ROCHESTER GAS AND ELECTRIC CORPORATION
89 EAST AVENUE, ROCHESTER, NEW YORK 14649

INSERVICE INSPECTION REPORT

FOR THE

THIRD INTERVAL (1990 - 1999)

FIRST PERIOD, FIRST OUTAGE (1990)

AT

R. E. GINNA NUCLEAR POWER STATION

REVISION 0
JULY 13, 1990

GINNA NUCLEAR POWER STATION

Inservice Inspection Report

1990 - 1999 Interval, First Outage 1990

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INTRODUCTION AND SYNOPSIS:

Inservice Inspection (ISI) activities during the 1990 Refueling Outage were performed on components of Class 1, 2, 3, High Energy Piping, Steam Generator Tubes and Snubbers. The examinations were initiated on 12 March 1990 and activities concluded on 7 May 1990. Examination methods included Visual Examination (VT), Liquid Penetrant Examination (PT), Magnetic Particle Examination (MT), Ultrasonic Examination (UT), Radiographic Examination (RT), Eddy Current Examination (ET), Functional Testing (FT) and System Hydrostatic Pressure and Leakage Tests.

Personnel involved included the RG&E Materials Engineering and Inspection Services Section, Southwest Research Institute, Gilbert Commonwealth, Allen Nuclear Associates, NDE Technologies, Ginna Station Quality Control and the Ginna Station Results/Test Group. Additional Support Personnel involved, included individuals from the following departments: Ginna Station Insulators, Maintenance, Electricians, Pipe Fitters, Health Physics, Turbine Maintenance, RG&E's General Maintenance and the Mechanical Engineering Group of the Engineering Department.

SUMMARY OF WORK ACCOMPLISHED:

Note: A detailed summary of all components with associated results can be found in the Attachments.

CLASS 1 COMPONENTS:

A total of 63 Class 1 components were examined during the 1990 Outage. The examination for these components consisted of 20 VT-1's, 11 VT-3's, 36 PT's, 3 MT's, 1 RT, and 22 UT's. A total of 93 examinations were performed on Class 1 components.

Class 1 examinations were performed on the following components and/or system lines:

Pressurizer.
Steam Generators.
Regenerative Heat Exchanger.
10" Pressurizer Surge Line; 10-RC8-2501
2" Auxiliary Spray Line; 2-CH5-2501
10" Safety Injection Line; 10A-SI2-2501A

6" Safety Injection (L.P.) Line; 6A-RC-2501-B
4" Safety Injection (L.P.) Line; 4A-RC-2501-B
6" Safety Injection (L.P.) Line; 6A-RC-2501-A
2" Safety Injection Loop A Line; 2C-SI2-2501
2" Safety Injection Loop B Line; 2B-SI2-2501
2" Letdown Line; 2B-RCO-2501-A
2" Letdown Line; 2A-RCO-2501-B
2" Letdown Line; 2A-CH4-2501
2" Charging Line; 2B-CH5-2501
2" Alternate Charging Line; 2A-CH5-2501
Reactor Coolant Pump B.
Reactor Coolant Pump - Spare Flywheel.
Valves.

CLASS 2 COMPONENTS:

A total of 75 Class 2 components were examined. The examination for these components consisted of 7 RT's, 19 UT's, 32 PT's, 14 MT's, 2 UTTK (Thickness Measurement), 10 VT-1's, and 35 VT-3's for a total of 119 examinations.

Class 2 examinations were performed on the following components and/or system lines:

Non-Regenerative Heat Exchanger.
Seal Water Heat Exchanger.
Reactor Coolant Filter.
Pulse Dampener Line; 8A-CH-2502.
Seal Water Injection Filters.
Main Steam Loop A Line; 30A-MS-600-1A.
Main Steam Loop A Line; 6B-MS-600-1A.
Main Steam Loop B Line; 30B-MS-600-1B.
Feedwater Loop A Line; 14A-FW-900-1A.
Feedwater Loop B Line; 14B-FW-900-1B.
L.P. Safety Injection; Line 10-SI-151.
L.P. Safety Injection; Line 8A-SI-301B.
L.P. Safety Injection; Line 8A-SI-151.
L.P. Safety Injection; Line 8B-SI-151.
L.P. Safety Injection; Line 8D-SI-301.
L.P. Safety Injection; Line 6-AC-601.
L.P. Safety Injection; Line 6A-AC-601.
L.P. Safety Injection; Line 4A-SI-301.
H.P. Safety Injection; Line 4D-SI-1501.
H.P. Safety Injection; Line 4E-SI-1501.
H.P. Safety Injection; Line 3B-SI-1501.
H.P. Safety Injection; Line 3C-SI-1501.
H.P. Safety Injection; Line 3E-SI-1501.
H.P. Safety Injection; Line 2A-SI-1501.
H.P. Safety Injection; Line 2D-SI-1501.
Residual Heat Removal; Line 8FF-AC-601.
Residual Heat Removal; Line 6K-AC-151.

Residual Heat Removal; Line 10B-AC-601.
Residual Heat Removal; Line 10D-AC-601.
Residual Heat Removal; Line 10A-AC-601.
Residual Heat Removal; Line 10H-AC-601.
Residual Heat Removal; Line 8C-AC-601.
Residual Heat Removal; Line 6C-AC-601.
Residual Heat Removal; Line 8X-AC-601.
Containment Spray; Line 6C-SI-301.
Containment Spray; Line 6E-SI-301.

CLASS 3 COMPONENTS:

A total of 21 Class 3 components were examined by the VT-3 visual technique.

Class 3 component examinations were performed on the following system lines:

Component Coolant Pumps Discharge to Component Coolant Heat Exchanger Line: 8B-AC5-152.
Service Water to Component Cooling and Spent Fuel Pit Heat Exchangers Line: 20A-SWO-125-9.
Service Water Intermediate Building to A & B Chillers Line: 6B-SWO-125-9.
Auxiliary Feedwater Pumps Discharge-Intermediate Building Line: 3A-FW7-900-1B.
Standby Auxiliary Feedwater from Penetration 119 to A S/G Feedwater Header.
Standby Auxiliary Feedwater From Penetration 119 to Auxiliary Feedwater Pump C Line: 3A-FW8-902-A.
Standby Auxiliary Feedwater from Penetration 123 to B S/G Feedwater Header.
Standby Auxiliary Feedwater Service Water Supply to Standby Auxiliary Feedwater Pump D Line: 4A-FW8-152-B.

HIGH ENERGY COMPONENTS:

Twenty Three (23) High Energy Piping components were examined during the 1990 Outage. The examinations for these components consisted of 16 VT-1's, 6 VT-3's, 6 PT's, 18 MT's, 11 UT's, 1 UTTK and 16 RT's for a total of 74 examinations.

High Energy component examinations were performed on the following system lines:

Design Break Weld Examinations:
Main Steam - Loop A Outside Containment, Line: 30A-MS-600-1A.
Main Steam - Loop B Outside Containment, Line: 30B-MS-600-1B.
Feedwater - Loop A Outside Containment, Line: 14A-FW-900-1A.
Feedwater - Loop B Outside Containment, Line: 14B-FW-900-1A.

Consequential Break Weld Examinations:

Main Steam - Loop A Outside Containment, Line: 30A-MS-600-1A.
Main Steam - Loop B Outside Containment, Line: 30B-MS-600-1B.
Main Steam - Turbine Building, Line: 24A-MS-600-1A.
Feedwater - Turbine Building, Line: 20-FW-900-1.
Feedwater - Turbine Building, Line: 8-FW-900-1.
Feedwater - Loop A Outside Containment, Line: 14A-FW-900-1A.
Feedwater - Loop B Outside Containment, Line: 14B-FW-900-1B.

Component Support Examinations:

Main Steam, Line: 36-MS-600-1.
Main Steam, Line: 24A-MS-600-1A.
Main Steam, Line: 24B-MS-600-1B.
Feedwater, Line: 14A-FW-900-1A.
Feedwater, Line: 14B-FW-900-1B.

STEAM GENERATOR TUBING:

Eddy Current Examinations were performed on tubes in the A and B Steam Generators.

The following Eddy Current examinations were performed during the 1990 Outage:

1. Open Generator Tubes, Previously identified degradation greater than 20%.
2. Open Generator Tubes, 20% Minimum, Rotating Random Sample Full Length (Total).
3. Open Generator Tubes, 100% of all unsleeved tubes. Hot Leg Tube End through First Tube Support Hot Leg.
4. Sleeved Generator Tubes, 20% Random Sample of each type. Sleeve End to Sleeve End (minimum).
5. MRPC of Row 1 U-Bends and Row 2 U-Bends that are a part of the 20% Random Sample Full Length.

The following information summarizes the initial pre-outage and post-outage tube status as well as the planned and completed Eddy Current work scope for Steam Generators A & B.

STEAM GENERATOR A:

Steam Generator "A" Pre-Outage Tube Status:

Total Tubes	3260
Out of Service (plugged)	173
Sleeved Tubes	172
Open Unsleeved Tubes	2915

Steam Generator "A" Planned and Completed Work Scope:

	Req'd Min	Number Progm'd	Number Inspt'd	% Completed
Hot Leg to #1 TSP	2915	2915	2915	100.0%
Full Length (20% Random)	583	586	585	100.3%
Previous Ind. ≥ 20%	9	9	9	100.0%
Sleeves	35	36	35	100.0%

Steam Generator "A" Post-Outage Tube Status:

Total Tubes	3260
Out of Service (plugged)	197
Sleeved Tubes	223
Open Unsleeved Tubes	2840

Note: A total of 75 tubes were repaired.
(51 sleeved & 24 plugged = 75 repairs)

STEAM GENERATOR B:

Steam Generator "B" Pre-Outage Tube Status:

Total Tubes	3260
Out of Service (plugged)	340
Sleeved Tubes	642
Open Unsleeved Tubes	2278

Steam Generator "B" Planned and Completed Work Scope:

	Req'd Min	Number Progm'd	Number Inspt'd	% Completed
Hot Leg to #1 TSP	2278	2278	2278	100.0%
Full Length (20% Random)	456	461	460	100.9%
Previous Ind. ≥ 20%	19	19	19	100.0%
Sleeves	129	131	131	101.6%
Deplugged Tubes (F/L)	28	28	28	100.0%

Steam Generator "B" Post-Outage Tube Status:

Total Tubes	3260	
Out of Service (plugged)	332	
Sleeved Tubes	832	(*)
Open Unsleeved Tubes	2096	

Notes: A total of 211 tubes were repaired.
(191 sleeved & 20 (*) plugged = 211 repairs)

(*) = One previous post-outage B&W Sleeved Tube was plugged and is included in the 20 tubes identified in the above note.

Eddy Current Examination details are documented in the "Summary Examination Report for the 1990 Steam Generator Eddy Current Inspection".

SYSTEM PRESSURE TEST:

Hydrostatic:

Four (4) Hydrostatic tests and associated VT-2 examinations were performed during the 1990 Outage.

Hydrostatic tests were performed on the following:

Procedure	Discreption
RSSP-15.7.1	Charging System through Regenerative Heat Exchanger.
RSSP-13.16	CVCS Hold-up Tank "A".
RSSP-13.17	CVCS Hold-up Tank "B".
RSSP-13.18	CVCS Hold-up Tank "C".

Two Hydrostatic examinations were scheduled for the 1990 outage but were not performed. One examination was scheduled in error and was subsequently rescheduled for the correct outage. The second examination scheduled pertained to a non-class vessel and associated piping that was initially performed during the Second Interval ISI Program. The associated examination boundary is not under the jurisdiction of Appendix B of the Quality Assurance Manual and was removed from the Third Interval ISI Program.

Two Leakage Examinations were performed during the 1990 Outage and are listed below:

Reactor Coolant System Leakage Examination (PT-7)
Containment Spray Rings

Five (5) Leakage examinations were also performed to fulfill the Second Interval Program when Ginna Station was placed back in service in 1989. The Leakage examinations included the following.

CVCS Hold-Up Tanks & Piping.
CVCS Charging & Letdown outside Containment.
CVCS Boric Acid Storage Tanks & Piping.
CVCS Boric Acid Evaporizer - Demineralizers.
Diesel Generators.

SNUBBER PROGRAM:

Visual Examinations:

A total of 147 Snubber components were inspected that required 148 VT-3 examinations. These examinations were performed to satisfy Ginna Station Technical Specification requirements.

A Mechanical Snubber on the Feedwater Loop "B" System; FWU-54, was rejected during the close of the 1989 Outage. This component was reviewed by Engineering under NCR G89-743 and resulted in a "use-as-is" determination.

Snubber examinations were performed on the following components and/or system lines:

Steam Generator "A".
Steam Generator "B".
Turbine Driven Auxiliary Feedwater Pump Suction Line: 4A-SW-125-1.
Auxiliary Feedwater Pump Discharge - Intermediate Building Lines: 3D-FW7-900-1.
3A-FW7-900-1A.
3J-FW7-900-1.
3A-FW7-900-1B.
3A-FW-900-1A.
Steam Generator 1B Blowdown Line: 2C-MS-600-1B.
Auxiliary Cooling Line: 3C-AC-152.
Auxiliary Cooling System from Pump Cooling Outlet to Penetration 126 Line: 3E-AC6-152.
Auxiliary Cooling Line: 4B-AC-152.
2-IN. Letdown Line: 2A-CH4-2501.
2-IN. Alternate Charging Lines: 2-CH-2501R.
2A-CH5-2501.
CVCS Letdown Line: 2G-CH-601.
Reactor Coolant Pump "B" Seal Water Line: 2AB-CH-2502.
Reactor Coolant Pump "A" Seal Water Line: 2U-CH-151.
CVCS Letdown Line: 2H-CH-601.
CVCS Letdown Line: 2N-CH-151.
Feedwater Loop "A" Line: 14A-FW-900-1A.
Feedwater Loop "B" Line: 14B-FW-900-1B.
Main Steam Loop "A" Line: 30A-MS-600-1A.
Main Steam Loop "B" Line: 30B-MS-600-1B.

Main Steam Loop "B" Riser Line: 6B-MS-600-1B.
Main Steam Loop "A" Riser Line: 6B-MS-600-1A.
Main Steam Supply to Auxiliary Feedwater Pump Turbine
Lines: 6B-MS-600-1.
6A-MS-600-1.
Low Head Safety Injection Line: 6-AC-601.
Residual Heat Removal Line: 10A-AC7-2501-A.
Residual Heat Removal Line: 8B-AC-601.
Residual Heat Removal Line: 10-AC-601.
Residual Heat Removal Line: 6D-AC-601.
Residual Heat Removal Line: 10E-AC-601.
Residual Heat Removal Line: 10G-AC-601.
Safety Injection Line: 10GG-AC-601.
Residual Heat Removal Line: 10D-AC-601.
Safety Injection Line: 6K-AC-151.
Safety Injection Line: 10-SI-151.
Safety Injection Line: 4-SI-301.
Safety Injection Line: 8H-SI-151.
Safety Injection Lines: 10A-SI2-2501-B.
10A-SI2-2501-A.
Residual Heat Removal Line: 10A-AC7-2501-B.
Service Water to A&B Diesel Generator Water Coolers
Lines: 10B-SW0-125-9.
8G-SW0-125-9B.
Service Water - Intermediate Building From 16" Header to
Penetrations 312-320 Line: 8A-SW0-125-9.
Standby Auxiliary Feedwater from Penetration 123 to B S/G
Feedwater Header Line: 3-FW-900-1B.
Standby Auxiliary Feedwater from Penetration 119 TO A S/G
Feedwater Header Line: 3-FW-900-1A.
Pressurizer Relief from Pressurizer to Relief Manifold
Lines: 6AP-RC-602.
6BP-RC-602.
Power Pressurizer Relief Lines: 3BP-RC-602.
3BP-RC-2501.

Functional Testing:

A total of 15 Snubbers were Functionally Tested (FT) during the 1990 outage. Twelve of the Fifteen Supports were Mechanical Snubbers and the remaining three were Hydraulic Snubbers. One Snubber AFU-227 was originally scheduled for functional testing but was substituted by AFU-109 during the outage.

Snubber Functional Testing (FT) was performed on the following components and/or system lines:

Steam Generator "A".
Auxiliary Feedwater Pump Discharge, Lines: 3A-FW7-900-1B
3A-FW-900-1A
Reactor Coolant Pump 1B Seal Water, Line: 2AB-CH-2502.

Chemical & Volume Control System Letdown, Line: 2H-CH-601
Feedwater Loop "A", Line: 14A-FW-900-1A
Feedwater Loop "B", Line: 14B-FW-900-1B
Residual Heat Removal System, Line: 10G-AC-601
Safety Injection, Line: 10A-SI2-2501-B
Pressurizer Relief from Pressurizer to Relief Manifold, Line: 6BP-RC-602
Power Pressurizer Relief, Line: 3BP-RC-602

REPAIR PROGRAM:

The Repair Program as described under the Ginna Station Quality Assurance Manual Appendix B identifies the component jurisdiction and associated requirements. The Rochester Gas & Electric Repair Program for Ginna Station covers both Service Induced and Code Rejectable Repairs. A "Service Induced Reject" occurs when an item that is under Appendix B jurisdiction contains an indication that is beyond acceptable standards that was caused during its' inservice life. A "Code Reject" occurs when an item that is under Appendix B jurisdiction contains indications or other rejectable conditions that were not service induced. Code rejects include but are not limited to items such as arc strikes or tightening of loose bolting.

Code Service Induced Rejectable Indications:

Three service induced rejectable components were identified during the 1990 Outage. The following listing provides a summary of the component and the associated expanded examination scope.

I. ASME Class: 1
System: 2" Alternate Charging
Line: 2A-CH5-2501
Component: Variable Spring, CVU-51
Code Service Induced Rejectable Indication:
A 3/4" rod was bent from the vertical position. NCR 90-167 was generated and corrective action taken. The rod was replaced under Work Order # (WO#) 9021606. This support was reexamined and acceptable.

Expanded Examination Scope:

The following components were examined on the system:

1. Support CVU-50, "U-Bolt" type: Examination revealed no other service induced recordable indications.

2. Support CVU-5, Variable Spring: Examination revealed no other service induced recordable indications.

II. ASME Class: 2
System: Low Pressure Safety Injection
Line: 8B-SI-151
Component: Variable Spring, RHU-129
Code Service Induced Rejectable Indication:
The Rod in the Spring Can is locked & the space in front of the can is 1/2" while the rod touches the rear of the can. NCR 90-091 was generated for Engineering disposition. Work Order (WO#) 9021614 was initiated to correct the situation. The support was reexamined with no recordable indications and acceptable.

Expanded Examination Scope:

The following components were examined on the system:

1. Support RHU-101, Rigid Support: Examination revealed no other service induced recordable indications.

2. Support RHU-130, Variable Spring: Examination revealed no other service induced recordable indications.

III. ASME Class: 2
System: High Pressure Safety Injection
Line: 3E-SI-1501
Component: Rigid Support, SIU-58
Code Service Induced Rejectable Indication:
A loose nut was identified on top of the support while the associated bottom nut can be turned by hand. NCR 90-107 was generated for Engineering disposition. Work Order (WO#) 9021810 was initiated to perform the repairs. The support was reexamined after repairs and acceptable.

Expanded Examination Scope:

The following components were examined on the system:

1. Support SIU-57, Rigid Support: Examination revealed no other service induced recordable indications.

2. Support SIU-59, Rigid Support: The Examination revealed no other service induced recordable indications.

3. Support SIU-66, Rigid Restraint: Examination revealed no other service induced recordable indications.

Code Rejectable Indications:

The following listing of 40 components provides an accounting of Code Rejectable Indications identified during the 1990 Outage.

1. ASME Class: 1
   System: Low Pressure Safety Injection System:
   Line: 6A-RC-2501-B
   Component: Rigid Hanger, RHU-22
   Code Rejectable Indication:
   Slag inclusions located in the crotch area were identified in the Northeast and Southeast Lug Plates. NCR 90-163 was generated. An Engineering evaluation was performed that resulted in a use-as-is disposition.

2. ASME Class: 1
   System: 2" Safety Injection Loop A
   Line: 2C-SI2-2501
   Component: Pipe-to-Elbow Weld, ASW-1
   Code Rejectable Indication:
   A rough weld with numerous pores on the weld center line was identified. NDE personnel "blended out" the indication with a file. The area was reexamined after blending and acceptable.

3. ASME Class: 2
   System: Main Steam Loop A
   Line: 30A-MS-600-1A
   Component: Anchor in Penetration 401(outside containment),PS-A
   Code Rejectable Indication:
   Lack of thread engagement was identified and reported on NCR 90-186. Engineering reviewed and performed an evaluation with a resulting disposition of use-as-is.

4. ASME Class: 2
   System: Feedwater Loop A
   Line: 14A-FW-900-1A
   Component: Variable Spring, FWU-1
   Code Rejectable Indication:
   The top nut does not have full thread engagement. NCR 90-173 was generated. Engineering review of this reportable condition indicated that it was addressed under NCR G83-132 that had a disposition of use-as-is, acceptable.

