeding 4" MC-V-316 SI-V-18 SI-V-19 SI-V-20 SI-V-21	VT-1
B-N-1	B13.10	Reactor Vessel Interior	VT-3
B-P	B15.10- B15.71	Main Coolant System Leakage Test	VT-2
B-Q	B16.20	100% of the #4 Steam Generator Tubes (1560 tubes) per Yankee Technical Specifications	ET
C-A	C1.10	50% of the #3 Steam Generator Shell Circumferential Weld SG-3-5	UT
C-A	C1.10	50% of the #4 Steam Generator Shell Circumferential Weld SG-4-4	UT
C-A	C1.20	50% of the Safety Injection Accumulator Top Head Circumferential Weld SI-ACC-2	UT
C-B	C2.10	Steam Generator Feedwater and Main Steam Outlet Nozzles SG-1-SO SG-1-FN SG-2-FN	UT/MT

Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

Commercial Service Date: 7/1/61 National Board Number for Unit: REACTOR #NB-23964

---

10. ABSTRACT OF EXAMINATIONS

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>COMPONENTS EXAMINED</u>	<u>EXAM METHOD</u>
C-C	C3.10	(1) Integrally Welded Support #3 Steam Generator Part 1 Examination SG-3-S	MT
C-E	C3.40	(20) Piping Supports SHP-R-2 WCBH-H-125 WCBH-H-5 WCBH-H-6 WCBH-H-7 WCBH-RH-130A-1 WCBH-RH-132-1 BRL-H-42 H-10 H-24 H-25 HPSI-RH-5 HPSI-RH-6 PRCL-H-40 PRCL-H-63 PRCL-H-52 PRSH-H-10 PRSH-RH-23 PRSH-RH-5 SG-1-221-SN	VT-3/VT-4
C-F	C5.11	(17) Class 2 Piping Welds 1/2" Wall or less PRS-2-25 PRS-2-26 SDC-2A SDC-1-24 SDC-3-L-20 SDC-4-23 SDC-4-22 SDC-4-28 SI-005 SI-008 SI-023 SI-039 SI-047 SI-050 FW-1-21 FW-2-17 FW-3-15	LP/MT

Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

Commercial Service Date: 7/1/61 National Board Number for Unit: REACTOR #NB-23964

---

10. ABSTRACT OF EXAMINATIONS

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>COMPONENTS EXAMINED</u>	<u>EXAM METHOD</u>
C-F	C5.21	(6) Class 2 Piping Welds over 1/2" Nominal Wall Thickness MS-02-01 MS-02-02 MS-02-06 MS-02-07 MS-02-11 MS-02-12	UT/MP
C-H	C7.20	(1) Class 2 System Pressure Test Conducted during the System Functional Test - Low Pressure Safety Injection Pump Discharge	VT-2
C-H	C7.11 C7.21 C7.31 C7.41	(14) Class 2 Hydrostatic Tests - Steam Generator Blowdown System - Emergency Feedwater System - Main Feedwater System - Safety Injection Accumulator - High Pressure Safety Injection Discharge Piping - Safety Injection Tank - Low Pressure Safety Injection Suction Piping - Safety Injection Recirc Line - Safety Injection N2 Piping - Safety Injection N2 Tanks - Charging Line - Valve Stem Leakoff - Purification Piping - Main Steam Line Hydro	VT-2

Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

Commercial Service Date: 7/1/61 National Board Number for Unit: REACTOR #NB-23964

---

10. ABSTRACT OF EXAMINATIONS

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>COMPONENTS EXAMINED</u>	<u>EXAM METHOD</u>
D-A	D.2.2	(41) Class 3 Piping Supports, Pipe Sizes exceeding 4 inches K-H-59 K-H-60 K-H-61 K-H-62 K-H-63 K-H-64 K-H-65 K-H-68 K-H-70 K-H-77 K-H-78 K-H-79 K-H-80 K-H-81 K-H-82 K-H-84 K-H-85 K-H-86 K-H-87 K-S-12 K-S-13 K-S-66 K-S-69 K-S-70 K-S-73 K-S-74 K-S-58 WS-H-58 WS-H-59 WS-H-67 WS-H-68 WS-H-70 WS-H-71 WSL-1 WSL-2 WSL-3 WSL-4 WSL-5 WSL-6 WSL-H-16A WSL-H-16B	VT-3
D-A	D.1.1.a	(1) Class 3 System Inservice Test - Primary Pump Seal Water System	VT-2

Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of  
Authorisation (if required): DPR-3

Commercial  
Service Date: 7/1/61 National Board  
Number for Unit: REACTOR #NB-23964

---

10. ABSTRACT OF EXAMINATIONS

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>COMPONENTS EXAMINED</u>	<u>EXAM METHOD</u>
D-A	D.1.1.b	(9) Class 3 System Hydrostatic Test <ul style="list-style-type: none"><li>- Steam Piping to the EBF Pump</li><li>- Service Water System</li><li>- Underground Demineralized Water Piping</li><li>- Valve Stem Leakoff System</li><li>- Seal Water Makeup Pump Discharge Piping</li><li>- Motor Driven EBF Pump Suction Piping</li><li>- Steam Driven EBF Pump Suction Piping</li><li>- Demineralized Water Storage Tank</li><li>- Primary Water Storage Tank</li></ul>	VT-2

Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

Commercial Service Date: 7/1/61 National Board Number for Unit: REACTOR #NB-23964

---

10. ABSTRACT OF EXAMINATIONS

<u>ASME</u> <u>CATEGORY</u>	<u>CODE</u> <u>ITEM NO.</u>	<u>COMPONENTS</u> <u>EXAMINED</u>	<u>EXAM</u> <u>METHOD</u>
--------------------------------	--------------------------------	--------------------------------------	------------------------------

NON-CODE EXAMINATIONS

---	---	The exterior reactor head base material at stud hole #1 and #13 was examined utilizing specialized ultrasonic examination techniques. The area was examined to verify the existing non-integral cladding cracks have not propagated into the base material. This examination revealed that no change has occurred since the 1974 inspection and the cracking does not extend into the base material. Additionally a visual examination was conducted on the inside surface of the reactor head which indicated no change since previous inspections.	UT
---	---	The pressurizer base material at the top head and middle shell circumferential weld area was examined from the exterior utilizing automated/specialized ultrasonic examination techniques. This examination revealed that the cracking does not extend into the base material and no change has occurred since the 1974 inspection.	UT

**Owner:** YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

**Plant:** YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

**Plant Unit:** YANKEE ROWE **Owner Certificate of Authorization (if required):** DPR-3

**Commercial Service Date:** 7/1/61 **National Board Number for Unit:** REACTOR #NB-23964

---

**11. ABSTRACT OF CONDITIONS NOTED**

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>CONDITIONS NOTED</u>
B-F	35.30	Ultrasonic examination of #2 Steam Generator safe end weld MC-2-6 revealed several recordable indications.
B-F	B5.30	Ultrasonic examination of #2 Steam Generator safe end weld MC-2-9 revealed several recordable indications
B-J	B9.11	Ultrasonic examination of welds MC-2-12, MC-2-18, SDC-4, SI-3-16, and SI-3-14 revealed recordable indications in each of the welds.
B-J	B9.21	Liquid penetrant examination of weld CH-18 revealed several unacceptable indications.
B-J	B9.40	Liquid penetrant examination of weld SI-4-23 revealed several unacceptable indications.
B-K-2	B11.10	Visual examination of hanger CRBH-H-1 revealed a loose nut on the pipe clamp.
B-K-2	B11.10	Visual examination of hanger H-4 revealed a bent rod and a loose lock nut.
B-Q	B16.20	Eddy current examination of the #4 Steam Generator tubes with greater than 30% wall loss.
C-A	C1 10	Ultrasonic examination of #3 Steam Generator shell circumferential weld (SG-3-5) revealed multiple recordable indications.
C-A	C1.10	Ultrasonic examination of #4 Steam Generator shell circumferential weld SG-4-4 revealed multiple recordable indications.
C-A	C1.20	Ultrasonic examination of the Safety Injection Accumulator top head weld (SI-ACC-2) revealed two recordable indications.
C-B	C2.10	Ultrasonic examination of the #1 and #2 Steam Generator Feedwater Nozzles (SG-1-FN, SG-2-FN) revealed several recordable indications.

Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

Commercial Service Date: 7/1/61 National Board Number for Unit: REACTOR #NB-23964

---

11. ABSTRACT OF CONDITIONS NOTED

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>CONDITIONS NOTED</u>
C-E	C3.40	Visual examination of Feedwater System Hanger WCB-D-RH-130A-1 revealed a bent hanger rod.
C-F	C5.21	Ultrasonic examination of the (6) class 2 piping welds over 1/2" thickness revealed recordable reflectors in each of the welds.  MS-02-01 MS-02-02 MS-02-06 MS-02-07 MS-02-11 MS-02-12  Additionally several unacceptable linear indications were noted in piping weld MS-02-02 during the magnetic particle examination.
D-A	D.2.2	Visual examination of class 3 support K-H-78 revealed a bent hanger rod and a missing jam nut.



**Owner:** YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BURLINGTON, MA 01740

**Plant:** YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

**Plant Unit:** YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

**Commercial Service Date:** 7/1/61 National Board Number for Unit: REACTOR #NB-23964

---

**12. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN**

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>CORRECTIVE MEASURES TAKEN</u>
B-F	B5.30	The ultrasonic indications recorded in #2 Steam Generator safe end weld MC-2-6 were subsequently evaluated in accordance with IWB-3514.5 and determined to be geometric reflectors.
B-F	B5.30	The ultrasonic indications recorded in #2 Steam Generator safe end weld MC-2-9 were subsequently evaluated in accordance with IWB-3514.5 and determined to be geometric reflectors.
B-J	B9.11	The ultrasonic indications recorded in welds MC-2-12, MC-2-18, SDC-4, SI-3-16 and SI-3-14 were subsequently evaluated in accordance with IWB-3514.5 and determined to be geometric reflectors.
B-J	B9.21	The liquid penetrant indications identified in weld CH-18 were subsequently removed with additional surface preparation. The area was re-examined satisfactory. In accordance with IWB-2340 an additional weld was selected for examination (CH-15). This examination did not reveal any unacceptable conditions.
B-J	B9.40	The liquid penetrant indications identified in weld SI-4-23 were subsequently removed with additional surface preparation. The area was re-examined satisfactory. In accordance with IWB-2340 an additional weld was selected for examination (SI-4-22). This examination did not reveal any unacceptable conditions.
B-K-2	B11.10	The loose clamp nut on hanger CRBH-H-1 was subsequently repaired and re-examined satisfactory. In accordance with IWB-2340 an additional hanger was selected for examination (CRBH-RH-6). This examination did not reveal any unacceptable conditions.

**Owner:** YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

**Plant:** YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

**Plant Unit:** YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

Commercial Service Date: 7/1/61 National Board Number for Unit: REACTOR #NB-23964

---

**12. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN**

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>CORRECTIVE MEASURES TAKEN</u>
B-K-2	B11.10	The bent rod and loose lock nut on hanger H-4 was subsequently repaired and re-examined satisfactory. In accordance with IWB-2340 an additional hanger was selected for examination (H-6). This examination did not reveal any unacceptable conditions.
B-Q	B16.20	In accordance with plant administrative limits (9) of the (17) tubes in #4 Steam Generator with wall losses greater than 40% were mechanically plugged and hydrostatically tested.
C-A	C1.10	A number of the ultrasonic indications recorded on #3 Steam Generator shell circumferential weld (SG-3-5) were subsequently evaluated in accordance with IWB-3514.5 and determined to be geometric reflectors. The remaining indications recorded were subsequently evaluated and determined to be fabrication related. An internal magnetic particle examination was conducted in the areas of interest which provided additional evidence that the reflectors were not I.D. connected.
C-A	C1.10	The ultrasonic indication recorded in #4 Steam Generator shell circumferential weld (SG-4-4) were subsequently evaluated in accordance with IWB-3514.5 and determined to be geometric reflectors.
C-A	C1.20	The ultrasonic reflectors recorded in the Safety Injection top head weld (SI-ACC-2) were subsequently evaluated and determined to be geometric reflectors.
C-B	C2.10	The ultrasonic reflectors recorded in #1 and #2 Steam Generator Feedwater Nozzles (SG-1-FN), (SG-2-FN) were subsequently evaluated in accordance with IWB-3512 and determined acceptable for continued service.