5. ASME Class: 2
System: Low Pressure Safety Injection System
Line: 8A-SI-301B
Component: Guide; SIU-108
Code Rejectable Indication:
This Inspection identified loose Micarta block on the North side of the guide. NCR 90-160 was generated for Engineering review. A use-as-is disposition was based on the pipe to block gaps being within the requirements with the associated nuts tack welded in place as addressed by FCR-3092-145 dated 5-11-87.

6. ASME Class: 2
System: Residual Heat Removal System
Line: 10B-AC-601
Component: Pipe to Pipe Weld, 1
Code Rejectable Indication:
The examination reported linear rejectable indications in the weld. Additional augmented NDE investigation revealed that the indications were actually score marks that appeared to be mechanical in origin. The final disposition of this weld is acceptable.

7. ASME Class: 2
System: Low Pressure Safety Injection System
Line: 4A-SI-301
Component: Rigid Support, RHU-126
Code Rejectable Indication:
The Integral Welded attachment to the Elbow pressure boundary was not welded all around. NCR 90-164 was generated for Engineering review and evaluation. A disposition of use-as-is was made based upon the adequacy of the existing weld.

8. ASME Class: 2
System: High Pressure Safety Injection System
Line: 3E-SI-1501
Component: Rigid Restraint, SIU-66
Code Rejectable Indication:
Examination revealed that the ear on the pipe clamp is bent inward. NCR 90-247 was generated for Engineering review and evaluation. The replacement of the clamp was performed under WO# 9021837. Reexamination of the component was acceptable.

9. ASME Class: 2
System: High Pressure Safety Injection System
Line: 3E-SI-1501
Component: Rigid Restraint, SIU-59
Code Rejectable Indication:

Examination revealed that a bushing was located in the upper clamp section while none were located in the lower clamp. NCR 90-090 was generated for review and disposition. Quality Control revealed that the bushing is a spacer and only required on one bolt. The component is acceptable, use-as-is.

10. ASME Class: 2
System: Containment Spray System
Line: 6E-SI-301
Component: Rigid Support, CSU-33
Code Rejectable Indication:

The Integrally Welded attachment to the pressure boundary is missing 1.5" of weld in the crotch area, an arc strike is also situated adjacent to the weld. NCR 90-089 was generated for Engineering review and evaluation. Engineerings' disposition of use-as-is on the missing weld was based on EWR 2512 design analysis, ME 39 Attachment B1. The rejectable arc strike was removed under WO# 9021570. Subsequent reexamination was acceptable.

11. ASME Class: High Energy Program Appendix B
System: Feedwater Loop B Outside Containment
Line: 14B-FW-900-1B
Component: Pipe to Pipe Weld, J
Code Rejectable Indication:

A rejectable Linear Indication 1/4" long was identified and reported on NCR 90-123. A disposition for repair employing a metal removal method was initiated under WO# 9021386. Reexamination after the repair activity was acceptable.

12. ASME Class: High Energy Program Appendix B
System: Feedwater Outside Containment
Line: 14A-FW-900-1A
Component: Mechanical Snubber, FWU-21
Code Rejectable Indication:

This support was rejected due to insulation obstructing the snubber movement. The insulation was tight against the snubber, 6" away on the clamp side. NCR 90-200 was initiated to resolve the situation. Engineering dispositioned the NCR as rework and instructed that the clamp be moved and rotated to insure that the final clamp position will not restrict the snubber freedom of movement in the hot position. Reexamination of the support was acceptable.

13. ASME Class: 3
System: Service Water to Component Cooling & Spent Fuel Pit Heat Exchangers.
Line: 20A-SWO-125-9
Component: Rigid Support, SWO-212
Code Rejectable Indication:
Four(4) bolts were identified and rejected for being 1/8" short of full thread engagement. NCR 90-090 was generated for Engineering review. Upon Engineerings' review & evaluation, a use-as-is disposition was made due to the associated loads are in compression.

14. ASME Class: 3
System: Auxiliary Feedwater Pump Discharge - Intermediate Building.
Line: 3A-FW7-900-1B
Component: Guide - Rigid Restraint, AFU-08
Code Rejectable Indication:
Inspection revealed that the support did not conform to the drawing requirements. NCR 90-108 was initiated and reported to Engineering for disposition. Engineering review indicated that Revision 1 of the drawing should have been used. The support is acceptable as is and agrees to Revision 1 drawing requirements.

15. ASME Class: 3
System: Standby Auxiliary Feedwater from Penetration 119 to A Steam Generator Feedwater Header.
Line: 3C-FW-900-1A
Component: Variable Spring, AFW-30
Code Rejectable Indication:
The inspection revealed that the can setting of 580 lbs. did not agree with the 540 lbs. identified in ME-256 Specification. NCR 90-185 was generated for Engineering review. The disposition initiated work to reset the spring can to resolve the discrepancy. Reexamination indicated no recordable indications, acceptable.

16. ASME Class: 3
System: Standby Auxiliary Feedwater from Penetration 123 to B Steam Generator Feedwater Header.
Line: 3C-FW-900-1B
Component: Hydraulic Snubber, AFU-208 (was AFW-13)
Code Rejectable Indication:
Results of the inspection revealed that the support cold setting of 2 1/8" should be 3 1/2". NCR 90-109 was generated. A review of the data by Engineering indicated that the Gilbert Scales show the setting to be 2 1/2". The reading of 2 1/8" is acceptable. ME-256 Specification for this component will be corrected and revised.

17. ASME Class: 3
System: Standby Auxiliary Feedwater , Service Water supply to Standby Auxiliary Feedwater Pump D.
Line: 4A-FW8-152-B
Component: Guide Support, SWU-500 (was SW-88)
Code Rejectable Indication:
Bottom lug weld on the East side has lack of sufficient weld at the toe. NCR 90-188 was generated to resolve this problem. Engineerings' disposition indicated that repairs are required. Upon completion of repair activities, a reexamination of the component was performed and acceptable. This repair was performed on a component under the jurisdiction of "Construction". This component is not under the jurisdiction of Appendix B until "Construction" rework turnover.

18. ASME Class: Snubber Program Appendix B
System: Auxiliary Feedwater Pumps Discharge, Intermediate Building.
Line: 3A-FW-900-1A
Component: Hydraulic Snubber, AFU-109
Code Rejectable Indication:
Inspection revealed that the bolt holding the fluid reservoir was loose. NCR 90-104 was generated. Corrective action was performed by replacing the support with another Snubber under WO #9020415. Reexamination of the support was acceptable.

19. ASME Class: Snubber Program Appendix B
System: Feedwater Loop A
Line: 14A-FW-900-1A
Component: Mechanical Snubber, FWU-20
Code Rejectable Indication:
The top of the Snubber was hitting the mounting brackets. NCR 90-246 was generated to document this condition. Engineering performed an evaluation and dispositioned the condition use-as-is. The disposition of use-as-is was based on the angular tolerance and clearance on the snubber being adequate to perform its function.

20. ASME Class: Snubber Program Appendix B
System: Feedwater Loop B
Line: 14B-FW-900-1B
Component: Mechanical Snubber, FWU-42
Code Rejectable Indication:
Insulation on valve 4012 was resting on the snubber that may interfere with and cause binding of the snubber during operation. NCR 90-103 was generated to resolve this situation. Engineering disposition of reduceing the thickness of the insulation on the valve in order to provide the needed clearance was performed. Reexamination after repairs was acceptable.

21. ASME Class: Snubber Program Appendix B
System: Feedwater Loop A
Line: 14B-FW-900-1B
Component: Hydraulic Snubber, FWU-44
Code Rejectable Indication:
The Inspection revealed that the locknut was not tight on the snubber side, the cotter pin was missing and a turnbuckle on the component was not shown on the drawing. NCR 90-172 was generated. Repairs were initiated to correct the reported items. The snubber was reexamined after repairs and found to be acceptable.

22. ASME Class: Snubber Program Appendix B
System: Main Steam Loop A
Line: 30A-MS-600-1A
Component: Mechanical Snubber, MSU-38
Code Rejectable Indication:
The snubber was installed backwards to the way the drawing indicated. NCR 90-101 was generated for Engineering evaluation. The results of the evaluation indicated that the snubber may be rotated 180 degrees without changing its function. A disposition of use-as-is was made.

23. ASME Class: Snubber Program Appendix B
System: Safety Injection System
Line: 10A-SI2-2501-A
Component: Mechanical Snubber, SIU-47
Code Rejectable Indication:
The inspection revealed that the snubber tang was binding on the pipe clamp. NCR 90-187 was initiated to address this problem. A repair was performed and the snubber was subsequently reexamined and found acceptable.

24. ASME Class: Snubber Program Appendix B
System: Service Water to A & B Diesel Generator Water Coolers.
Line: 10B-SW0-125-9
Component: Mechanical Snubber, SWU-254
Code Rejectable Indication:
The examination indicated that loose nuts were found on the West side of the Snubber pipe clamp. NCR 90-208 was initiated for Engineering review & disposition. Repairs were initiated to tighten the loose nuts. Reexamination of the snubber indicated the component was acceptable.

25. ASME Class: Snubber Program Appendix B
System: Standby Auxiliary Feedwater from Penetration 123 to B Steam Generator Feedwater Header.
Line: 3C-FW-900-1B
Component: Hydraulic Snubber, AFU-208
Code Rejectable Indication:
Inspection revealed that the 2 1/16" observed setting did not compare with the 3 1/2" documented cold setting in ME-256 Specification. NCR 90-109 was generated to resolve this problem. Engineering revealed that the Gilbert scales show the proper setting to be 2 1/2". Engineering disposition of use-as-is was made along with a proposed revision to ME-256 Specification.

26. ASME Class: Snubber Program Appendix B
System: Pressurizer Relief from Pressurizer to Relief Manifold
Line: 6AP-RC-602
Component: Hydraulic Snubber, N601
Code Rejectable Indication:
The Snubber hits the base plate at the wall and is missing its I.D. Tag. NCR 90-184 was generated. Engineering evaluation indicated a use-as-is disposition. The base plate does not impair the snubber function. A new I.D. Tag was installed. The reexamination of the snubber was acceptable.

27. ASME Class: Snubber Program Appendix B
System: Pressurizer Relief from Pressurizer to Relief Manifold
Line: 6AP-RC-602
Component: Hydraulic Snubber, N602
Code Rejectable Indication:
The Inspection revealed that the snubber was missing an I.D. Tag. NCR 90-184 was generated. A new I.D. Tag was installed. The reexamination was acceptable.

28. ASME Class: Snubber Program Appendix B
System: Pressurizer Relief from Pressurizer to Relief Manifold
Line: 6BP-RC-602
Component: Hydraulic Snubber, N604
Code Rejectable Indication:
The Inspection indicated that the snubber was missing an I.D. Tag. NCR 90-184 was generated. A new I.D. Tag was installed. The reexamination was acceptable.

29. ASME Class: Snubber Program Appendix B
System: Pressurizer Relief from Pressurizer to Relief Manifold
Line: 6AP-RC-602
Component: Hydraulic Snubber, N607
Code Rejectable Indication:
The Inspection indicated that the snubber was missing an I.D. Tag. NCR 90-184 was generated. A new I.D. Tag was installed. The reexamination was acceptable.

30. ASME Class: Snubber Program Appendix B
System: Pressurizer Relief from Pressurizer to Relief Manifold
Line: 6AP-RC-602
Component: Hydraulic Snubber, N608
Code Rejectable Indication:
The Snubber hits the base plate at the wall and is missing its I.D. Tag. NCR 90-184 was generated. Engineering evaluation indicated a use-as-is disposition. The base plate does not impair the snubber function. A new I.D. Tag was installed. The Reexamination of the snubber was acceptable.

31. ASME Class: Snubber Program Appendix B
System: Pressurizer Relief from Pressurizer to Relief Manifold
Line: 6BP-RC-602
Component: Hydraulic Snubber, N615
Code Rejectable Indication:
The Inspection indicated that the snubber was missing an I.D. Tag. NCR 90-184 was generated. A new I.D. Tag was installed. The reexamination was acceptable.

32. ASME Class: Snubber Program Appendix B
System: Pressurizer Relief from Pressurizer to Relief Manifold
Line: 6AP-RC-602
Component: Hydraulic Snubber, N616
Code Rejectable Indication:
The Inspection indicated that the snubber was missing an I.D. Tag and a cotter key was broken at top of the component near the wall. NCR 90-184 was generated. Engineering disposition indicated that the cotter key should be repaired and a new I.D. Tag installed. The reexamination was acceptable.

33. ASME Class: Snubber Program Appendix B
System: Power Pressurizer Relief Line
Line: 3BP-RC-2501
Component: Hydraulic Snubber, PS-5
Code Rejectable Indication:
Inspection indicated that the cotter key at top of the component was not engaged 100% and was deformed. NCR 90-112 was generated. Engineering review indicated a repair should be made. The reexamination was acceptable.

34. ASME Class: Snubber Program Appendix B
System: Power Pressurizer Relief Line
Line: 3BP-RC-2501
Component: Hydraulic Snubber, PS-6
Code Rejectable Indication:
The Inspection revealed that the snubber had a broken cotter key and the clamp end bolting had lack of thread engagement. NCR 90-112 was generated for Engineering review. An Engineering design analysis was performed to address the lack of thread engagement. The dispositioned of use-as-is was made by Engineering. Work was initiated on the support with the cotter key being replaced. Reexamination of the component was acceptable.

35. ASME Class: 3
System: Auxiliary Feedwater System
Line: 2A-FW-900-1
Component: 4" Check Valve, CV 4017
Code Rejectable Indication:
This 4" Crane Check Valve had cracks on the gasket surface and valve body. NCR 90-096 was generated for Engineering review. The disposition was made to remove the indications and perform a weld repair under WO # 9021452. Reexamination was performed and acceptable. The NDE reexamination record was documented under the Maintenance NDE Summary Number 900023.

36. ASME Class: 2
System: Low Pressure Safety Injection Line
Line: 10-SI-151
Component: 2" Weld-O-Let, First Weld out from A4A
Code Rejectable Indication:
Two linear indications, 1/8" & 1/2" was identified in the 2" Weld-O-Let to Pipe Weld. NCR 90-102 was generated. Engineering reviewed this condition and recommended a repair be performed by metal removal process under WO# 9021568. A reexamination was perfqrmed of the repaired area and was acceptable.

37. ASME Class: 2
System: Steam Generator Blowdown
Line: 2E-MS-600-1A
Component: 2A, Pipe to Valve 5701
Code Rejectable Indication:
The wall thickness was 68% T Nominal that equates to a minimum reading of 0.150". In 1988 & 1989 the thickness of this section was 0.170". NCR 90-150 was generated for Engineering review & disposition. An interim use disposition was made to repair the area by grinding and rewelding. Work was performed under WO# 9021695. Replacement of this component is scheduled for the 1991 Outage under EWR 4324C or reinspected in 1991 if the EWR is deferred.

38. ASME Class: 2
System: Steam Generator Blowdown
Line: 2E-MS-600-1A
Component: 3A, Valve 5701 to Pipe
Code Rejectable Indication:
The wall thickness was 64% T Nominal that equates to a minimum reading of 0.140". In 1988 the thickness of this section was 0.180" and in 1989 the thickness was 0.160". NCR 90-150 was generated for Engineering review & disposition. An interim use disposition was made to repair the area by grinding and rewelding. Work was performed under WO# 9021695. Replacement of this component is scheduled for the 1991 Outage under EWR 4324C or reinspected in 1991 if the EWR is deferred.

39. ASME Class: 2
System: Steam Generator Blowdown
Line: 6B-MS-600-1A
Component: Valve 3411, Bonnet Flange Seal Area
Code Rejectable Indication:

During a Maintenance activity to remove Valve 3411 internals, it was discovered that scoring occurred on the seat. Steam cuts was also observed on the face of the valve bonnet. NCR 90-234 was generated to address the problem. Repairs were performed under WO# 9000043. Upon completion of welding & subsequent machining operations, reexamination of the component was acceptable.

40. ASME Class: Class 3
System: Service Cooling Water
Line: 2B-SW-152
Component: 2" Pipe
Code Rejectable Indication:

Inspection indicated that a 3/32" wide by 1/8" long through wall indication was identified in the 2" pipe by support SWU-570. The through wall indication was caused by work activities associated with EWR 2512. NCR G90-022 was generated for resolution. Engineering review indicated that a weld repair be performed. A Code weld repair and subsequent examinations were performed by Projects under SM 2512.129. The NDE consisted of surface examinations, UT thickness measurements and Hydrostatic testing. All repair cycle examinations and testing were acceptable.

REPLACEMENT PROGRAM:

Appendix B of the Ginna Station Quality Assurance Manual identifies the component jurisdiction and requirements for the Replacement Program. The term Replacement includes both Replacements and Modifications.

Replacements and/or Modifications that were initiated prior to 1 January 1990 and installed during the 1990 Outage are under the jurisdiction of the Second Interval Appendix B Program requirements. Any Replacements and/or Modifications that were initiated after 1 January 1990 are under the Third Interval Appendix B Program requirements. During the 1990 Outage, no Major Modifications were initiated and/or installed to the Third Interval Program requirements.

The following Replacements and Minor Modifications were performed during the 1990 Outage and conforms to the Third Interval Program requirements.

1. ASME Class: 3
System: Chemical & Volume Control
Line: 2C-CH6-151
Replacement Component: V-338, 3" Diaphragm Valve Bonnet.

Replacement Summary: The ITT Grinnell Valve Bonnet was an approved equilivant replacement. Code required reconciliation and verification was performed and is documented under TSR 90-25. This bonnet was ordered under PO NEG-87329 and was installed under Work Order # 9000185. A VT-2 Leakage examination was performed and acceptable.

2. ASME Class: 3
System: Auxiliary Feedwater
Line: 3A-FW-900-1A
Replacement Component: V-4009, 3" Tilting Dics Check Valve.

Replacement Summary: The Crane Valve Disk assembly was a "like and kind" replacement. The Code required verification was performed. The Crane seating and disc assembly was ordered under PO NQ 10274CSD, serial number 159953102 and installed under Work Order # 9021448. A VT-2 Leakage examination was performed and acceptable.

EROSION/CORROSION MINWALL PROGRAM:

A Total of 312 Components were examined during the 1990 Outage. The breakdoun of this total number is as follows: 154 components were of pipes, 108 components were of elbows, 28 components were of Tees', 19 components were of reducers and 3 components were nozzles.

Component Thickness measurements were performed on the following systems:

A/B Feedwater Pump Discharge to 5 A/B Heater.
Feedwater Cleanup to Condenser East Wall.
Heaters 4 A/B to Feedwater Suction.
Condensate Pump & Heater Drain Tank Discharge to Feedwater Suction.
Low Pressure Downcomers.
Low Pressure Downcomers in West Condenser.
Low Pressure Downcomers in East Condenser.
MSR 1A, 1B 2nd Pass Drain.
MSR 2A, 2B 2nd Pass Drain.
MSR 1A, 1B 2nd Pass Drain to 5A H.P.H. & Condenser.
MSR 2A, 2B 2nd Pass Drain to 5B H.P.H. & Condenser.
MSR 1A 4th Pass to 5A Heater.
MSR 1B 4th Pass to 5B Heater.
MSR 1A & 1B 4th Pass to Condenser.
MSR 2A 4th Pass to 5A Heater.
MSR 2B 4th Pass to 5B Heater.
MSR 2A & 2B 4th Pass to Condenser.
1A, 2A & 3A L.P.H. Drains to Condenser.
Steam Extraction to Preseparator B & 4B L.P.H.
Steam Extraction to Preseparator A & 4A L.P.H.
Condensate Booster Pumps to Hydrogen Coolers.
MSR 1A & 1B to Heater Drain Tank.
MSR 2A & 2B to Heater Drain Tank.

5A H.P.H. Drain to 4A L.P.H.
5B H.P.H. Drain to 4B L.P.H.
Preseparator A/B to Heater Drain Tank & Condenser.
Preseparator A/B to Heater Drain Tank.
Turbine Driven Auxiliary Feedwater Pump to Discharge Lines.
Auxiliary Feedwater Pump A to Discharge Lines.
Auxiliary Feedwater Pump B to Discharge Lines.
Steam Extraction to 5A & 5B H.P.H.
Feedwater Discharge, Turbine Building.
Steam Generator Blowdown Lines, (Intermediate Building)
Steam Generator Blowdown Lines, (Turbine Building)
Steam Generator 1A Blowdoun Lines, (Containment Building)
Steam Generator 1B Blowdoun Lines, (Containment Building)
Feedwater Recirculation (CV-18).
Feedwater Recirculation (CV-19).
Main Feedwater Pump Bypass.
Steam Generator Blowdoun to Condenser.
Service Water in Screen House.
Heater Drain Tank to Condenser.
Main Steam Dump to Condenser.
Blowdown Tank to Condenser.
Blowdown Tank to 3A Low Pressure Heater.
Gland Steam Discharge to Gland Steam Condenser.
Preseparator Drain to Preseparator Vent.
4B Low Pressure Heater Vent.

Prepared By: Frank A Klepacki 7-13-90
Frank A. Klepacki
ISI Engineer

Certificate of Inservice Inspection

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspections and employed by The Hartford Steam Boiler Inspection and Insurance Company have inspected and/or verified that the components described within this report and associated Attachments during the stated reporting time frame, and state to the best of my knowledge and belief, the Owner has performed examinations and corrective measures described in this Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Reviewed By: Russell B. Miller 7/13/90
ANII's Signature Date

Approved By: Michael J Saporito
Michael J. Saporito
Supervisor, Materials Engineering
NDE Level III

GINNA NUCLEAR POWER STATION

Inservice Inspection Report

1990 - 1999 Interval, First Outage 1990

Attachment I

1990 ISI INSPECTION SUMMARY

A. CLASS 1 COMPONENTS:

1. Pressurizer: Drawings: A-4

Summary Number	Component	NDE Exam	Results
004400	Surge Line Nozzle to Reducer Weld; SLNSEW	PT UT	PT & UT, no recordable indications. Limitations due to ID Plate -acceptable.
005000	Safety Nozzle #1 to Safe End; RC-273-I	PT UT	PT & UT, no recordable indications - acceptable.
005200	Safety Nozzle #2 to Safe End; RC-273-S	PT UT	PT & UT, no recordable indications. Limitations, 1" downstream due to reducer - acceptable.
005600	Manway Bolting, 16 total.	VT-1 UT MT	VT-1 & UT, no recordable indications. MT required only when removed-bolting not removed. Acceptable.

2. Steam Generator A: Drawings: A-3A, A-3B, A-5

Summary Number	Component	NDE Exam	Results
006000	Elbow to Safe End Inlet Nozzle Weld; PL-FW-I-ASW	PT UT	PT & UT, no recordable indications, unable to skew 45 degrees due to curved shoe - acceptable.
006200	Outlet Nozzle Safe End to Elbow Weld; PL-FW-IX-ASW	PT UT	PT & UT, no recordable indications, unable to skew 45 degrees due to curved shoe. No upstream exam due to nozzle -acceptable.
006430	Inlet Manway Nuts; 16 Total.	VT-1 UT MT	VT-1, MT & UT, no recordable indications - acceptable.

Summary Number	Component	NDE Exam	Results
006435	Inlet Manway Studs; 16 Total.	VT-1 UT MT	VT-1, MT & UT, no recordable indications - acceptable.

3. Regenerative Heat Exchanger: Drawings: A-8

Summary Number	Component	NDE Exam	Results
009200	Component Support Hanger; RHE-8-PR1	VT-3	VT-3, no recordable indications - acceptable.

4. 10" Pressurizer Surge Line:

Line: 10-RC8-2501 Drawings: A-3D

Summary Number	Component	NDE Exam	Results
014000	Safe End to Pipe Weld; A	UT PT	PT; no recordable indications. UT; no recordable indications, UT,Geom: 2 indications upstream - acceptable.
014100	Pipe to Pipe Weld; B	UT PT	PT; no recordable indications. UT; no recordable indications, UT, Geom: 2 indications, 1 upstream & 1 downstream - acceptable.
014200	Pipe to Pipe Weld; C	UT PT	PT; no recordable indications. UT; no recordable indications, UT, Geom: 2 indications, 1 upstream & 1 downstream - acceptable.

Line: 10-RC8-2501 Drawings: A-3B

014500	Pipe to Nozzle Weld; D	UT PT	PT & UT; no recordable indications. UT Geom upstream - acceptable.

5. 2" Auxiliary Spray Line:

Line: 2-CH5-2501 Drawings: A-11

Summary Number	Component	NDE Exam	Results
023000	Tee to Pipe Weld; 9	PT	PT; no recordable indications - acceptable.

Summary Number	Component	NDE Exam	Results
025200	Pipe to Elbow Weld; 20	PT	PT; no recordable indications - acceptable.
026000	Pipe to Reducer Weld; 27	PT RT	PT; no recordable indications (to verify removal of surface type Geom. indication.) RT; no recordable indications, Insig., intermittent IUC, suck-up, tungsten spot & spot pores - acceptable.

6. 10" Safety Injection System:

Line: 10A-SI2-2501-A Drawings: A-16

Summary Number	Component	NDE Exam	Results
034200	Elbow to Pipe Weld; GSW-2	UT PT	PT & UT; no recordable indications. UT Geom: upstream inside surface - acceptable.

Line: 10A-SI2-2501-B Drawings: A-17

Summary Number	Component	NDE Exam	Results
034530	Hydraulic Snubber Support; SIU-3	VT-3	VT-3; no recordable indications, PSA-10 setting of 3 1/4" at a temperature of 57 deg. F. - acceptable.
036100	Elbow to Nozzle Weld; K	UT PT	PT; Insig: 1/4" long arc strike -acceptable per Section XI table 3514-2. UT; no recordable indications - acceptable.

7. 6" Low Pressure Safety Injection System:

Line: 6A-RC-2501-B Drawings: A-18

Summary Number	Component	NDE Exam	Results
036400	Rigid Hanger, Integral Attachment; RHU-22	PT	PT; Rej., slag inclusions at NE & SE Lug plates in crotch area. NCR 90-163 generated, use-as-is per Engineering evaluation-acceptable.

Summary Number	Component	NDE Exam	Results
036500	Rigid Hanger Support; RHU-22	VT-3	VT-3; no recordable indications - acceptable.

8. 4" Low Pressure Safety Injection System:

Line: 4A-RC-2501-B Drawings: A-18

Summary Number	Component	NDE Exam	Results
036800	Elbow to Pipe Weld; H	UT PT	PT & UT; no recordable indications - acceptable.

9. 6" Low Pressure Safety Injection System:

Line: 6A-RC-2501-A Drawings: A-14

Summary Number	Component	NDE Exam	Results
037600	852A Valve to Pipe Weld; J	UT PT	PT & UT; no recordable indications. UT; Geom., Elbow side, root geometry - acceptable.

10. 2" Safety Injection Loop A:

Line: 2C-SI2-2501 Drawings: A-20

Summary Number	Component	NDE Exam	Results
039600	Pipe to Elbow Weld; ASW-1	PT	PT, Rej.; Rough weld & pores in center line of weld. Reexam. after blending weld- no recordable indications per Sect. XI IWB-3514- 2, -acceptable.

11. 2" Safety Injection Loop B:

Line: 2B-SI2-2501 Drawings: A-21

Summary Number	Component	NDE Exam	Results
041600	Pipe to Elbow Weld; GSW-14	PT	Insig.; 1/16" Dia. round indication. Acceptable per Section XI IWB-3514-2.

12. 2" Letdown:

Line: 2B-RCO-2501-A Drawings: A-22

Summary Number	Component	NDE Exam	Results
042300	Nozzle to Pipe Weld; 1	PT	PT: no recordable indications - acceptable.

Line: 2A-RCO-2501-B Drawings: A-23A

Summary Number	Component	NDE Exam	Results
043300	Pipe to Elbow Weld; 6	PT	PT: no recordable indications - acceptable.

Line: 2A-CH4-2501 Drawings: A-23

Summary Number	Component	NDE Exam	Results
046000	Rigid Restraint Integral Attachment Support; CVU-31	PT	PT: no recordable indications - acceptable.
046020	Rigid Restraint Support; CVU-31	VT-3	VT-3: no recordable indications - acceptable.

13. 2" Charging:

Line: 2B-CH5-2501 Drawings: A-25

Summary Number	Component	NDE Exam	Results
051200	Elbow to Pipe Weld; 27	PT	PT: no recordable indications - acceptable.

14. 2" Alternate Charging:

Line: 2A-CH5-2501 Drawings: A-26

Summary Number	Component	NDE Exam	Results
052525	Anchor Integral Attachment Support; CVU-24	PT	PT: no recordable indications - acceptable.

Summary Number	Component	NDE Exam	Results
052530	Anchor Support: CVU-24	VT-3	VT-3; no recordable indications - acceptable.
053300	383A Valve to Pipe Weld; 38	UT PT	PT & UT; no recordable indications - acceptable.
053800	Pipe to Nozzle Weld; 43	PT	PT; no recordable indications - acceptable.

Line: 2A-CH5-2501 Drawings: A-27

Summary Number	Component	NDE Exam	Results
054200	Variable Spring Support; CVU-51	VT-3	VT-3; Rej. 3/4" rod bent. NCR 90-167 generated. Reexam. after repairs, Setting of 61# at 65 deg. F.,Support SN: 582 -acceptable. Service Induced expanded scope required. See Summary #'s 054300 & 054900.
054300	U-Bolt Support; CVU-50	VT-3	VT-3; no recordable indications - acceptable, no degradation of component identified with expanded service induced scope.
054300	Variable Spring Support; CVU-5	VT-3	VT-3; no recordable indications - acceptable, no degradation of component identified with expanded service induced scope. Setting of 135# at 63 deg. F. Berger Patterson Size 3 support.
055100	393 Valve to Pipe Weld; 11	UT PT	PT & UT; no recordable indications - acceptable.

15. Reactor Coolant Pump B:

Pump Casing Welds: Drawings: A-7

Summary Number	Component	NDE Exam	Results
057410	Weld A	VT-1 PT	VT-1 & PT; no recordable indications. VT-1, Insig; pits from casting process 360 deg. around weld < 1/32". Grind marks from prepping-acceptable. PT, Insig; 15 Random rounded indications < 1/16" Dia., small scale 1/8 x 1/4 and 4 gouges at weld attachments < 1/32" - acceptable.
057420	Weld B	VT-1 PT	VT-1 & PT; no recordable indications. VT-1, Insig; pits from casting process 360 deg. around weld < 1/32". Grind marks from prepping-acceptable. PT; Insig., casting rounded inclusions 1/8" Dia.; Limitations due to pump supports B-1, B-2 & B-3 over weld for 20" each - acceptable.
057430	Weld C	VT-1 PT	VT-1 & PT; no recordable indications. VT-1 & PT; Insig., Gouge 1/2 x 1/32 deep by 1/16 wide at 11 1/2" location acceptable. Also, 1/2" Dia. rounded indication above gouge with cluster porosity < 1/64" each -acceptable.

Integral Welded Supports: Drawings: A-7

Summary Number	Component	NDE Exam	Results
057910	Support 1	VT-1 PT	VT-1 & PT; no recordable indications. VT-1, Insig.; minor pits < 1/32" in casting, grind marks from welds ground flush -acceptable. PT, Insig.; 2 indications each 3/8" long. Indications are underbead cold laps at edge of weld and are not service induced - acceptable.

Summary Number	Component	NDE Exam	Results
057920	Support 2	VT-1 PT	VT-1 & PT; no recordable indications. VT-1, Insig.; under cut < 1/32" long - acceptable. PT, Insig.; Linear indication 7/16" long is undercut < 1/32" deep. Indication not service induced and acceptable per Section III NB4424(C).
057930	Support 3	VT-1 PT	VT-1 & PT; no recordable indications. VT-1, Insig.; Weld is prepped showing grind marks < 1/32" deep - acceptable.

16. Reactor Coolant Pump Spare:

Flywheel: Drawings: N/A

Summary Number	Component	NDE Exam	Results
058200	Flywheel, SN: 212-3D19156-G01-02	UT	UT; no recordable indications, Top side keyway bore reflections were observed - acceptable.

17. Valves:

10" Check Valves: Drawings: A-16

Summary Number	Component	NDE Exam	Results
058300	Darling Check Valve 842A	VT-1	VT-1; no recordable indications - acceptable.

10" Check Valves: Drawings: A-17

Summary Number	Component	NDE Exam	Results
058400	Darling Check Valve 842B	VT-1	VT-1; no recordable indications - acceptable.

10" Gate Valves (1500 lbs.) Drawings: A-15

Summary Number	Component	NDE Exam	Results
059100	Velan Motor Oper. Gate Valve 701	VT-1	VT-1; no recordable indications - bolts inspected in place - acceptable.

10" Gate Valves (1500 lbs.) Drawings: A-14

Summary Number	Component	NDE Exam	Results
059200	Velan Motor Oper. Gate Valve; 720-1 Body Weld	UT PT	PT & UT: no recordable indications - acceptable.
059205	Velan Motor Oper. Gate Valve; 720-2 Body Weld	UT PT	PT & UT: no recordable indications - acceptable.
059210	Velan Motor Oper. Gate Valve; 720	VT-3	VT-3; no recordable indications - acceptable.
059300	Velan Motor Oper. Gate Valve; 720	VT-1	VT-1, MT & UT: no recordable indications. Baseline exam performed in 1989. Nuts and Studs installed in 1990.

6" Check Valves Drawings: A-14

Summary Number	Component	NDE Exam	Results
059600	Velan Check Valve;	VT-1	VT-1: no recordable indications, Bolts inspected in place - acceptable.

6" Gate Valves Drawings: A-14

Summary Number	Component	NDE Exam	Results
059600	Velan Check Valve;	VT-1	VT-1: no recordable indications, Bolts inspected in place - acceptable.

4" Relief Valves

Drawings: A-13

Summary Number	Component	NDE Exam	Results
060000	Crosby Relief Valve; 434	VT-1	VT-1: no recordable indications on 8 1 1/4" Dia. Bolts, 93 1"x8 nuts & 48 1"x8x7" studs. Rej: 12 1" Dia. Bolts. NCR 90-159 was generated for disposition. Examination performed after installation; flange, bonnet studs & replacements - acceptable.
060100	Crosby Relief Valve; 435	VT-1	VT-1: no recordable indications, 93 1"x8 nuts & 48 1"x8x7" studs. Insig: 1 of 1 1/4" Dia. bolts have minor corrosion; 7 bolts, NRI with 8 acceptable. Rej: 12 1" Dia. bolts with thread damage. NCR 90-159 was generated for disposition. Examination performed after installation; flange, bonnet studs & replacements -acceptable.

3" Control Valves

Drawings: A-12

Summary Number	Component	NDE Exam	Results
060200	Copes-Vulcan Control Valve; 430	VT-1	VT-1: no recordable indications - acceptable.

3" Gate Valves

Drawings: A-12

Summary Number	Component	NDE Exam	Results
060600	Velan Motor Oper. Gate Valve; 515	VT-1	VT-1; no recordable indications - acceptable.

2" Control Valves — Drawings: A-24

Summary Number	Component	NDE Exam	Results
060200	Copes-Vulcan Control Valve; 200A	VT-1	VT-1: Rej: heavy corrosion on nuts, WO 9021545 was generated to clean nuts for examination in accordance with A-1407 Procedure. No recordable indications & no material degradation observed - acceptable.
060900	Copes-Vulcan Control Valve; 200B	VT-1	VT-1: no recordable indications - acceptable.
070000	Copes-Vulcan Control Valve; 202	VT-1	VT-1: Rej: Boron deposits on top of #1 & #7 nuts and between nuts & bolts. WO 9021545 was generated to clean deposit areas for examination in accordance with A-1407 Procedure. No recordable indications & no material degradation observed - acceptable.

B. CLASS 2 COMPONENTS:

1. Non-Regenerative Heat Exchanger:

Bolting: — Drawings: B-2

Summary Number	Component	NDE Exam	Results
072240	7/8" Diameter Bolts	UT VT-1 MT	VT-1: no recordable indications. Insig: slight rust on all bolting. All studs were double nutted top & bottom. One stud over V204A had 1 nut on bottom due to lack of space -acceptable. MT: required when bolts are removed, bolting not removed. UT: no recordable indications, 20 bolts were examined from top & bottom -acceptable.

2. Seal Water Heat Exchanger:

Attachments: Drawings: B-4

Summary Number	Component	NDE Exam	Results
073170	Support Leg #3; S3	VT-3	VT-3: no recordable indications. Insig: paint on weld - acceptable.
073400	Support Leg #3; Integral Attachment Weld, S3	PT	PT: no recordable indications. Insig: Weld spatter on weld, nonrelevant indication - acceptable.

3. Reactor Coolant Filter:

Welded Supports: Drawings: B-3

Summary Number	Component	NDE Exam	Results
073170	Support Leg #3; Integral Attachment Weld, L3	PT	PT: no recordable indications - acceptable.
074760	Support Leg #3; L3	VT-3	VT-3: no recordable indications - acceptable.

4. Pulse Dampener:

Line: 8A-CH-2502 Drawings: B-6

Summary Number	Component	NDE Exam	Results
075800	Pipe to Elbow Weld; 2	UT PT	PT & UT; no recordable indications - acceptable.

5. Seal Water Injection Filter No. 2:

Welded Supports: Drawings: B-7

Summary Number	Component	NDE Exam	Results
078630	Support Leg #2; Welded Support, 2	VT-3	VT-3; no recordable indications. Insig; 4 pinholes < 1/64", light undercut < 1/16" and peening marks - acceptable.

Summary Number	Component	NDE Exam	Results
074760	Support Leg #2; Integral Attachment Weld, 2	PT	PT: no recordable indications. Insig; 3 scattered pin holes 1/32" Dia. - acceptable.

6. Main Steam Loop A:

Line: 30A-MS-600-1A Drawings: B-9

Summary Number	Component	NDE Exam	Results
080400	Anchor Support in Pen. 401 Outside Containment; PS-A	VT-3 MT	VT-3; Rej, Lack of thread engagement. NCR 90-186 was generated. Engineering disposition of use-as-is was made. MT; Insig, 3/4"x1"x1/2" circular indication with scabs from fabrication - acceptable.
080450	Anchor Support in Pen. 401 Inside Containment; PS-B	VT-3 MT	VT-3; no recordable indication Insig; intermittent arc strikes 360 deg. < 1/32" -acceptable. MT; no recordable indications, made. MT; Insig, 3/4"x1"x1/2"
080600	Pipe to Elbow Weld; D	RT MT VT-1	VT-1, MT & RT; Examined as High Energy Weld, see Summary No. 200005 for 1990 results.
083200	6" Branch Conn. Weld; G3-BC-3	RT VT-1 MT	VT-1; no recordable indication Insig: various arc strikes, intermittent undercut & light rust - acceptable. MT; Insig, areas of arc strikes - acceptable. RT; Other, weld configuration not conducive for RT examination.
083300	6" Branch Conn. Weld; G3-BC-4	RT VT-1 MT	VT-1; no recordable indication Insig: various arc strikes, intermittent undercut - acceptable. MT; no recordable indications in areas of arc strikes -acceptable. RT; Other, weld configuration not conducive for RT examination.

Line: 6B-MS-600-1A Drawings: B-9A

Summary Number	Component	NDE Exam	Results
083860	Bolting (< 2") G2-BC-2-B-BT	VT-1 MT UT	VT-1; no recordable indications on 12, 1"x7 1/4" studs - acceptable. MT; MT not performed, only when studs are removed. UT; no recordable indications, scanned from top side only -acceptable.

Line: 30B-MS-600-1B Drawings: B-10A

Summary Number	Component	NDE Exam	Results
086800	Mechanical Snubber Support, MSU-15	VT-3	VT-3; no recordable indications SN 7476, North setting = 3" & South - 3 1/4" at a Temp. of 53 deg. F. -acceptable. Insig; snubber can not be rotated by hand -acceptable.
086805	Mechanical Snubber Integral Attachment Weld, MSU-15	MT	MT: Insig; intermittent EUC on both North & South snubber that is < 1/32" 360 deg. around pipe side -acceptable.
087600	Guide Support; MSU-24	VT-3	VT-3: no recordable indications - acceptable.
088100	Variable Spring Support; MSU-28	VT-3	VT-3; no recordable indications - acceptable. Insig; rivet missing on ID Tag. Setting of 3 1/4 with load of 10852# at 47 deg. F., Berger Patterson VS-1 support-acceptable.

Line: 30B-MS-600-1B Drawings: B-10

Summary Number	Component	NDE Exam	Results
089300	6" Branch Conn. Weld; L2-BC-1	RT VT-1 MT	VT-1; no recordable indication Insig: Light rust 360 deg. on weld, intermittent weld spatter & undercut < 1/32" deep - acceptable. MT; no recordable indications -acceptable. RT; Other, weld configuration not conducive for RT examination.

7. Feedwater Loop A:

Line: 14A-FW-900-1A Drawings: B-12

Summary Number	Component	NDE Exam	Results
093500	Variable Spring Support; FWU-1	VT-3	VT-3; Rej. Top nut not in full thread engagement. NCR 90-173 was generated for Engineering evaluation. Condition previous addressed on NCR G83-132, use-as-is -acceptable.
093505	Variable Spring Integral Attachment Weld, FWU-1	MT	MT; no recordable indications - acceptable.
094300	Elbow to Nozzle Weld; EE	RT MT VT-1	VT-1 & MT; no recordable indications - acceptable. RT; Insig, Various porosity, no apparent change since last examination on 4/7/89.