Owner: YANKEE ATOMIC ELECTRIC COMPANY, 580 MAIN STREET, BOLTON, MA 01740

Plant: YANKEE NUCLEAR POWER STATION, ROWE, MA 01367

Plant Unit: YANKEE ROWE Owner Certificate of Authorization (if required): DPR-3

Commercial Service Date: 7/1/61 National Board Number for Unit: REACTOR #NB-23964

---

12. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

<u>ASME CATEGORY</u>	<u>CODE ITEM NO.</u>	<u>CORRECTIVE MEASURES TAKEN</u>
C-E	C3-40	<p>The bent rod observed on Feedwater Hanger WCBD-RH-130A-1 was subsequently repaired and re-examined satisfactory. In accordance with IWC-2430 an additional hanger was selected for examination (WCBD-RH-130-1). No unacceptable conditions were observed.</p>
C-F	C5.21	<p>The ultrasonic reflectors recorded in each of the (6) class 2 piping welds greater than 1/2" wall thickness were subsequently evaluated in accordance with IWB-3514.5 and determined to be geometric reflectors.</p> <p>MS-02-01 MS-02-02 MS-02-06 MS-02-07 MS-02-11 MS-02-12</p> <p>The linear indications observed in piping weld MS-02-02 were subsequently removed by minor surface preparation. In accordance with IWC-2430 an additional weld was selected for examination (MS-03-02), this examination also revealed several linear indications. The indications were subsequently removed by minor surface preparation. As required by IWC-2430 the remaining piping configurations were subjected to MT examination (MS-04-02, MS-01-02). Several linear indications were observed in MS-04-02 which were removed by additional surface preparation.</p>
D-A	D.2.2	<p>The class 3 support (K-H-78) with a bent hanger rod and missing jam nut was repaired and subsequently reinspected with no unacceptable conditions noted. In accordance with IWC-2340 an additional support was selected for examination (K-5-68). This examination did not reveal any unacceptable conditions.</p>

8.0 CONCLUSIONS

The examinations completed and identified within this report constitute completion of those examinations required by the Yankee Nuclear Power Station Technical Specifications for the second period of the third interval.

## REPAIRS AND REPLACEMENTS

The following ASME Section XI repairs/replacements were performed during the time frame of January 17, 1989 to August 17, 1990:

### Maintenance Requests

88-2185	Repair of Component Cooling Piping Support K-S-52
88-2186	Repair of Component Cooling Line Support K-S-64
89-43	Refurbish Spare Vapor Container Penetration - Blister 6E
89-225	Replace Pressurizer Safety Valves Inlet Flange PR-SV-181
89-343	Repair to Vapor Container Recirculation Line Support H-JM-69
89-1004	Replace #3 Steam Generator Vent Valve VD-V-708
89-1043	Replacement of Main Steam Root Isolation Valve MS-V-613
89-1049	Replacement of Steam Control Valve AS-PCV-451
89-1663	Replacement of Vent Piping Inlet to VD-V-724
89-1693	Replace Bolting on Charging Line Support CRCH-S-2
89-1874	Repair of Spare MC-SV-201 Main Coolant Bypass Safety Valve
89-2371	Repair to Demineralized Water Fill Line to Spent Fuel Pit Cooling
90-118	Replace High Pressure Safety Injection Pump Seal Water Lines
90-186	Repair of #1 Charging Pump Strainer Drain Valve CH-V-621
90-201	Repair of #1 Component Cooling Vent Valve
90-254	Replacement of Vent Valve VD-V-713
90-1100	Repair to #3 High Pressure Safety Injection Balancing Line Piping
90-1361	Replace #1 Charging Pump Discharge Check Valve CH-V-601
90-1481	Repair to Weld in Demineralized Water Tank Over Flow Line
90-1751	Replacement of MC-SV-201B Main Coolant Bypass Safety Valve

### Engineering Design Change

87-308	Installation of Water Cleanup System
89-301	Safe Shutdown System Piping Modifications in the Vapor Container
89-302	Modifications to the Pressurizer Auxiliary Spray Line and the High Pressure Safety Injection Piping
89-305	Installation of a New Refueling Level Transmitter RF-LT-705
89-306	Fabrication of Support CM-H-8
90-301	Safety Injection Tank Replacement
90-302	Safety Injection Nitrogen Piping Modifications
90-306	Reactor Vessel Sampling