8. Feedwater Loop B:

Line: 14B-FW-900-1B Drawings: B-14

Summary Number	Component	NDE Exam	Results
095400	Mechanical Snubber Support, FWU-47	VT-3	VT-3; no recordable indications Rubber Boot covering snubber is ripped. Acceptable for ISI examination, Trouble Card written for boot covering.
096800	Rigid Restraint Support; FWU-56	VT-3	VT-3: no recordable indications - acceptable.
097200	Pipe to Elbow Weld; U2	RT MT VT-1 UT PT UTTK	VT-1 & MT; Weld prep for I-98 UT, no recordable indications. PT;(Aug. exam) no recordable indications. UTTK;(Aug. exam) - acceptable. UT; (I-98), no Recordable indications. UT; (I-98), Geom; ID configuration. UT performed in lieu of RT.

Line: 14B-FW-900-1B Drawings: B-14

Summary Number	Component	NDE Exam	Results
099900	Elbow to Nozzle Weld; BB	RT MT VT-1 UT	VT-1 & MT; no recordable indications - acceptable. RT; Insig, Various porosity, slag & suck up. No apparent change since last examination on 3/27/89. UT; no downstream examination, indications were inclusions & ID surface geometry - acceptable.

9. Low Pressure Safety Injection System:

Line: 8A-SI-301B-1B Drawings: B-15

Summary Number	Component	NDE Exam	Results
100310	2" Branch Weld; 5M	PT	PT; no recordable indications - acceptable.
100325	Guide Support; SIU-109	VT-3	VT-3: no recordable indications - acceptable. White powder residue from installation.
100925	Guide Support; SIU-108	VT-3	VT-3: Insig, insulation residue resulting in light corrosion - acceptable. Rej; Loose micarta block identified. NCR 90-160 was generated. Engineering evaluation provided use-as-is status.

10. Low Pressure Safety Injection System:

Line: 8D-SI-301 Drawings: B-16

Summary Number	Component	NDE Exam	Results
106050	Rigid Support; SIU-103	VT-3	VT-3: no recordable indications - acceptable.

11. Low Pressure Safety Injection System:

Line: 6-AC-601 Drawings: B-17

Summary Number	Component	NDE Exam	Results
110300	Variable Spring Support; RHU-78	VT-3	VT-3; no recordable indications - acceptable. Setting of 7/8" equates to a load of 644 #'s at 61 deg. F..

12. Low Pressure Safety Injection System:

Line: 6A-AC-601 Drawings: B-18

Summary Number	Component	NDE Exam	Results
110900	Pipe to Elbow Weld; 1A	PT UT	PT & UT; no recordable indications - acceptable.

13. Residual Heat Removal System:

Line: 8FF-AC-601 Drawings: B-20

Summary Number	Component	NDE Exam	Results
126400	Pipe to Tee Weld; 6	PT UT	PT & UT; no recordable indications - acceptable.

14. Residual Heat Removal System:

Line: 6K-AC-151 Drawings: B-21

Summary Number	Component	NDE Exam	Results
129900	Tee to Pipe Weld; 1	PT UT	PT & UT; no recordable indications - acceptable.

15. Residual Heat Removal System:

Line: 10B-AC-601 Drawings: B-20

Summary Number	Component	NDE Exam	Results
130300	Pipe to Pipe Weld; 1	PT UT	PT; Rej; initial exam indicated linear indications. PT; reexam indicated that the linear marks were created by mechanical means, use-as-is by Materials Engineering - acceptable. UT; no recordable indications - acceptable.
130550	2" Branch Weld; 3A	PT	PT; no recordable indications - acceptable.

16. Residual Heat Removal System:

Line: 10D-AC-601 Drawings: B-20

Summary Number	Component	NDE Exam	Results
133100	Elbow to Flange Weld; 24	PT UT	PT & UT; no recordable indications - acceptable.

17. Residual Heat Removal System:

Line: 10A-AC-601 Drawings: B-22

Summary Number	Component	NDE Exam	Results
133900	Rigid Restraint Support; RHU-28	VT-3	VT-3: no recordable indications - acceptable.
133910	Rigid Restraint Integral Attachment RHU-28	PT	PT: no recordable indications - paint removed - acceptable.

Line: 10A-AC-601' Drawings: B-20A

Summary Number	Component	NDE Exam	Results
136000	Elbow to Tee Weld; 17	PT UT	PT & UT; no recordable indications - acceptable.

18. Residual Heat Removal System:

Line: 10H-AC-601 Drawings: B-23

Summary Number	Component	NDE Exam	Results
140000	Rigid Hanger; RHU-383	VT-3	VT-3: no recordable indications - acceptable.

19. Residual Heat Removal System:

Line: 8C-AC-601 Drawings: B-24

Summary Number	Component	NDE Exam	Results
144150	2" Branch Weld; 19A	PT	PT; no recordable indications Limitations; Hanger clamp 1/4" from toe of weld - acceptable.

20. Residual Heat Removal System:

Line: 6C-AC-601 Drawings: B-27

Summary Number	Component	NDE Exam	Results
154250	Rigid Hanger Support; RHU-58	VT-3	VT-3: no recordable indications - acceptable.
154255	Rigid Hanger Integral Attachment RHU-58	PT	PT: no recordable indications - paint removed - acceptable.
154700	Elbow to Pipe Weld; 1M	PT UT	PT & UT; no recordable indications - acceptable.

21. Residual Heat Removal System:

Line: 8X-AC-601 Drawings: B-26

Summary Number	Component	NDE Exam	Results
158500	Nozzle to Elbow Weld; 1	PT UT	PT & UT; no recordable indications - acceptable.

22. Low Pressure Safety Injection System:

Line: 10-SI-151 Drawings: B-19

Summary Number	Component	NDE Exam	Results
159100	Rigid Support RHU-101	VT-3	VT-3:no recordable indications. Insig. Spot of weld at 0" & 4" on 10" Elbow, weld deposit-no linear indications -acceptable. No ID Tag. Additional Exam after NCR 90-091 for RHU-129 Service Induced Degradation. No Service Induced Degradation found with expanded exam scope.
159105	Rigid Support Integral Attachment Weld, RHU-101	VT-3	VT-3:no recordable indications. Insig. Spot of weld at 0" & 4" on 10" Elbow, weld deposit-no linear indications -acceptable. No ID Tag. Additional Exam after NCR 90-091 for RHU-129 Service Induced Degradation. No Service Induced Degradation found with expanded exam scope.
159450	2" Branch Weld, A4A	PT	PT: no recordable indications - acceptable.

23. Low Pressure Safety Injection System:

Line: 8B-SI-151 Drawings: B-19

Summary Number	Component	NDE Exam	Results
159900	Variable Spring Support, RHU-129	VT-3	VT-3: Service Induced Reject; Rod in spring can is locked. Space in front of can is 1/2", Rod touches rear of can. NCR 90-091 was generated for Engineering disposition. Repairs performed with reexamination acceptable -no recordable indications. Setting of 661# at a Temp. of 69 deg. F. for size 7 - acceptable. See Summary No.'s 159100 & 160400 for expanded scope results.
159901	Variable Spring Integral Attachment Weld, RHU-129	PT	PT: no recordable indications. - acceptable.

24. Low Pressure Safety Injection System:

Line: 8A-SI-151 Drawings: B-19

Summary Number	Component	NDE Exam	Results
160400	Variable Spring Support, RHU-130	VT-3	VT-3: no recordable indications -additional exam after NCR 90-091 for RHU-129 Service Induced Reject. No Service Induced Degradation found. Setting of 482# at 69 deg. F. -acceptable.

25. Low Pressure Safety Injection System:

Line: 4A-SI-301 Drawings: B-16B

Summary Number	Component	NDE Exam	Results
160550	Rigid Support RHU-126	VT-3	VT-3: Reject-Support to elbow not welded all around. Missing 3" to 3 1/2" of weld on upper outmost radius. NCR 90-164 was generated. Engineering disposition and evaluation indicated that the existing weld is adequate and should be used as is - acceptable.

26. High Pressure Safety Injection System:

Line: 4D-SI-1501 Drawings: B-37

Summary Number	Component	NDE Exam	Results
161350	Rigid Restraint Support, SIU-73	VT-3	VT-3: no recordable indications Insig, grease fitting painted over, Restraint will not swivel back and forth -acceptable.
161390	Variable Spring Support, SIU-72	VT-3	VT-3: no recordable indications - settings were taken at a Temp. of 77 deg. F. of 5/8" equating to 250# -acceptable.
161391	Variable Spring Integral Attachment Weld, SIU-72	PT	PT: no recordable indications - paint removed from weld - acceptable.

27. High Pressure Safety Injection System:

Line: 2A-SI-1501 Drawings: B-39

Summary Number	Component	NDE Exam	Results
162090	Tee to 3/4" Reducer Weld, 28	PT	PT: no recordable indications - acceptable.
162210	Rigid Restraint Support, SIU-29	VT-3	VT-3: no recordable indications - acceptable.

28. High Pressure Safety Injection System:

Line: 3B-SI-1501 Drawings: B-40

Summary Number	Component	NDE Exam	Results
162740	Pipe to Elbow Weld; 16	PT UT	PT & UT; no recordable indications - acceptable.

29. High Pressure Safety Injection System:

Line: 3C-SI-1501 Drawings: B-41

Summary Number	Component	NDE Exam	Results
163110	Pipe to Tee Weld; 10	PT UT	PT & UT; no recordable indications - acceptable.

30. High Pressure Safety Injection System:

Line: 3E-SI-1501 Drawings: B-42

Summary Number	Component	NDE Exam	Results
163590	Spring Can Support, SIU-68	VT-3	VT-3: no recordable indications setting of .7" or 549# at a Temp. of 78 deg. F.-acceptable.
163591	Spring Can Integral Attachment Weld, SIU-68	PT	PT: no recordable indications - paint removed- acceptable.

Line: 3E-SI-1501 Drawings: B-42

Summary Number	Component	NDE Exam	Results
163640	Rigid Restraint Support, SIU-66	VT-3	VT-3: Reject. Ear on pipe clamp is bent inward. NCR 90-247 was generated for Engineering review. Clamp was replaced, reexamined-acceptable. Additional Exam performed after NCR 90-107 for SIU-58 that was a Service Induced Reject. No Service Induced Degradation was found with expanded scope - acceptable.
163650	Guide Support SIU-65	VT-3	VT-3: no recordable indications - acceptable.
163690	Rigid Support SIU-63	VT-3	VT-3: no recordable indications - acceptable.
163710	Elbow to Pipe Weld; 16	PT UT	PT & UT; no recordable indications - acceptable. UT, Insig; Geometry downstream - acceptable.
163790	Rigid Restraint Support, SIU-59	VT-3	VT-3: Reject. Identified bushing in upper clamp section while no bushing was in the lower clamp. NCR 90-090 was generated. Bushing is actually a spacer & only required on one bolt per QC. Use-as-is, acceptable. No other recordable indications - acceptable. Additional exam performed after NCR 90-107 for SIU-58 Service Induced Reject. No Degradation found with expanded scope -acceptable.
163820	Rigid Support SIU-58	VT-3	VT-3: Service Induced Reject, Loose nut identified on top while the nut on the bottom tube can be turned by hand. NCR 90-107 was generated for disposition. Nuts were tightened, Reexam after repairs - acceptable. For Service Induced Code Reject, exam. scope was expanded. Exams were performed on Summary #'s 163830, 163790 & 163640.

Line: 3E-SI-1501 Drawings: B-42

Summary Number	Component	NDE Exam	Results
163830	Rigid Restraint Support, SIU-57	VT-3	VT-3: Additional exam after NCR 90-107 for SIU-58 for Service Induced Reject. No Service Induced Degradation was found -acceptable.

31. High Pressure Safety Injection System:

Line: 4E-SI-1501 Drawings: B-43

Summary Number	Component	NDE Exam	Results
164300	Flange to Pipe Weld; 56	PT UT	PT & UT; no recordable indications - acceptable.

32. High Pressure Safety Injection System:

Line: 2D-SI-1501 Drawings: B-44

Summary Number	Component	NDE Exam	Results
164700	Pipe to Valve 878H Weld; 19	PT	PT; no recordable indications - acceptable.

33. Containment Spray System:

Line: 6C-SI-301 Drawings: B-46

Summary Number	Component	NDE Exam	Results
166050	Reducer to Pipe Weld; 2	PT UT	PT & UT; no recordable indications - acceptable. UT, Root Geometry

34. Containment Spray System:

Line: 6E-SI-301 Drawings: B-46

Summary Number	Component	NDE Exam	Results
166840	Rigid Support CSU-33	VT-3 UTTK PT	VT-3 Rej., 1 1/2" of weld missing at crotch & arc strike adjacent to the weld. NCR 90-089 was generated. Arc strike was blended out. UT thickness readings obtained & Acceptable. PT & VT-3 reexam after repairs -acceptable. Engineering evaluation performed on missing weld with a use-as-is determination based on design analysis EWR 2512 & ME 39 Attachment B1.
166842	Rigid Support Integral Attachment CSU-33	PT	PT; no recordable indications - acceptable.

C. CLASS 3 COMPONENTS:

1. Component Cooling:

Line: 8B-AC5-152 Drawings: C-2

Summary Number	Component	NDE Exam	Results
500200	Rigid Support Integral Attachment CCU-86	VT-3	VT-3: no recordable indications - acceptable.
500205	Rigid Support CCU-86	VT-3	VT-3: no recordable indications Insig; no grout - not required per ME121. Weep hole accepted, general practice when welding a confined component -acceptable.

2. Service Water:

Line: 20A-SWO-125-9 Drawings: C-12

Summary Number	Component	NDE Exam	Results
502080	Rigid Support Integral Attachment SWU-212	VT-3	VT-3: no recordable indications Insig. surface rust & light scale on weld - acceptable.
500205	Rigid Support SWU-212	VT-3	VT-3: Rej. 4 nuts 1/8" short of full thread engagement. NCR 90-090 was generated for Engineering review. The disposition indicated that the load was in compression and that the condition was use-as-is. - acceptable.

Line: 6C-SWO-125-9 Drawings: C-12

Summary Number	Component	NDE Exam	Results
502130	Variable Spring Integral Attachment SWU-120	VT-3	VT-3: no recordable indications Insig. light rust on weld - acceptable.
502135	Variable Spring Support, SWU-120	VT-3	VT-3: no recordable indications at a Temp. of 57 deg. F. the setting was 299#'s -acceptable.

Line: 6B-SWO-125-9 Drawings: C-18

Summary Number	Component	NDE Exam	Results
503620	Rigid Restraint Integral Attachment SWU-384	VT-3	VT-3: no recordable indications Insig. Light rust on lugs, welds & pipe - acceptable.
503625	Rigid Restraint Support, SWU-384	VT-3	VT-3: no recordable indications pipe clamp insulated - acceptable.

3. Auxiliary Feedwater:

Line: 3A-FW7-900-1B Drawings: C-1F

Summary Number	Component	NDE Exam	Results
505000	Guide/Rigid Support Integral Attachment AFU-08	VT-3	VT-3: no recordable indications with paint removed -acceptable.
505005	Guide/Rigid Support AFU-08	VT-3	VT-3: Rej. Guide does not conform to the component support drawing. Pipe was replaced by steel block with no attachment weld to the pipe. NCR 90-108 was generated for Engineering review. Disposition indicated that no nonconformance occurred due to review of the revised drawing, Revision 1 -acceptable.

Line: 3A-FW7-900-1B Drawings: C-1F

Summary Number	Component	NDE Exam	Results
505270	Variable Spring Support, AFU-104	VT-3	VT-3: no recordable indications Support is a size 9 with a setting of 870 #'s taken at a Temp. of 272 deg. F.. Support ID# is N-EG-13312-82-330 - acceptable.

4. Standby Auxiliary Feedwater:

Line: 3C-FW-900-1A Drawings: C-20

Summary Number	Component	NDE Exam	Results
507000	Variable Spring Support, AFW-14	VT-3	VT-3: no recordable indications Support is a Navco type E, Model BE-401 size 0 that had a setting of 60#'s at a Temp. of 66 deg. F..
507090	Guide Support, AFU-221 (was AFW-22)	VT-3	VT-3: no recordable indications Other; New tag for AFU-221 was attached to the support & a new baseline was performed and accepted.

Line: 3C-FW-900-1A Drawings: C-20

Summary Number	Component	NDE Exam	Results
507180	Variable Spring Support, AFW-30	VT-3	VT-3: Rej. Can setting reading of 580#'s conflicted with the 540#'s that the Specification allows. NCR 90-185 was generated for Engineering review. The support was reset, reexamined and acceptable.

Line: 3A-FW8-902-A Drawings: C-21

Summary Number	Component	NDE Exam	Results
507380	Guide, Integral Attachment AFU-165 (was AFW-88)	VT-3	VT-3: no recordable indications Other, New tag for AFU-165 was attached to the support. A new baseline was performed and accepted.
507385	Guide, AFU-165 (was AFW-88)	VT-3	VT-3: no recordable indications Other, New tag for AFU-165 was attached to the support. A new baseline was performed and accepted.

Line: 3C-FW-900-1B Drawings: C-24

Summary Number	Component	NDE Exam	Results
508000	Variable Spring Support, AFW-3	VT-3	VT-3: no recordable indications - acceptable. This support is a Navco Type D Size 3 that had a setting of 190#'s at a Temp. of 64 deg. F..
508090	Hydraulic Snubber Support, AFU-208 (was AFW-13)	VT-3	VT-3: Rej. Cold setting should be 3 1/2" was 2 1/8". NCR 90-109 was generated for Engineering review. Disposition indicated that the Gilbert Scales show a 2 1/2" reading. Engineering to revise ME-256 and use-as-is the support to its existing setting.

Line: 4A-FW8-152-B Drawings: C-27

Summary Number	Component	NDE Exam	Results
508860	Guide Support Integral Attachment SWU-500 (was SW-88)	VT-3	VT-3: Rej. Bottom weld on East side has lack of weld at toe. NCR 90-188 was generated for Engineering review. Disposition indicated that repairs will be made. Reexam after repairs indicated insignificant results being that small pinholes < 1/16" were found & acceptable. This support has been upgraded to SWU-500
508863	Guide Support SWU-500 (was SW-88)	VT-3	VT-3: Guide was formerly SW-88 and has been upgraded to SWU-500. Examination indicated no recordable indications - acceptable.

D. HIGH ENERGY COMPONENTS:

1. Main Steam Loop A Outside Containment:

Line: 30A-MS-600-1A Drawings: HE-1

Summary Number	Component	NDE Exam	Results
200005	Pipe to Elbow Weld, D	VT-1 RT MT	VT-1 & RT: no recordable indications. VT-1: Insig.Gouges from line-up lug < 1/32" deep, acceptable. MT: Insig, surface scabs acceptable. RT: Insig. Fine & spot porosity, all porosity acceptable per table A-5 NACSI 3/2/82.
200120	Elbow to Pipe Weld, E2	VT-1 RT MT	VT-1 MT & RT: no recordable indications. VT-1: Insig. Intermittent undercut up & down stream. An arc strike was also identified and prepped to < 1/32" -all acceptable. RT: Insig. Suck-up, fine porosity, slight weld concavity & minor U/C -all acceptable.

2. Main Steam Loop B Outside Containment:

Line: 30B-MS-600-1B Drawings: HE-2A

Summary Number	Component	NDE Exam	Results
200030	Pipe to Elbow Weld, D	VT-1 RT MT UT	VT-1,MT & UT: no recordable indications. VT-1:Insig. Light rust on pipe & weld-acceptable. UT performed in lieu of RT.
200175	Elbow to Pipe Weld, E	VT-1 RT MT UT PT UTTK	VT-1 & MT: no recordable indications for weld prep. PT: no recordable indications. UTTK: initial and final thickness measurements for the weld prep -acceptable. UT: no recordable indications. UT: Geom, Thickness change, root geometry, counterbore and ID - acceptable.
200180	Elbow to Pipe Weld, J	VT-1 RT	VT-1: no recordable indications VT-1, Insig, Minor pits < 1/32" ,light rust and grind marks from weld prep-acceptable. UT, PT & MT: no recordable indications-acceptable. UTTK: initial and final thickness measurements for weld prep - acceptable. UT: Geom, rough root acceptable. UT performed in lieu of RT.

3. Feedwater Loop A Outside Containment:

Line: 14A-FW-900-1A Drawings: HE-3

Summary Number	Component	NDE Exam	Results
200070	Pipe to Pipe Weld, AA	VT-1 RT MT UT	VT-1,MT & UT: no recordable indications. VT-1:Insig. Under cut < 1/32" deep-acceptable. UT: Geom. ID counterbore configuration was confirmed by RT. Root Geometry acceptable. UT performed in lieu of RT.

Line: 14A-FW-900-1A Drawings: HE-3

Summary Number	Component	NDE Exam	Results
200410	Pipe to Pipe Weld, V2	VT-1 RT MT UT PT	VT-1, PT & UT: no recordable indications. VT-1:Insig. One pit, undercut was removed when weld was ground flush - acceptable. MT; Insig. All undercut was removed - acceptable. UT; Geom. ID root configuration. UT performed in lieu of RT.
200425	Pipe to Valve 3993 Weld, W	VT-1 RT MT UT	VT-1, MT & UT: no recordable indications. VT-1:Insig. Arc strike & undercut 1/16" deep - acceptable. UT; Geom. No downstream exam due to valve - acceptable. UT performed in lieu of RT.

4. Feedwater Loop B Outside Containment:

Line: 14B-FW-900-1A Drawings: HE-5

Summary Number	Component	NDE Exam	Results
200080	Elbow to Pipe Weld, F4	VT-1 RT MT	VT-1,MT & RT: no recordable indications. RT:Insig. Stringer pass weld contains fine & spot porosity. No change since last inspected on 1-26-87 - acceptable.
200090	Elbow to Pipe Weld, V	VT-1 RT MT UT PT	VT-1,PT & UT: no recordable indications. VT-1:Insig. 2 pits 1/16" deep, acceptable. MT: no recordable indications on weld prep for UT-acceptable. UT: Geom. Root & counterbore identified. Ut performed in lieu of RT.

Line: 14B-FW-900-1B Drawings: HE-4

Summary Number	Component	NDE Exam	Results
200530	Pipe to Pipe Weld, H2	VT-1 RT MT UT PT	VT-1, MT, PT & UT: no recordable indications - acceptable. VT-1; Insig. Light rust & minor pits < 1/32" - acceptable. UT; Geom. ID root geometry - acceptable. UT performed in lieu of RT
200545	Pipe to Pipe Weld, J	VT-1 RT MT UT PT	MT: Rej. 1/4" linear indication and arc strikes from fabrication. PT: Rej. Linear & pin hole indications. NCR 90-123 generated and repairs made. VT-1, UT & PT: no recordable indications -acceptable. VT-1: Insig. - Light rust. UT thickness readings were performed and acceptable. UT; Geom., ID and root configuration -acceptable. UT performed in lieu of RT.

5. Main Steam, Turbine Building:

Line: 24A-MS-600-1A Drawings: HE-7A

Summary Number	Component	NDE Exam	Results
200235	Pipe to Elbow Weld, B	VT-1 RT MT	VT-1,MT & RT: no recordable indications. RT:Insig. Weld spatter and spot porosity identified - acceptable. No apparent change since last examination on 3-17-82 - acceptable.

6. Feedwater, Turbine Building:

Line: 20-FW-900-1 Drawings: HE-6

Summary Number	Component	NDE Exam	Results
200295	Pipe to Elbow Weld, B	VT-1 RT MT	VT-1 & MT: no recordable indications. RT:Insig. Fine and spot porosity identified. No apparent change since last inspection on 3-19-82.

Line: 8-FW-900-1 Drawings: HE-6

Summary Number	Component	NDE Exam	Results
200340	Pipe to Elbow Weld, D	VT-1 RT MT	VT-1, RT & MT: no recordable indications. RT:Insig. Minor suckup, excessive root bead & spot porosity - acceptable. VT-1: Insig, undercut < 1/32" - acceptable. No apparent change since last examination in 1982 - acceptable.

7. Mainsteam Supports:

Line: 36-MS-600-1 Drawings: HE-7

Summary Number	Component	NDE Exam	Results
201000	Anchor Support, MSU-35	VT-3 MT PT	VT-3, PT & MT: no recordable indications on areas accessible to examination. VT-3; Insig. Grout cracked - acceptable.

Line: 24A-MS-600-1A Drawings: HE-7A

Summary Number	Component	NDE Exam	Results
201200	Hydraulic Snubber Support, S10	VT-3	VT-3; No recordable indications acceptable. VT-3; Insig. Light rust on pipe clamp -acceptable. Snubber SN# is 487620. Fluid reading of 1 7/16 was taken when the Temp. was 72 deg. F..-acceptable.

Line: 24B-MS-600-1B Drawings: HE-7A

Summary Number	Component	NDE Exam	Results
201400	Hydraulic Snubber Support, S20	VT-3	VT-3; No recordable indications acceptable. The Snubber is a Grinnell Size 3 type having a SN# of 11946. The piston position of 2 3/4" was obtained when the temperature was 72 deg. F.-acceptable.

8. Feedwater Supports:

Line: 14A-FW-900-1A Drawings: HE-5

Summary Number	Component	NDE Exam	Results
201600	Mechanical Snubber Support, FWU-21	VT-3	VT-3; Rej. Insulation tight against snubber 6" away on the clamp side. NCR 90-200 was generated for corrective action. Repairs were performed and the support reexamined-acceptable. The Snubber SN# is F-51035-1 that had a setting of 3 5/32" at a Temp. of 75 deg. F..

Line: 14B-FW-900-1B Drawings: HE-4

Summary Number	Component	NDE Exam	Results
201840	Hydraulic Snubber Support, FWU-39	VT-3	VT-3; No recordable indications acceptable. VT-3; Insig. Light rust - acceptable. The Snubber SN# is 61642 which is a type PSA-35 that had a setting of 3 3/8 at a Temp. of 64 deg. F. -acceptable.
201841	Hydraulic Snubber Integral Attachment FWU-39	MT	MT; No recordable indications - acceptable.

Line: 14B-FW-900-1B Drawings: HE-5

Summary Number	Component	NDE Exam	Results
202040	Rigid Support FWU-29	VT-3	VT-3; No recordable indications - acceptable.

E. STEAM GENERATOR TUBING:

1. Steam Generator A:

Summary Number	Component	NDE Exam	Results
800000	Open Generator Tubes having previous identified degradation >20%.	ET	ET; All previous indications >20% were examined to the extent of degradation as a minimum. See the 1990 Eddy Current Examination Report for details.
800150	20% Rotating Random Sample on open Generator Tubes.	ET	ET; 20% Random sample of all open unsleeved tubes were examined full length. Tube R3-C39 was programed but not examined full length. See the 1990 Eddy Current Examination Report for details.
800200	100% of all Unsleeved Tubes on open Generator Tubes.	ET	ET; 100% of all open unsleeved tubes were examined to the #1 Tube Support on the Hot Leg. See the 1990 Eddy Current Examination Report for details.
800350	20% Rotating Random Sample on each type of Sleeve.	ET	ET; 20% Random sample of each type of sleeved Generator Tube were examined from sleeve end to sleeve end as a minimum. Sleeved Tube R19-C22 was programed (excess of 20%) but not examined. See the 1990 Eddy Current Examination Report for details.

2. Steam Generator B:

Summary Number	Component	NDE Exam	Results
801000	Open Generator Tubes having previous identified degradation >20%.	ET	ET; All previous indications >20% were examined to the extent of degradation as a minimum. See the 1990 Eddy Current Examination Report for details.

Summary Number	Component	NDE Exam	Results
801150	20% Rotating Random Sample on open Generator Tubes.	ET	ET; 20% Random sample of all open unsleeved tubes were examined full length. See the 1990 Eddy Current Examination Report for details.
801200	100% of all Unsleeved Tubes on open Generator Tubes.	ET	ET; 100% of all open unsleeved tubes were examined to the #1 Tube Support on the Hot Leg. See the 1990 Eddy Current Examination Report for details.
801350	20% Rotating Random Sample on each type of Sleeve.	ET	ET; 20% Random sample of each type of sleeved Generator Tube were examined from sleeve end to sleeve end as a minimum. See the 1990 Eddy Current Examination Report for details.

F. SYSTEM PRESSURE TESTS:

1. Hydrostatic Testing:

Class: 2

Summary Number	Component	NDE Exam	Results
350710	RSSP-15.7.1 Charging System through the Regenerative Heat Exchanger.	VT-2	VT-2: no recordable indications or leakage - acceptable./

Class: 3

Summary Number	Component	NDE Exam	Results
361600	RSSP-13.16 CVCS "A" Holdup Tank	VT-2	VT-2: no recordable indications -acceptable. Cannot examine under tank due to support.
361700	RSSP-13.17 CVCS "B" Holdup Tank	VT-2	VT-2: no recordable indications -acceptable. Cannot examine under tank due to support.
361800	RSSP-13.18 CVCS "D" Holdup Tank	VT-2	VT-2: no recordable indications -acceptable. Cannot examine under tank due to support.

2. Leakage Testing:

Class: 1, 2 and 3

Summary Number	Component	NDE Exam	Results
411000	PT-7 Leakage of Reactor Coolant System	VT-2	VT-2: no recordable indications - acceptable. Insig. Boron residue found and reported to the Station by work requests for the following; valve 392A bonnet, valve 700 packing, FIP 180, valve 924 bonnet bolts & valve 427 -acceptable.
415300	PT-30, Containment Spray Rings, open flow path test.	VT-2	VT-2: no recordable indications all nozzles appear to have flow -acceptable.
400800	CVCS Holdup Tanks & Piping	VT-2	VT-2: no recordable indications or leakage - acceptable.
400805	CVCS Charging & Letdown outside containment	VT-2	VT-2: no recordable indications or leakage - acceptable.
400820	CVCS Boric Acid Storage Tanks & Piping	VT-2	VT-2: no recordable indications or leakage - acceptable.
400825	CVCS Boric Acid Evaporizer - Demineralizers.	VT-2	VT-2: no recordable indications or leakage - acceptable.
401100	Diesel Generators	VT-2	VT-2: no recordable indications or leakage - acceptable.

G. SNUBBER PROGRAM:

1. Steam Generator A Drawing: A-7F

Summary Number	Component	NDE Exam	Results
600080	SGA-7 Hydraulic Snubber Serial Number: 77-28073-A	VT-3	No recordable indications. Insignificant: Serial numbers 7&8 are inverted with each other. Fluid level 1" from top. Temperature 65 F. Setting 2 7/16" - Acceptable.
600090	SGA-8 Hydraulic Snubber Serial Number: 77-28073-A	VT-3	No recordable indications. Insignificant: Hammer marks on the snubber block. Serial numbers 7&8 are inverted with each other. Fluid level 1". No tag on No. 8. Temperature 65 F. Setting: 2 1/2" - Acceptable.

2. Steam Generator B Drawing: A-7F

Summary Number	Component	NDE Exam	Results
600120	SGB-3 Hydraulic Snubber Serial Number: 77-28073-A	VT-3	No recordable indications. Insignificant: No ID stamp on snubber. Temperature: 65 F. Setting: 2 7/8" - Acceptable.
600130	SGB-4 Hydraulic Snubber Serial Number: 77-28073-A	VT-3	No recordable indications. Insignificant: No ID tag. Hammer marks on snubber block Temperature 65 F. Setting 2 1/2" - Acceptable.

3. Turbine Driven Auxiliary Feedwater Pump Suction:

Line: 4A-SW-125-1B Drawing No. C-16

Summary Number	Component	NDE Exam	Results
600200	AFU-03 Mechanical Snubber Serial Number: 20925 Model PSA-1	VT-3	No recordable indications. Temperature 84 F. Setting: 2" Acceptable.

4. Auxiliary Feedwater Pumps Discharge-Intermediate Building:

Line: 3D-FW7-900-1 Drawing: C-1E

Summary Number	Component	NDE Exam	Results
600220	AFU-31 Mechanical Snubber Serial Number: 24452 Model PSA-1	VT-3	No recordable indications. Temperature: 100 F. Setting: 2" - Acceptable.
600240	AFU-34 Mechanical Snubber Serial Number: 16379 Model PSA-1	VT-3	No recordable indications. Temperature: 98 F. Setting: 2 7/8". - Acceptable.

Line: 3A-FW7-900-1A Drawing: C-1A

Summary Number	Component	NDE Exam	Results
600260	AFU-52 Mechanical Snubber Serial Number: 24453 Model PSA-1	VT-3	No recordable indications. Temperature: 100 F. Setting: 1 3/4". - Acceptable.

Line: 3J-FW7-900-1 Drawing: C-1B

Summary Number	Component	NDE Exam	Results
600280	AFU-75 Mechanical Snubber Serial Number: 20924 Model PSA-1	VT-3	No recordable indications. Temperature: 102 F. Setting: 2". - Acceptable.
600300	AFU-98 Mechanical Snubber Serial Number: 24454 Model PSA-1	VT-3	No recordable indications. Temperature: 302 F. Setting: 1 1/2". - Acceptable.

Line: 3A-FW7-900-1B Drawing: C-1C

Summary Number	Component	NDE Exam	Results
600320	AFU-101 Mechanical Snubber Serial Number: 15751 Model PSA-1	VT-3	No recordable indications. Temperature: 302 F. Setting: 3 1/4" - Acceptable.
600339	AFU-103 (EAST) Mechanical Snubber Serial Number: 18184 Model PSA-3	VT-3	No recordable indications. Temperature: 67 F. Setting: 2 5/8" - Acceptable.
600340	AFU-103 (WEST) Mechanical Snubber Serial Number: 18185 Model PSA-3	VT-3	No recordable indications. Temperature: 67 F. Setting: 3 1/8" Acceptable.

Line: 3A-FW-900-1A Drawing: C-1A

Summary Number	Component	NDE Exam	Results
600360	AFU-109 Hydraulic Snubber Serial Number: 30986 Size 1.5	VT-3	Rejected: Bolt holding reservoir loose. NCR 90-104 Replaced with a new snubber, SN 30986. Temperature: 76 F. Setting: 2 3/4" - Acceptable.
600380	AFU-111 Mechanical Snubber Serial Number: 16377 Model PSA-1	VT-3	No recordable indications. Temperature: 76 F. Setting: 2 1/4" - Acceptable.
600400	AFU-123 Mechanical Snubber Serial Number: 16378 Model PSA-1	VT-3	No recordable indications. Temperature: 290 F. Setting: 1 5/8" - Acceptable.
600420	AFU-124 Mechanical Snubber Serial Number: 244 Model PSA-1	VT-3	No recordable indications. Temperature: 290 F. Setting: 2" - Acceptable.

5. Steam Generator Blowdown 1B:

Line: 2C-MS-600-1B Drawing: B-31

Summary Number	Component	NDE Exam	Results
600460	BDU-16 Mechanical Snubber Serial Number: 10182 Model PSA-5	VT-3	No recordable indications. Temperature: 68 F. Setting: 2 1/2" - Acceptable.

6. Auxiliary Cooling:

Line: 3C-AC-152 Drawing: B-29

Summary Number	Component	NDE Exam	Results
600530	CCU-43 Mechanical Snubber Serial Number: 11462 Model PSA-1	VT-3	No recordable indications. Temperature: 68 F. Setting: 1 1/8" - Acceptable.

7. Auxiliary Cooling From Pump Cooling to Penetration 126:

Line: 3E-AC6-152 Drawing: C-34

Summary Number	Component	NDE Exam	Results
600610	CCU-57 Mechanical Snubber Serial Number: 04160305 Model PSA-3	VT-3	No recordable indications. Temperature: 65 F. Setting: 2 3/8" - Acceptable.

8. Auxiliary Cooling:

Line 4B-AC-152 Drawing: B-30

Summary Number	Component	NDE Exam	Results
600710	CCU-71 Mechanical Snubber Serial Number: 18193 Model PSA-3	VT-3	No Recordable Indications. Temperature: 64 F. Setting: 2 1/2" - Acceptable.

9. 2 Inch Letdown:

Line: 2A-CH4-2501 Drawing: A-23

Summary Number	Component	NDE Exam	Results
600880	CVU-26 Mechanical Snubber Serial Number: 20880 Model PSA-1	VT-3	No Recordable Indications Temperature: 50 F. Setting: 2" - Acceptable.

10. 2 Inch Alternative Charging:

Line: CVC 300 (Class 2 Exempt) Drawing: S-4

Summary Number	Component	NDE Exam	Results
600900	CVU-46 Mechanical Snubber Serial Number: 23517 Model PSA 1/4	VT-3	No Recordable Indications. Temperature: 50 F. Setting: 2 " - Acceptable.

Line: 2A-CH5-2501 Drawing: A-27

Summary Number	Component	NDE Exam	Results
600920	CVU-49 Mechanical Snubber Serial Number: 9483 Model PSA 1/2	VT-3	No Recordable Indications. Temperature: 48 F. Setting: 1 1/2" - Acceptable.

11. CVCS Letdown:

Line: 2G-CH-601 Drawing: B-32

Summary Number	Component	NDE Exam	Results
600940	CVU-80 Mechanical Snubber Serial Number: 23516 Model PSA 1/4	VT-3	No Recordable Indications. Temperature: 50 F. Setting: 1 1/2" - Acceptable.

12. Reactor Coolant Pump 1B Seal Water:

Line: 2AB-CH-2502 Drawing: B-33

Summary Number	Component	NDE Exam	Results
600960	CVU-103 Mechanical Snubber Serial Number: 24450 Model PSA-1	VT-3	No Recordable Indications. Temperature: 66 F. Setting: 2" - Acceptable.
600980	CVU-104 Mechanical Snubber Serial Number: 24449 Model PSA-1	VT-3	No Recordable Indications. Temperature: 62 F. Setting: 2" - Acceptable.

13. Reactor Coolant Pump 1A Seal Water:

Line: 2U-CH-151 Drawing: B-34

Summary Number	Component	NDE Exam	Results
601000	CVU-186 Mechanical Snubber Serial Number: 16541 Model PSA-1	VT-3	No Recordable Indications. Temperature: 60 F. Setting: 1 5/8" - Acceptable.

14. CVCS Letdown:

Line 2H-CH-601 Drawing: B-35

Summary Number	Component	NDE Exam	Results
601040	CVU-345 Mechanical Snubber Serial Number: 9491 Model PSA 1/2	VT-3	No Recordable Indications. Temperature: 69 F. Setting: 1 1/2" - Acceptable.
601060	CVU-351 Mechanical Snubber Serial Number: 12508 Model PSA 1/2	VT-3	No Recordable Indications. Temperature: 63 F. Setting: 1" - Acceptable.

Line: 2N-CH-151 Drawing B-36

Summary Number	Component	NDE Exam	Results
601080	CVU-372 Mechanical Snubber Serial Number: 12917 Model PSA 1/2	VT-3	No Recordable Indications. Temperature: 63 F. Setting: 7/8" - Acceptable.

15. Feedwater Loop A:

Line: 14A-FW-900-1A Drawing: B-12

Summary Number	Component	NDE Exam	Results
601100	FWU-3 Hydraulic Snubber Serial Number: 2500-10-153 Model Berger Paterson Size 10	VT-3	No Recordable Indications. Temperature: 69 F. Setting: 4 1/16" - Acceptable.
601110	FWU-5 Hydraulic Snubber Serial Number: 2500-10-152 Model Berger Paterson Size 10	VT-3	No Recordable Indications. Temperature: 69 F. Setting: 2 1/2" - Acceptable.

16. Feedwater Loop B:

Line: 14B-FW-900-1B Drawing: B-13

Summary Number	Component	NDE Exam	Results
601120	FWU-8 Mechanical Snubber Serial Number: 8033 Model PSA-10	VT-3	No Recordable Indications. Temperature: 58 F. Setting: 3 1/8" - Acceptable.
601130	FWU-12 Mechanical Snubber Serial Number: 8034 Model PSA-10	VT-3	No Recordable Indications. Temperature: 58 F. Setting: 3" - Acceptable.

17. Feedwater Loop A:

Line: 14A-FW-900-1A — Drawing: B-11

Summary Number	Component	NDE Exam	Results
601140	FWU-15 Mechanical Snubber Serial Number: 9358/51644 Model PSA-35	VT-3	No Recordable Indications. Temperature: 241 F. Setting: 2 5/8" - Acceptable.
601150	FWU-17 Mechanical Snubber Serial Number: 9392 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Corrosion on housing. Tube marks on transition tube and housing. Acceptable. Temperature: 242 F. Setting: 5" - Acceptable.
601160	FWU-18 Mechanical Snubber Serial Number: 7067 Model PSA-35	VT-3	No Recordable Indications. Temperature: 211 F. Setting: 4 3/4" - Acceptable.

Line: 14A-FW-900-1A — Drawing: HE-5

Summary Number	Component	NDE Exam	Results
601170	FWU-20 Mechanical Snubber Serial Number: 7049 Model PSA-35	VT-3	Reject: Top of snubber was hitting mounting bracket. NCR 90-246: Angular tolerance OK. Clearance adequate. Use-as-is per E.K. Voci - Acceptable. Temperature:79 F.; Setting: 3" - Acceptable.
601180	FWU-21 Hydraulic Snubber Serial Number: F51035 Model HSSA-20	VT-3	No Recordable Indications. Temperature: 220 F. Setting: 3 11/16" - Acceptable.
601190	FWU-23 Mechanical Snubber Serial Number: 8630 Model PSA-10	VT-3	No Recordable Indications. Temperature: 250 F. Setting: 2 3/4" - Acceptable.
601200	FWU-24 Mechanical Snubber Serial Number: 10061 Model PSA-10	VT-3	No Recordable Indications. Temperature: 280 F. Setting: 3" - Acceptable.

Summary Number	Component	NDE Exam	Results
601209	FWU-26 (EAST) Mechanical Snubber Serial Number: 18179 Model PSA-3	VT-3	No Recordable Indications. Temperature: 156 F. Setting: 3" - Acceptable.
601210	FWU-26 (WEST) Mechanical Snubber Serial Number: 18180 Model PSA-3	VT-3	No Recordable Indications. Temperature: 195 F. Setting: 3" - Acceptable.

Line: 14B-FW-900-1B Drawing: HE-5

Summary Number	Component	NDE Exam	Results
601220	FWU-32 Mechanical Snubber Serial Number: 7053 Model PSA-35	VT-3	No Recordable Indications. Temperature: 222 F. Setting: 3 1/4" - Acceptable.

Line: 14B-FW-900-1B Drawing: B-14

Summary Number	Component	NDE Exam	Results
601230	FWU-38 Mechanical Snubber Serial Number: 9395 Model PSA-35	VT-3	No Recordable Indications. Temperature: 260 F. Setting: 2 3/4" - Acceptable.
601240	FWU-39 Mechanical Snubber Serial Number: 9354/51642 Model PSA-35	VT-3	No Recordable Indications. Temperature: 177 F. Setting: 3 7/8" - Acceptable.
601250	FWU-40 Mechanical Snubber Serial Number: 7066 Model PSA-35	VT-3	No Recordable Indications. Temperature: 267 F. Setting: 3 1/2" - Acceptable.

18. Feedwater Loop B:

Line: 14-B-FW-900-1B Drawing: HE-8

Summary Number	Component	NDE Exam	Results
601260	FWU-42 Mechanical Snubber Serial Number: 6158 Model PSA-35	VT-3	Reject: Insulation on valve 4012 resting on snubber; binding. Re-exam after repair. No Recordable Indications. Temperature: 73 F. Setting: 4 3/8" - Acceptable.
601270	FWU-44 Hydraulic Snubber Serial Number: 643864-20 Model HSSA-30	VT-3	Reject: Insulation not removed. 1) Locknut not tight on snubber side. 2) Snubber does not move. 3) No oil indicator. 4) Reservoir on bottom. 5) Cotter Pin missing. 6) Turnbuckle not on print NCR 90-172 generated. Re-exam after repairs. Temperature: 75 F., Setting: 3 3/4",Acceptable.
601280	FWU-47 Mechanical Snubber Serial Number: 7474 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Boot on snubber has rip with tape on it. Trouble card written for boot. Temperature: 47 F., Setting: 4.875" - Acceptable.
601290	FWU-48 Mechanical Snubber Serial Number: 7475 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Very light corrosion that was cleaned off. Hole in boot on bottom. Temperature: 66 F. Setting: 4 1/4" - Acceptable.
601300	FWU-51 Mechanical Snubber Serial Number: 7483 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Very light corrosion after cleaning. Temperature: 61 F. Setting: 4 1/2". Setting on chart 4 3/8" -Acceptable.
601310	FWU-52 Mechanical Snubber Serial Number: 8607 Model PSA-10	VT-3	No Recordable Indications. Temperature: 182 F. Setting: 1.875" - Acceptable.
601320	FWU-54 Mechanical Snubber Serial Number: 7482 Model PSA-35	VT-3	No Recordable Indications. Temperature: 187 F. Setting: 3 1/2" - Acceptable.

Summary Number	Component	NDE Exam	Results
601330	FWU-57 Mechanical Snubber Serial Number: 10064 Model PSA-10	VT-3	No Recordable Indications. Temperature: 187 F. Setting: 2.875" - Acceptable.

19. Main Steam Loop A:

Line: 30A-MS-600-1A Drawing: B-8

Summary Number	Component	NDE Exam	Results
601350	MSU-2 Mechanical Snubber Serial Number: 7048 Model PSA-35	VT-3	No Recordable Indications. Temperature: 68 F. Setting: 3 1/4" - Acceptable.
601360	MSU-3 Mechanical Snubber Serial Number: 7060 Model PSA-35	VT-3	No Recordable Indications. Temperature: 67 F. Setting: 3" - Acceptable.

20. Main Steam Loop B:

Line: 30B-MS-600-1B Drawing: B-8

Summary Number	Component	NDE Exam	Results
601369	MSU-7 (TOP) Mechanical Snubber Serial Number: 7051 Model PSA-35	VT-3	No Recordable Indications. Insignificant: No damage is apparent to snubber or rear brackets. Total movement is significant -2". Drag force present. Temperature: 80 F. Setting: 2 3/4". Acceptable to ME-256 per A. Butcavage.
601370	MSU-7 (BOTTOM) Mechanical Snubber Serial Number: 7047 Model PSA-35	VT-3	No Recordable Indications. Insignificant: No damage to snubber. Present movement 2". Drag force present. Temperature: 80 F., Setting: 3". Acceptable to ME-256 per A. Butcavage.

Summary Number	Component	NDE Exam	Results
601380	MSU-8 Hydraulic Snubber Serial Number: G-20968-1-30 Model HSSA-20	VT-3	No Recordable Indications. Insignificant: Snubber does not move by hand. Temperature: 100 F., Setting 3 1/2", - Acceptable.

Line: 30-B-MS-600-1B Drawing: B-10A

Summary Number	Component	NDE Exam	Results
601390	MSU-12 Mechanical Snubber Serial Number: 9400 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Pigeon feces. Acceptable per NCR 90-119. Temperature: 190 F. Setting: 3.375" -Acceptable.
601399	MSU-13 (EAST) Mechanical Snubber Serial Number: 1467 Model PSA-100	VT-3	No Recordable Indications. Insignificant: Pigeon feces. Acceptable per NCR 90-119. Temperature: 200 F. Setting: 3.25" - Acceptable.
601400	MSU-13 (WEST) Mechanical Snubber Serial Number: 1464 Model PSA-100	VT-3	No Recordable Indications. Insignificant: Pigeon feces. Acceptable per NCR 90-119. Temperature: 200 F. Setting: 3.25" - Acceptable.
601409	MSU-15 (NORTH) Mechanical Snubber Serial Number: 7476 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Light rust; Does not rotate-acceptable. Temperature: 48 F., Setting: 3" Acceptable.
601410	MSU-15 (SOUTH) Mechanical Snubber Serial Number: 7477 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Light rust. Does not rotate, acceptable. Temperature: 48 F., Setting: 3 1/4", -Acceptable.
601419	MSU-16 (NORTH) Mechanical Snubber Serial Number: 7481 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Pigeon feces. Acceptable per NCR 90-119. Temperature: 190 F., Setting: 3.875" - Acceptable.

Line: 30B-MS-600-1B Drawing: B-10

Summary Number	Component	NDE Exam	Results
601420	MSU-16 (SOUTH) Mechanical Snubber Serial Number: 7480 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Pigeon feces. Acceptable per NCR 90-119. Temperature: 205 F. Setting: 4.375" - Acceptable.
601429	MSU-18 (NORTH) Mechanical Snubber Serial Number: 93695 1645 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Pigeon feces. Acceptable per NCR 90-119. Temperature: 180 F., Setting: 3.625" - Acceptable.
601430	MSU-18 (SOUTH) Mechanical Snubber Serial Number: 937251646 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Pigeon feces. Acceptable per NCR 90-119. Temperature: 160 F. Setting: 3.375" -Acceptable.
601439	MSU-19 (NORTH) Mechanical Snubber Serial Number: 9369 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Light rust. Does not rotate. Acceptable. Temperature: 325 F. Setting: 4.25" -Acceptable.
601440	MSU-19 (SOUTH) Mechanical Snubber Serial Number: 9372 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Light rust. Does not rotate. Accept. Temperature: 235 F. Setting: 4.25" -Acceptable.
601450	MSU-22 Mechanical Snubber Serial Number: 9357 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Light rust. Does not rotate. Accept. Temperature: 235 F. Setting: 4.375" -Acceptable.
601460	MSU-25 Mechanical Snubber Serial Number: 1465 Model PSA-100	VT-3	No Recordable Indications. Insignificant: Light rust. Does not rotate. Accept. Temperature: 235 F. Setting: 4.125" -Acceptable.

Summary Number	Component	NDE Exam	Results
601469	MSU-26 (TOP) Mechanical Snubber Serial Number: 1465 Model PSA-100	VT-3	No Recordable Indications. Insignificant: Light rust. Does not rotate. Accept. Temperature: 235 F., Setting: 4.125", - Acceptable.
601470	MSU-26 (BOTTOM) Mechanical Snubber Serial Number: 9389 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Light rust on attachment plate to pipe. Temperature: 235 F., Setting: 1.5" , - Acceptable.
601480	MSU-27 Mechanical Snubber Serial Number: 9398 Model PSA-35	VT-3	No Recordable Indications. Insignificant: Light rust. Does not rotate. Accept. Temperature: 235 F., Setting: 4.5", -Acceptable.
601490	MSU-29 Mechanical Snubber Serial Number: 1469 Model PSA-100	VT-3	No Recordable Indications Insignificant: Does not rotate. Accept. Temperature: 416 F., Setting: 4 1/8" - Acceptable.
601500	MSU-31 Mechanical Snubber Serial Number: 9356 Model PSA-35	VT-3	No Recordable Indications. Temperature: 416 F. Setting: 2 5/8" - Acceptable.
601510	MSU-32 Mechanical Snubber Serial Number: 1093 Model PSA-100	VT-3	No Recordable Indications. Temperature: 292 F. Setting: 2 1/2" - Acceptable.

21. Main Steam Loop A:

Line: 30A-MS-600-1A Drawing: B-9

Summary Number	Component	NDE Exam	Results
601520	MSU-38 Mechanical Snubber Serial Number: 1090 Model PSA-100	VT-3	Reject: Snubber installed backward to print. NCR 90-101. Snubber may be installed 180 deg. without change of function. Use-as-is. per E.K. Voci. - Acceptable.
601530	MSU-39 Mechanical Snubber Serial Number: 1087 Model PSA-100	VT-3	No Recordable Indications. Insignificant: Does not rotate. Accept. Temperature: 76 F. Setting: 4 3/4" -Acceptable.
601540	MSU-40 Mechanical Snubber Serial Number: 1080 Model PSA-100	VT-3	No Recordable Indications. Insignificant: Does not rotate. Accept. Temperature: 416 F. Setting: 4 5/8" -Acceptable.
601550	MSU-44 Mechanical Snubber Serial Number: 1468 Model PSA-100	VT-3	No Recordable Indications. Insignificant: Does not rotate. No ID tag. Accept. Temperature: 416 F. Setting: 3 1/8" -Acceptable.

22. Main Steam Loop B: 6 Inch Risers:

Line: 6B-MS-600-1B Drawing B-10

Summary Number	Component	NDE Exam	Results
601560	MSU-55 Mechanical Snubber Serial Number: 18195 Model PSA-3	VT-3	No Recordable Indications. Temperature: 109 F. Setting: 1 5/8" - Acceptable.
601570	MSU-57 Mechanical Snubber Serial Number: 15388 Model PSA-3	VT-3	No Recordable Indications. Insignificant: No tag-Accept. Temperature: 138 F. Setting: 2 1/4" - Acceptable.

23. Main Steam Loop A; 6 Inch Risers:

Line: 6B-MS-600-1A Drawing B-9

Summary Number	Component	NDE Exam	Results
601580	MSU-58 Mechanical Snubber Serial Number: 18187 Model PSA-3	VT-3	No Recordable Indications. Temperature: 170 F. Setting: 2 1/4" - Acceptable.
601590	MSU-60 Mechanical Snubber Serial Number: 18186 Model PSA-3	VT-3	No Recordable Indications. Insignificant: Corrosion from pipeline above it -Accept. Temperature: 169 F. Setting: 3" - Acceptable.

24. Main Steam Supply to Auxiliary Feedwater Pump Turbine:

Line: 6B-MS-600-1 Drawing C-32

Summary Number	Component	NDE Exam	Results
601600	MSU-72 Mechanical Snubber Serial Number: 15767 Model PSA-3	VT-3	No Recordable Indications. Temperature: 140 F. Setting: 2 1/2" - Acceptable.
601610	MSU-74 Mechanical Snubber Serial Number: 10083 Model PSA-10	VT-3	No Recordable Indications. Temperature: 335 F. Setting: 3 1/4" - Acceptable.
601620	MSU-75 Mechanical Snubber Serial Number: 8030 Model PSA-10	VT-3	No Recordable Indications. Temperature: 334 F. Setting: 1 7/8" - Acceptable.

Line: 6A-MS-600-1 Drawing C-32

Summary Number	Component	NDE Exam	Results
601630	MSU-78 Mechanical Snubber Serial Number: 8576 Model PSA-10	VT-3	No Recordable Indications. Temperature: 220 F. Setting: 3" - Acceptable.

Summary Number	Component	NDE Exam	Results
601640	MSU-80 Mechanical Snubber Serial Number: 18181 Model PSA-3	VT-3	No Recordable Indications. Temperature: 220 F. Setting: 2 1/8" - Acceptable.
601650	MSU-82 Mechanical Snubber Serial Number: 15768 Model PSA-3	VT-3	No Recordable Indications. Temperature: 220 F. Setting: 2 3/4" - Acceptable.
601659	MSU-84 (EAST) Mechanical Snubber Serial Number: 18182 Model PSA-3	VT-3	No Recordable Indications. Temperature: 72 F. Setting: 3 1/8" - Acceptable.
601660	MSU-84 (WEST) Mechanical Snubber Serial Number: 18183 Model PSA-3	VT-3	No Recordable Indications. Temperature: 72 F. Setting: 2 5/8" - Acceptable.
601670	MSU-85 Mechanical Snubber Serial Number: 10074 Model PSA-10	VT-3	No Recordable Indications. Temperature: 284 F. Setting: 3 3/8" - Acceptable.

25. Low Pressure Safety Injection:

Line: 6-AC-601 Drawing: B-17

Summary Number	Component	NDE Exam	Results
601680	RHU-8 Mechanical Snubber Serial Number: 15755 Model PSA-3	VT-3	No Recordable Indications. Temperature: 61 F. Setting: 2 5/8" - Acceptable.

26. Residual Heat Removal:

Line: 10A-AC7-2501-A Drawing: A-15

Summary Number	Component	NDE Exam	Results
601690	RHU-30 Mechanical Snubber Serial Number: 7065 Model PSA-35	VT-3	No Recordable Indications. Temperature: 61 F. Setting: 1" - Acceptable.
601700	RHU-33 Mechanical Snubber Serial Number: 7064 Model PSA-35	VT-3	No Recordable Indications. Temperature: 61 F. Setting: 3 1/8" - Acceptable.

Line: 8B-AC-601 Drawing: B-23

Summary Number	Component	NDE Exam	Results
601710	RHU-36 Mechanical Snubber Serial Number: 15756 Model PSA-3	VT-3	No Recordable Indications. Temperature: 64 F. Setting: 2 1/2" - Acceptable.

Line: 10-AC-601 Drawing: B-25

Summary Number	Component	NDE Exam	Results
601720	RHU-51 Mechanical Snubber Serial Number: 15752 Model PSA-3	VT-3	No Recordable Indications. Temperature: 76 F. Setting: 2 1/2" - Acceptable.
601730	RHU-53 Mechanical Snubber Serial Number: 15754 Model PSA-3	VT-3	No Recordable Indications. Temperature: 74 F. Setting: 2 3/4" - Acceptable.

Line: 6D-AC-601 Drawing: B-26

Summary Number	Component	NDE Exam	Results
601740	RHU-61 Mechanical Snubber Serial Number: 15753 Model PSA-3	VT-3	No Recordable Indications. Temperature: 79 F. Setting: 2 3/8" - Acceptable.

Line: 10E-AC-601 Drawing: B-20

Summary Number	Component	NDE Exam	Results
601749	RHU-63 (NORTH) Mechanical Snubber Serial Number: 16380 Model PSA-1	VT-3	No Recordable Indications. Temperature: 64 F. Setting: 2 3/4" - Acceptable.
601750	RHU-63 (SOUTH) Mechanical Snubber Serial Number: 16375 Model PSA-1	VT-3	No Recordable Indications. Insignificant: Mortar under mounting plate is cracked. Acceptable per NCR 90-118, A.G. Goetz. Temperature: 64 F. Setting: 3" - Acceptable.

Line: 10G-AC-601 Drawing: B-20

Summary Number	Component	NDE Exam	Results
601760	RHU-69 Mechanical Snubber Serial Number: 8629 Model PSA-10	VT-3	No Recordable Indications. Temperature: 65 F. Setting: 2 1/4" - Acceptable.
601769	RHU-71 (NORTH) Mechanical Snubber Serial Number: 11466 Model PSA-1	VT-3	No Recordable Indications. Temperature: 63 F. Setting: 2 1/2" - Acceptable.
601770	RHU-71 (SOUTH) Mechanical Snubber Serial Number: 11465 Model PSA-1	VT-3	No Recordable Indications. Temperature: 63 F. Setting: 2 1/2" - Acceptable.

27. Safety Injection:

Line: 10GG-AC-601 Drawing: B-20

Summary Number	Component	NDE Exam	Results
601780	RHU-72 Mechanical Snubber Serial Number: 8606 Model PSA-10	VT-3	No Recordable Indications. Temperature: 63 F. Setting: 3" - Acceptable.

28. Residual Heat Removal:

Line: 10D-AC-601 Drawing: B-20

Summary Number	Component	NDE Exam	Results
601790	RHU-75 Mechanical Snubber Serial Number: 8632 Model PSA-10	VT-3	No Recordable Indications. Temperature: 63 F. Setting: 3 1/2" - Acceptable.

Line: 6K-AC-151 Drawing: B-21

Summary Number	Component	NDE Exam	Results
601800	RHU-92 Mechanical Snubber Serial Number: 16376 Model PSA-1	VT-3	No Recordable Indications. Insignificant: Light rust on base plate. Accept. Temperature: 63 F. Setting: 2 1/4" -Acceptable.

29. Safety Injection:

Line: 10-SI-151 Drawing: B-19

Summary Number	Component	NDE Exam	Results
601810	RHU-109 Mechanical Snubber Serial Number: 11463 Model PSA-1	VT-3	No Recordable Indications. Temperature: 79 F. Setting: 2 1/4" - Acceptable.

Summary Number	Component	NDE Exam	Results
601820	RHU-110 Mechanical Snubber Serial Number: 16373 Model PSA-1	VT-3	No Recordable Indications. Temperature: 74 F. Setting: 2 1/4" - Acceptable.

Line: 4-SI-301 Drawing: B-16B

Summary Number	Component	NDE Exam	Results
601830	RHU-119 Mechanical Snubber Serial Number: 15766 Model PSA-3	VT-3	No Recordable Indications. Temperature: 140 F. Setting: 1 5/8" - Acceptable.

Line: 8H-SI-151 Drawing: B-19

Summary Number	Component	NDE Exam	Results
601840	RHU-123 Mechanical Snubber Serial Number: 15765 Model PSA-3	VT-3	No Recordable Indications. Temperature: 89 F. Setting: 2 1/2" - Acceptable.

Line: 10A-SI2-2501-B Drawing: A-17

Summary Number	Component	NDE Exam	Results
601850	SIU-3 Mechanical Snubber Serial Number: 8614 Model PSA-10	VT-3	No Recordable Indications. Temperature: 57 F. Setting: 3.250" - Acceptable.

Line: 10A-SI2-2501-A Drawing: A-16

Summary Number	Component	NDE Exam	Results
601860	SIU-47 Mechanical Snubber Serial Number: 15349 Model PSA-3	VT-3	Reject: Snubber tang binding on pipe clamp. Repaired under NCR 90-187. No Recordable Indications, Acceptable. Temperature: 72 F. Setting: 3 3/8" -Acceptable.

30. Residual Heat Removal:

Line: 10A-AC7-2501-B Drawing: A-14

Summary Number	Component	NDE Exam	Results
601870	SIU-52 Mechanical Snubber Serial Number: 15348 Model PSA-3	VT-3	No Recordable Indications. Temperature: 69 F. Setting: 2 9/16" - Acceptable.

31. Service Water to A & B Diesel Generator Water Coolers:

Line: 10B-SW0-125-9 Drawing: C-13

Summary Number	Component	NDE Exam	Results
601890	SWU-254 Mechanical Snubber Serial Number: 12508 Model PSA 1/2	VT-3	Rejected: Loose nuts on west side of snubber pipe clamp. Repaired under NCR 90-208. Temperature: 42 F. Setting: 1 1/8" -Acceptable.

Line: 8L-SW-125 Drawing: C-14

Summary Number	Component	NDE Exam	Results
601900	SWU-308 Mechanical Snubber Serial Number: 8031 Model PSA-10	VT-3	No Recordable Indications. Temperature: 49 F. Setting: 2 3/4" - Acceptable.
601910	SWU-309 Mechanical Snubber Serial Number: 10073 Model PSA-10	VT-3	No Recordable Indications. Temperature: 49 F. Setting: 3 1/4" - Acceptable.

32. Service Water - Intermediate Building 16" Header to Penetration 312-320:

Line: 8A-SW0-125-9 Drawing: C-16B

Summary Number	Component	NDE Exam	Results
601920	SWU-370 Mechanical Snubber Serial Number: 11464 Model PSA-1	VT-3	No Recordable Indications. Temperature: 45 F. Setting: 2 1/4" Acceptable.

33. Standby Auxiliary Feedwater from Penetration 123 to B Steam Generator Feedwater Header:

Line: 3C-FW-900-1B Drawing: C-24

Summary Number	Component	NDE Exam	Results
601930	AFU-205 (AFW-10) Hydraulic Snubber Serial Number: 12900 Model Grinnell Size 1 1/2	VT-3	No Recordable Indications. Temperature: 81 F. Setting: 3" - Acceptable.
601940	AFU-208 (AFW-13) Hydraulic Snubber Serial Number: 21010 Model Grinnell Fig. 200	VT-3	Reject: Cold setting 2 1/16" should be 3 1/2". NCR 90-109 generated. Gilbert Scales show proper setting to be 2 1/2". Revise ME-256 & Use-as-is per E.K. Voci. Temperature: 66 F. Setting: 2 1/16" -Acceptable.

34. Standby Auxiliary Feedwater from Penetration 119 to A Steam Generator Feedwater Header:

Line: 3C-FW-900-1A Drawing: C-20

Summary Number	Component	NDE Exam	Results
601950	AFW-25 Hydraulic Snubber	VT-3	Other: This snubber has been removed from the line under seismic upgrade program phase 10. Removed from Snubber program.
601960	AFW-26 Hydraulic Snubber	VT-3	Other: This snubber has been removed from the line under seismic upgrade program phase 10. Removed from Snubber program.
601970	AFU-226 (AFW-27) Hydraulic Snubber Serial Number: 12901 Model Grinnell Size 1 1/2	VT-3	No Recordable Indications. Temperature: 86 F. Setting: 3 1/8" - Acceptable.
601980	AFU-224 (AFW-28) Hydraulic Snubber Serial Number: 12905 Model Grinnell Size 1 1/2	VT-3	No Recordable Indications. Temperature: 86 F. Setting: 2 1/2" - Acceptable.

Summary Number	Component	NDE Exam	Results
601990	AFU-225 (AFW-29) Hydraulic Snubber Serial Number: 12906 Model Grinnell Size 1 1/2	VT-3	No Recordable Indications. Temperature: 85 F. Setting: 1 3/4" - Acceptable.
602000	AFU-227 (AFW-31) Mechanical Snubber Serial Number: 25594 Model PSA-3	VT-3	No Recordable Indications. Temperature: 69 F. Setting: 4 1/4" - Acceptable.

35. Pressurizer Relief from Pressurizer to Relief Manifold:

Line: 6AP-RC-602 Drawing S-2

Summary Number	Component	NDE Exam	Results
602010	N601 Hydraulic Snubber Serial Number: 6565 Model Grinnel Size 2	VT-3	Reject: Snubber hits base plate at wall & has no ID tag. NCR 90-184 generated. Base plate does not impair function. Use-as-is per E.K. Voci. New ID tag installed. Temperature: 66 F., Setting: 3" -Acceptable.
602020	N602 Hydraulic Snubber Serial Number: 6568 Model Grinnell Size 2	VT-3	Reject: No ID tag. NCR 90-184 generated, ID tag installed. Temperature: 66 F. Setting: 2 1/4" - Acceptable.

Line: 6BP-RC-602 Drawing: S-2

Summary Number	Component	NDE Exam	Results
602030	N604 Hydraulic Snubber Serial Number: 6566 Model Grinnell Size 2	VT-3	Reject: No ID tag. NCR 90-184 generated. ID tag installed. Temperature: 66 F. Setting: 1 1/2" - Acceptable.
602040	N605 Hydraulic Snubber Serial Number: 6561 Model Grinnell Size 2	VT-3	No Recordable Indications. Temperature: 66 F. Setting: 2 3/4" - Acceptable.

Summary Number	Component	NDE Exam	Results
602050	N607 Hydraulic Snubber Serial Number: 6562 Model Grinnell Size 2	VT-3	Reject: No ID tag. NCR 90-184 generated. ID tag installed. Temperature: 66 F. Setting: 3 1/2" - Acceptable.
602060	N608 Hydraulic Snubber Serial Number: 6563 Model Grinnell Size 2	VT-3	Reject: Snubber has no ID tag & hits base plate. NCR 90-184 generated. The Snubber hitting base plate does not impair its function. Use-as-is per E.K. Voci. New ID tag installed. Temperature: 66 F. Setting: 3 3/4" -Acceptable.

Line: 6BP-RC-602 Drawing: S-2

Summary Number	Component	NDE Exam	Results
602070	N615 Hydraulic Snubber Serial Number: 6564 Model Grinnell Size 2	VT-3	Reject: No ID tag. NCR 90-184 generated. ID tag installed. Temperature: 64 F. Setting: 2 3/8" - Acceptable.

Line: 6AP-RC-602 Drawing: S-2

Summary Number	Component	NDE Exam	Results
602080	N616 Hydraulic Snubber Serial Number: 6567 Model Grinnell Size 2	VT-3	Reject: Cotter key broken off at top near wall, no ID tag. NCR 90-184 generated. Key repaired & ID tag installed. Temperature: 65 F. Setting: 2 5/8" -Acceptable.

36. Power Pressurizer Relief:

Line: 3BP-RC-602 Drawing: S-1

Summary Number	Component	NDE Exam	Results
602090	PS-2 Hydraulic Snubber Serial Number: PD872-39-1244 Model Paul Monroe - PMH2103	VT-3	No Recordable Indications. Temperature: 63 F. Setting: 4" - Acceptable.

Summary Number	Component	NDE Exam	Results
602100	PS-4 Hydraulic Snubber Serial Number: PD86144-1152 Model Paul Monroe - PMH 2103	VT-3	No Recordable Indications. Temperature: 63 F. Setting: 1" - Acceptable.

Line: 3BP-RC-2501 Drawing: S-1

Summary Number	Component	NDE Exam	Results
602110	PS-5 Hydraulic Snubber Serial Number: PD87767-1246 Model Paul Monroe - PMH 2103	VT-3	Reject: Cotter key at top not engaged 100% & deformed. NCR 90-112 generated for repairs. Re-examined after repairs. Temperature: 65 F. Setting: 2 5/8" -Acceptable.
602120	PS-6 Hydraulic Snubber Serial Number: PD87767-1239 Model Paul Monroe -PMH 2103	VT-3	Reject: Broken cotter key/lack of thread engagement at clamp end. NCR 90-112 generated. Re-examined after repairs. Insignificant: Lack of thread engagement acceptable per design analysis by W. Tomo.
602130	PS-8 Hydraulic Snubber Serial Number: 86144-1159 Model Paul Monroe - PMH 2103	VT-3	No Recordable Indications. Temperature: 65 F. Setting: 2 3/4" - Acceptable.
602140	PS-9 Hydraulic Snubber Serial Number: 86144-1154 Model Paul Monroe - PMH 2103	VT-3	No Recordable Indications. Temperature: 65 F. Setting: 3" - Acceptable.
602150	PS-10 Hydraulic Snubber Serial Number: 86144-1157 Model Paul Monroe - PMH 2103	VT-3	No Recordable Indications. Temperature: 66 F. Setting: 3 5/8" - Acceptable.

Line: 3BP-RC-602 Drawing: S-1A

Summary Number	Component	NDE Exam	Results
602160	PS-11 Hydraulic Snubber Serial Number: PD86144-1156 Model Paul Monroe - PMH 2103	VT-3	No Recordable Indications. Temperature: 65 F. Setting: 2 5/16" - Acceptable.

H. SNUBBER PROGRAM FUNCTIONAL TESTING:

1. Steam Generator A Drawing: A-7F

Summary Number	Component	NDE Exam	Results
600081	SGA-7 Hydraulic Snubber	FT	Functionally tested and acceptable.

2. Auxiliary Feedwater Pumps Discharge-Intermediate Building:

Line: 3A-FW7-900-1B Drawing: C-1C

Summary Number	Component	NDE Exam	Results
600341	AFU-103 (EAST) Mechanical Snubber Serial Number: 18184 Model PSA-3	FT	Functionally tested and acceptable.
600342	AFU-103 (WEST) Mechanical Snubber Serial Number: 18185 Model PSA-3	FT	Functionally tested and acceptable.

Line: 3A-FW-900-1A Drawing: C-1A

Summary Number	Component	NDE Exam	Results
600361	AFU-109 Hydraulic Snubber Serial Number: 30986 Size 1.5	FT	Functionally tested S/N 15403. Installed new snubber S/N 30986 - acceptable.

Summary Number	Component	NDE Exam	Results
600381	AFU-111 Mechanical Snubber Serial Number: 16377 Model PSA-1	FT	Functionally tested and acceptable.

3. Reactor Coolant Pump 1B Seal Water:

Line: 2AB-CH-2502 Drawing: B-33

Summary Number	Component	NDE Exam	Results
600961	CVU-103 Mechanical Snubber Serial Number: 24450 Model PSA-1	FT	Functionally tested and acceptable.
600981	CVU-104 Mechanical Snubber Serial Number: 24449 Model PSA-1	FT	Functionally tested and acceptable.

4. CVCS Letdown:

Line 2H-CH-601 Drawing: B-35

Summary Number	Component	NDE Exam	Results
601041	CVU-345 Mechanical Snubber Serial Number: 9491 Model PSA 1/2	FT	Functionally tested and acceptable.

5. Feedwater Loop A:

Line: 14A-FW-900-1A Drawing: HE-5

Summary Number	Component	NDE Exam	Results
601171	FWU-20 Mechanical Snubber Serial Number: 7049 Model PSA-35	FT	Functionally tested and acceptable.

6. Feedwater Loop B:

Line: 14-B-FW-900-1B Drawing: HE-8

Summary Number	Component	NDE Exam	Results
601291	FWU-48 Mechanical Snubber Serial Number: 7475 Model PSA-35	FT	Functionally tested and acceptable.
601301	FWU-51 Mechanical Snubber Serial Number: 7483 Model PSA-35	FT	Functionally tested and acceptable.

7. Residual Heat Removal:

Line: 10G-AC-601 Drawing: B-20

Summary Number	Component	NDE Exam	Results
601761	RHU-69 Mechanical Snubber Serial Number: 8679 Model PSA-10	FT	Functionally tested and acceptable.

8. Safety Injection:

Line: 10A-SI2-2501-A Drawing: A-16

Summary Number	Component	NDE Exam	Results
601861	SIU-47 Mechanical Snubber Serial Number: 15349 Model PSA-3	FT	Functionally tested and acceptable.

9. Service Water to A & B Diesel Generator Water Coolers:

Line: 10B-SW0-125-9 Drawing: C-13

Summary Number	Component	NDE Exam	Results
601891	SWU-254 Mechanical Snubber Serial Number: 12508 Model PSA 1/2	FT	Functionally tested and acceptable.

10. Standby Auxiliary Feedwater from Penetration 119 to A Steam Generator Feedwater Header:

Line: 3C-FW-900-1A Drawing: C-20

Summary Number	Component	NDE Exam	Results
602001	AFU-227 (AFW-31) Mechanical Snubber Serial Number: 25594 Model PSA-3	FT	Functional test not required on this snubber in 1990. Snubber AFU-109 was substituted per G. Wahl.

11. Pressurizer Relief from Pressurizer to Relief Manifold:

Line: 6BP-RC-602 Drawing: S-2

Summary Number	Component	NDE Exam	Results
602041	N605 Hydraulic Snubber Serial Number: 6561 Model Grinnell, Size 2	FT	Functionally tested and acceptable.

12. Power Pressurizer Relief:

Line: 3BP-RC-602 Drawing: S-1A

Summary Number	Component	NDE Exam	Results
602161	PS-11 Hydraulic Snubber Serial Number: PD86144-1156 Model Paul Monroe - PMH 2103	FT	Functionally tested and acceptable.

GINNA NUCLEAR POWER STATION

Inservice Inspection Report

1990 - 1999 Interval, First Outage 1990

Attachment II

Erosion/Corrosion (Minwall) Summary Report

This section provides a detailed listing of components and associated examination results on items that were inspected during the 1990 Ginna Outage. A total of 312 components were examined. Chart number 1 shows by graphic display the types of components that were examined. This chart also provides an overall display of components in relationship to the percentage of nominal wall remaining. Out of a total number of 312 components; 17 components had less than 65% nominal wall remaining.

Table number 1 provides a complete listing of items by components that were examined during the 1990 Ginna Outage. If the listed component had examination results in 1989, the results of that examination is specified along with the results of the 1990 inspection. The percentage of Nominal Wall remaining by component is also included for reference.

1990 Minwall Examination Program and Results:

The following listing identifies the systems, the types of components within the system, the examination result breakdown as a percentage of nominal wall remaining as well as the reference drawing that identifies the component within the specified system.

Drawing No.	System Title	Components Examined:	Results:
M-1	A/B Feedwater Pump Discharge to 5 A/B Heater.	2 Pipes	1 >88% of nominal 1 88-82% of nominal
M-4B	Feedwater Cleanup to Condenser East Wall.	4 Elbows 2 Pipes 2 Reducers	1 >88% of nominal 2 88-82% of nominal 1 82-76% of nominal 4 76-70% of nominal
M-5	Heaters 4 A/B to Feedwater Suction.	2 Elbows 2 Pipes 1 Tee	3 >88% of nominal 2 88-82% of nominal

Drawing No.	System Title	Components Examined:	Results:
M-7B	Condensate Pump & Heater Drain Tank Discharge to Feedwater Suction.	1 Elbow 3 Pipes 2 Tees	6 >88% of nominal
M-10	Low Pressure Downcomers.	1 Pipe	1 76-70% of nominal
M-10A	Low Pressure Downcomers in West Condenser.	5 Elbows 17 Pipes	6 >88% of nominal 10 88-82% of nominal 2 82-76% of nominal 2 76-70% of nominal 2 <65% of nominal
M-10B	Low Pressure Downcomers in East Condenser.	7 Pipes	5 88-82% of nominal 1 82-76% of nominal 1 <65% of nominal
M-11A	MSR 1A, 1B 2nd Pass Drain.	2 Elbows 2 Pipes	3 >88% of nominal 1 88-82% of nominal
M-11B	MSR 2A, 2B 2nd Pass Drain.	1 Pipe 2 Tees	1 >88% of nominal 2 88-82% of nominal
M-12A	MSR 1A, 1B 2nd Pass Drain to 5A H.P.H. & Condenser.	2 Elbows 3 Pipes 1 Tee	3 >88% of nominal 1 88-82% of nominal 1 82-76% of nominal 1 76-70% of nominal
M-12B	MSR 2A, 2B 2nd Pass Drain to 5B H.P.H. & Condenser.	2 Elbows 3 Pipes 2 Reducers 1 Tee	4 >88% of nominal 1 88-82% of nominal 3 82-76% of nominal

Drawing No.	System Title		
M-15A	MSR 1A 4th Pass to 5A Heater.		
	Components Examined:	Results:	
	2 Elbows	1	>88% of nominal
		1	88-82% of nominal
M-15B	MSR 1B 4th Pass to 5B Heater.		
	Components Examined:	Results:	
	2 Elbows	1	>88% of nominal
		1	88-82% of nominal
M-16	MSR 1A & 1B 4th Pass to Condenser.		
	Components Examined:	Results:	
	2 Elbows	2	88-82% of nominal
M-17A	MSR 2A 4th Pass to 5A Heater.		
	Components Examined:	Results:	
	1 Elbow	1	>88% of nominal
M-17B	MSR 2B 4th Pass to 5B Heater.		
	Components Examined:	Results:	
	2 Elbows	2	>88% of nominal
	1 Pipe	1	88-82% of nominal
M-18	MSR 2A & 2B 4th Pass to Condenser.		
	Components Examined:	Results:	
	5 Elbows	8	>88% of nominal
	5 Pipes	4	88-82% of nominal
	2 Tees		
M-19	1A, 2A & 3A L.P.H. Drains to Condenser.		
	Components Examined:	Results:	
	2 Elbows	3	>88% of nominal
	3 Reducers	1	88-82% of nominal
		1	82-76% of nominal
M-21	Steam Extraction to Preseparator B & 4B L.P.H.		
	Components Examined:	Results:	
	10 Elbows	11	>88% of nominal
	9 Pipes	3	88-82% of nominal
	1 Reducer	1	82-76% of nominal
	1 Tee	4	76-70% of nominal
	1 Downcomer (pipe)	1	70-65% of nominal
		2	<65% of nominal

Drawing No.	System Title		
M-22	Steam Extraction to Preseparator A & 4A L.P.H.		
	Components Examined:	Results:	
	5 Elbows	4	88-82% of nominal
	4 Pipes	3	82-76% of nominal
	1 Reducer	2	76-70% of nominal
	1 Tee	3	<65% of nominal
	1 Downcomer (pipe)		
M-27	Condensate Booster Pumps to Hydrogen Coolers.		
	Components Examined:	Results:	
	1 Elbow	1	>88% of nominal
	1 Pipe	1	82-76% of nominal
M-28	Condensate Booster Pumps to Hydrogen Coolers.		
	Components Examined:	Results:	
	1 Elbow	1	>88% of nominal
M-31	MSR 1A & 1B to Heater Drain Tank.		
	Components Examined:	Results:	
	2 Elbows	2	>88% of nominal
	1 Tee	1	88-82% of nominal
M-32	MSR 2A & 2B to Heater Drain Tank.		
	Components Examined:	Results:	
	5 Elbows	9	>88% of nominal
	3 Pipes		
	1 Reducer		
M-41A	5A H.P.H. Drain to 4A L.P.H.		
	Components Examined:	Results:	
	1 Reducer	1	>88% of nominal
M-41B	5B H.P.H. Drain to 4B L.P.H.		
	Components Examined:	Results:	
	1 Elbow	2	>88% of nominal
	1 Pipe		
M-45	Preseparator A/B to Heater Drain Tank & Condenser.		
	Components Examined:	Results:	
	1 Pipe	1	76-70% of nominal
M-46A	Preseparator A/B to Heater Drain Tank & Condenser.		
	Components Examined:	Results:	
	1 Elbow		82-76% of nominal

Drawing No.	System Title	Components Examined:	Results:
M-46B	Preseparator A/B to Heater Drain Tank.	1 Pipe 2 Reducers	3 >88% of nominal
M-47	Turbine Driven Auxiliary Feedwater Pump to Discharge Lines.	5 Elbows 3 Pipes 1 Tee	7 >88% of nominal 2 88-82% of nominal
M-48	Auxiliary Feedwater Pump A to Discharge Lines.	2 Elbows 1 Pipe	3 >88% of nominal
M-49	Auxiliary Feedwater Pump B to Discharge Lines.	1 Pipe	1 >88% of nominal
M-75	Steam Extraction to 5A & 5B H.P.H.	1 Elbow 4 Pipes 2 Reducers 2 Tees 2 Nozzles	5 >88% of nominal 2 88-82% of nominal 4 <65% of nominal
M-81	Feedwater Discharge, Turbine Building.	1 Reducer	1 76-70% of nominal
M-88A	Steam Generator Blowdown Lines, (Intermediate Building)	7 Elbows 7 Pipes	6 >88% of nominal 2 88-82% of nominal 4 76-70% of nominal 1 70-65% of nominal 1 <65% of nominal
M-88D	Steam Generator Blowdown Lines, (Turbine Building)	4 Elbows 6 Pipes 1 Lateral	8 >88% of nominal 2 88-82% of nominal 1 <65% of nominal

Drawing No.	System Title		
M-89A	Steam Generator 1A Blowdown Lines, (Containment Building)		
	Components Examined:	Results:	
	6 Pipes	10	>88% of nominal
	3 Tees		
	1 Nozzle		
M-89B	Steam Generator 1B Blowdown Lines, (Containment Building)		
	Components Examined:	Results:	
	4 Pipes	3	>88% of nominal
	1 Tee	2	88-82% of nominal
M-89C	Steam Generator 1B Blowdowm Lines (Containment Building)		
	Components Examined:	Results:	
	1 Elbow	3	>88% of nominal
	3 Pipes	2	88-82% of nominal
	2 Tees	1	82-76% of nominal
M-90	Feedwater Recirculation (CV-1C).		
	Components Examined:	Results:	
	1 Pipe	1	70-65% of nominal
M-91	Feedwater Recirculation (CV-19).		
	Components Examined:	Results:	
	1 Elbow	1	70-65% of nominal
M-92	Main Feedwater Pump Bypass.		
	Components Examined:	Results:	
	2 Elbows	1	>88% of nominal
		1	76-70% of nominal
M-94	Steam Generator Blowdoun to Condenser.		
	Components Examined:	Results:	
	8 Elbows	15	>88% of nominal
	10 Pipes	3	88-82% of nominal
M-SW	Service Water in Screen House.		
	Components Examined:	Results:	
	8 Elbows	21	>88% of nominal
	15 Pipes	6	88-82% of nominal
	4 Tees		
N/A	Heater Drain Tank to Condenser. Summary Numbers 400001 to 400002		
	Components Examined:	Results:	
	2 Elbows	2	>88% of nominal

Drawing No.	System Title		
N/A	**Main Steam Dump to Condenser.**		
	Summary Numbers 400003 to 400004		
	Components Examined:	Results:	
	2 Reducers	2 >88%	of nominal
N/A	**Blowdown Tank to Condenser.**		
	Summary Numbers 400005 to 400006		
	Components Examined:	Results:	
	1 Elbow	2 >88%	of nominal
	1 Pipe		
N/A	**Blowdown Tank to 3A Low Pressure Heater.**		
	Summary Numbers 400007 to 400008		
	Components Examined:	Results:	
	1 Elbow	2 >88%	of nominal
	1 Pipe		
N/A	**Gland Steam Discharge to Gland Steam Condenser.**		
	Summary Numbers 400009 to 400010		
	Components Examined:	Results:	
	1 Elbow	2 >88%	of nominal
	1 Lateral		
N/A	**Preseparator Drain to Preseparator Vent.**		
	Summary Numbers 400011 to 400015		
	Components Examined:	Results:	
	1 Elbow	4 >88%	of nominal
	3 Pipes	1 <65%	of nominal
	1 Tee		
N/A	**4B Low Pressure Heater Vent.**		
	Summary Numbers 400016 to 400025		
	Components Examined:	Results:	
	3 Elbows	9 >88%	of nominal
	5 Pipes		
	1 Tee		
N/A	**Steam Extraction To 4A Low Pressure Heater.**		
	Summary Numbers 400047 to 400058		
	Components Examined:	Results:	
	12 Pipes	6 76-70%	of nominal
		4 70-65%	of nominal
		2 <65%	of nominal

Component Rejectable Dispositions:

The following listing of Dispositions provides information on components that have less than 70% of Nominal Wall remaining.

System: Low Pressure Downcomers in West Condenser.

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
212180	M-10A	18	90-143	Engineering Evaluation, "use-as-is", Reexamine during 1992 outage.
212190	M-10A	19	90-143	Engineering Evaluation, "use-as-is", Reexamine during 1992 outage.

System: Low Pressure Downcomers in East Condenser.

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
213060	M-10B	2F	90-142	Engineering Evaluation, "use-as-is", Reexamine during 1992 outage.

System: Feedwater Recirculation (CV-18).

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
300440	M-90	43	89-312	No change since last exam during 1989 outage.

System: Feedwater Recirculation (CV-19).

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
300840	M-91	38	89-279	No change since last exam during 1989 outage.

System: Steam Extraction to Preseparator B & 4B L.P.H.

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
301270	M-21	25	90-128	Component was Replaced.
301290	M-21	27	90-128	Component was Replaced.
301300	M-21	28	90-128	Engineering Evaluation, "use-as-is".

System: Steam Extraction to Preseparator A & 4A L.P.H.

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
302010	M-22	28	90-131	Engineering Evaluation, "use-as-is".
302020	M-22	29	90-131	First 20" of component was Replaced.
302130.	M-22	38	90-131	Component was Replaced.

System: Steam Extraction to 5A & 5B H.P.H.

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
303015	M-75	1A	90-168	Component was Replaced.
303017	M-75	1B	N/A	Component was "pad welded" from I.D. when downstream component was Replaced.
303165	M-75	16A	90-168	Component was Replaced.
303167	M-75	16B	N/A	Component was "pad welded" from I.D. when downstream component was Replaced.

System: Steam Generator Blowdown Lines, (Intermediate Building)

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
304425	M-88A	2A	90-150	Adjacent fillet welds were reworked to give a concave shape to reduce stresses.
304435	M-88A	3A	90-150	Adjacent fillet welds were reworked to give a concave shape to reduce stresses.

System: Steam Generator Blowdown Lines, (Turbine Building)

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
385800	M-88D	80	90-215	Welded rolled plate to O.D.

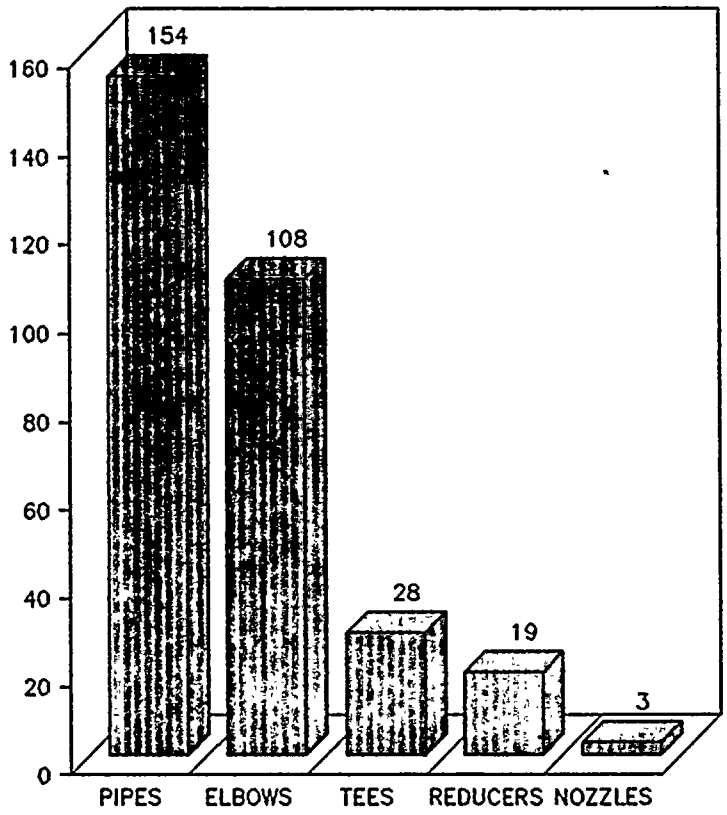
System: Preseparator Drain to Preseparator Vent.

Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
400014	N/A	N/A	90-216	Engineering Evaluation, "use-as-is".

System: Steam Extraction To 4A Low Pressure Heater.

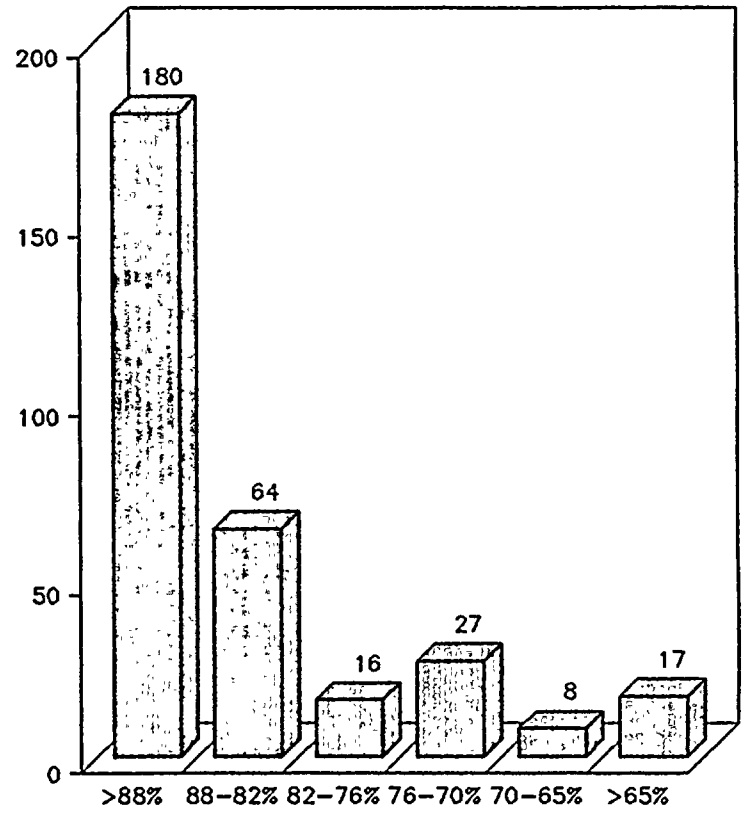
Component Summary No.	Dwg. No.	ID No.	NCR No.	Disposition
400051	N/A	5	90-131	Engineering Evaluation, "use-as-is".
400053	N/A	7	90-131	Engineering Evaluation, "use-as-is".
400054	N/A	8	90-131	Engineering Evaluation, "use-as-is".
400056	N/A	C	90-131	Engineering Evaluation, "use-as-is".
400057	N/A	B	90-131	Engineering Evaluation, "use-as-is".
400058	N/A	A	90-131	Engineering Evaluation, "use-as-is".

MINWALL
1990 GINNA OUTAGE



NUMBER OF EACH COMPONENT TYPE
THAT WAS EXAMINED

MINWALL
1990 GINNA OUTAGE



PERCENTAGE OF NOMINAL
WALL REMAINING

Chart 1

SUMMARY NUMBER	COMP NO.	TYPE	1989 MIN. READING	1990 MIN. READING	PERCENT NOMINAL
** DRAWING NUMBER M-1					
200010	1	P	0.602	0.595	88-82
200015	1A	P	0.534	0.669	>88
** DRAWING NUMBER M-4B					
204510	51	R	0.481	0.483	82-76
204520	52	E	0.494	0.494	88-82
204570	57	E	0.434	0.436	76-70
204590	59	E	0.458	0.448	76-70
204600	60	P	0.495	0.444	76-70
204610	61	E	0.453	0.491	88-82
204630	63	R	0.469	0.454	76-70
204840	84	P	0.209	0.247	>88
** DRAWING NUMBER M-5					
205040	4	E		0.323	88-82
205050	5	P		0.342	>88
205160	16	E		0.319	88-82
205170	17	P		0.365	>88
205250	25	T		0.505	>88
** DRAWING NUMBER M-7B					
208550	55	T		0.395	>88
208600	60	P		0.298	>88
208610	61	E		0.303	>88
208620	62	P		0.310	>88
208630	63	T		0.362	>88
208640	64	P		0.336	>88
** DRAWING NUMBER M-10					
211060	1F	P	0.151	0.273	76-70
** DRAWING NUMBER M-10A					
212010	1	P		0.334	>88
212020	2	E		0.299	>88
212030	3	P		0.324	88-82
212040	4	E		0.327	88-82
212050	5	P		0.333	>88
212060	6	P		0.343	>88
212070	7	E		0.329	88-82
212080	8	P		0.326	88-82
212090	9	E		0.344	>88
212100	10	P		0.324	88-82
212110	11	P		0.344	>88
212120	12	P		0.322	88-82
212130	13	P		0.329	88-82
212150	15	E		0.322	88-82
212160	16	P		0.281	76-70
212180	18	P		0.169	<65
212190	19	P		0.169	<65

Table 1

SUMMARY NUMBER	COMP NO.	TYPE	1989 MIN. READING	1990 MIN. READING	PERCENT NOMINAL
212200	20	P		0.314	88-82
212210	21	P		0.302	82-76
212220	22	P		0.318	88-82
212230	23	P		0.281	76-70
212240	24	P		0.289	82-76
** DRAWING NUMBER M-10B					
213010	2A	P		0.329	88-82
213020	2B	P		0.322	88-82
213030	2C	P		0.291	82-76
213040	2D	P		0.308	88-82
213050	2E	P		0.317	88-82
213060	2F	P		0.176	<65
213070	2G	P		0.318	88-82
** DRAWING NUMBER M-11A					
215410	41	P		0.456	>88
215411	41A	E		0.358	88-82
215412	41B	P		0.424	>88
215420	42	E		0.388	>88
** DRAWING NUMBER M-11B					
216100	88	T	0.363	0.470	>88
216300	108	P	0.375	0.371	88-82
216440	122	T	0.315	0.358	88-82
** DRAWING NUMBER M-12A					
222280	26	P	0.361	0.361	88-82
** DRAWING NUMBER M-12B					
222490	47	R		0.302	88-82
222495	47B	P		0.394	>88
222500	48	E		0.429	82-76
222510	49	P		0.386	>88
222890	87	E		0.332	82-76
222900	88	P	0.357	0.343	82-76
222905	88A	R		0.456	>88
222910	89	T	0.497	0.584	>88
** DRAWING NUMBER M-12A					
223040	101	E	0.372	0.446	>88
223050	102	P		0.400	>88
223080	105	E		0.346	82-76
223090	106	P	0.316	0.304	76-70
223095	106A	R		0.421	>88
** DRAWING NUMBER M-15A					
226250	25	E	0.259	0.258	88-82
226480	48	E	0.246	0.307	>88

Table 1

SUMMARY NUMBER	COMP NO.	TYPE	1989 MIN. READING	1990 MIN. READING	PERCENT NOMINAL
** DRAWING NUMBER M-15B					
227440	96	E	0.253	0.299	>88
227500	102	E	0.265	0.285	88-82
** DRAWING NUMBER M-16					
228060	6	E	0.235	0.260	88-82
228270	27	E	0.288	0.287	88-82
** DRAWING NUMBER M-17A					
230410	41	E	0.271	0.316	>88
** DRAWING NUMBER M-17B					
231020	52	E	0.353	0.372	88-82
231410	91	P	0.255	0.313	>88
231420	92	E	0.240	0.297	>88
** DRAWING NUMBER M-18					
232070	7	E		0.283	>88
232080	8	P		0.266	88-82
232090	9	E		0.275	88-82
232100	10	P		0.291	>88
232260	26	T		0.338	>88
232330	33	E		0.277	88-82
232340	34	P		0.298	>88
232350	35	E		0.291	>88
232360	36	P		0.293	>88
232520	52	T		0.309	88-82
232580	58	E		0.481	>88
232590	59	P		0.540	>88
** DRAWING NUMBER M-19					
234405	40A	E	0.306	0.334	82-76
234420	42	E	0.360	0.362	88-82
234455	45A	R		0.374	>88
234457	45B	R		0.366	>88
234465	46A	R		0.281	>88
** DRAWING NUMBER M-27					
253260	26	P	0.309	0.307	82-76
253270	27	E	0.302	0.357	>88
** DRAWING NUMBER M-28					
254250	25	E	0.312	0.385	>88
** DRAWING NUMBER M-31					
260020	2	T	0.359	0.466	>88
260241	24A	E		0.384	>88
260242	24B	E		0.363	88-82

SUMMARY NUMBER	COMP NO.	TYPE	1989 MIN. READING	1990 MIN. READING	PERCENT NOMINAL
** DRAWING NUMBER M-32					
261380	38	E		0.396	>88
261390	39	P		0.388	>88
261400	40	E		0.392	>88
261410	41	P		0.390	>88
261420	42	E		0.412	>88
261430	43	R		0.320	>88
261460	46	E		0.533	>88
261470	47	E		0.612	>88
261500	50	P		0.547	>88
** DRAWING NUMBER M-92					
281200	20	E		0.450	76-70
281310	31	E	0.351	0.351	>88
** DRAWING NUMBER M-41A					
290016	1B	R		0.447	>88
** DRAWING NUMBER M-41B					
291020	41	E		0.417	>88
291030	42	P		0.407	>88
** DRAWING NUMBER M-45					
298520	52	P	0.332	0.319	76-70
** DRAWING NUMBER M-90					
300440	43	P	0.297	0.298	70-65
** DRAWING NUMBER M-91					
300840	38	E	0.291	0.297	70-65
** DRAWING NUMBER M-21					
301025	2A	D	0.362	0.351	76-70
301040	4	P		0.703	>88
301050	5	E		0.809	>88
301100	10	R		0.759	>88
301180	17	E		0.759	>88
301250	23	P		0.400	82-76
301260	24	E		0.267	76-70
301270	25	P		0.151	<65
301280	26	E		0.324	88-82
301290	27	P		0.233	<65
301300	28	E		0.258	70-65
301310	29	P		0.275	76-70
301320	30	T	0.496	0.473	76-70
301390	37	E		0.309	88-82
301400	37A	P		0.342	>88
301405	39B	P		0.333	>88
301410	38	E		0.312	88-82
301420	39	P		0.354	>88

SUMMARY NUMBER	COMP NO.	TYPE	1989 MIN. READING	1990 MIN. READING	PERCENT NOMINAL
301425	39A	E		0.338	>88
301430	40	E		0.356	>88
301450	42	P		0.361	>88
301470	44	E		0.374	>88
** DRAWING NUMBER M-22					
301705	1B	D	0.342	0.400	82-76
301780	9	E	0.669	0.676	76-70
301830	14	R		0.733	88-82
302010	28	P		0.320	<65
302020	29	P		0.155	<65
302030	30	E		0.328	88-82
302090	35	E	0.332	0.311	88-82
302110	37	T	0.502	0.498	76-70
302120	37A	P		0.300	82-76
302130	38	E		0.185	<65
302140	39	P		0.324	88-82
302150	40	E		0.298	82-76
** DRAWING NUMBER M-75					
303010	1	P		0.318	88-82
303015	1A	R		0.110	<65
303017	1B	N		0.200	<65
303020	2	T	0.343	0.318	88-82
303160	16	P		0.353	>88
303165	16A	R		0.161	<65
303167	16B	N		0.250	<65
303220	22	P	0.271	0.366	>88
303230	23	T	0.318	0.463	>88
303235	23A	P		0.344	>88
303240	24	E	0.211	0.372	>88
** DRAWING NUMBER M-88A					
304420	2	E	0.160	0.160	76-70
304425	2A	P	0.170	0.150	70-65
304430	3	V			NE
304435	3A	P	0.160	0.140	<65
304440	4	E	0.160	0.180	88-82
304450	5	P		0.250	>88
304460	6	V			NE
304560	16	E		0.283	>88
304950	55	E	0.150	0.160	76-70
304955	55A	P	0.160	0.160	76-70
304960	56	E		0.280	>88
304970	57	P	0.150	0.160	76-70
304980	58	E		0.300	>88
304990	59	V			NE
305000	60	P	0.170	0.250	>88
305010	61	V			NE
305020	62	P	0.170	0.220	>88

SUMMARY NUMBER	COMP NO.	TYPE	1989 MIN. READING	1990 MIN. READING	PERCENT NOMINAL
305090	69	E		0.261	88-82
** DRAWING NUMBER M-48					
320370	37	E		0.265	>88
320390	39	P		0.287	>88
320400	40	E		0.285	>88
** DRAWING NUMBER M-49					
323420	42	P	0.266	0.269	>88
** DRAWING NUMBER M-47					
327070	7	E	0.296	0.321	88-82
327080	8	P		0.352	>88
327180	18	T		0.330	>88
327190	19	P		0.278	>88
327200	20	E		0.287	>88
327250	25	E		0.314	88-82
327500	50	E		0.288	>88
327510	51	P		0.292	>88
327570	57	E		0.348	>88
** DRAWING NUMBER M-46B					
328115	11A	R		0.311	>88
328125	12A	R		0.352	>88
328130	13	P		0.420	>88
** DRAWING NUMBER M-46A					
329230	53	E	0.362	0.352	82-76
** DRAWING NUMBER M-88D					
385010	1	E		0.280	>88
385080	8	P		0.262	88-82
385100	10	P		0.288	>88
385260	26	E		0.275	>88
385290	29	P		0.286	>88
385420	42	E		0.289	>88
385470	47	P		0.273	>88
385490	49	P		0.255	88-82
385660	66	E		0.271	>88
385680	68	P		0.272	>88
385800	80	L		0.308	<65
** DRAWING NUMBER M-81					
390060	6	R	0.653	0.614	76-70
** DRAWING NUMBER M-94					
395010	1	P		0.277	>88
395030	3	P		0.301	>88
395040	4	E	0.267	0.270	>88
395100	10	E	0:242	0.277	>88

Table 1

SUMMARY NUMBER	COMP NO.	TYPE	1989 MIN. READING	1990 MIN. READING	PERCENT NOMINAL
395180	18	E		0.290	>88
395190	19	P		0.280	>88
395210	21	P		0.306	>88
395230	23	P		0.298	>88
395240	24	E		0.293	88-82
395270	27	P		0.305	>88
395290	29	P		0.288	>88
395360	36	E	0.231	0.262	88-82
395400	40	E		0.281	>88
395440	44	E		0.259	88-82
395450	45	P		0.280	>88
395470	47	P		0.302	>88
395490	49	P		0.300	>88
395500	50	E		0.309	>88
** DRAWING NUMBER NA					
400001	NA	E		0.759	>88
400002	NA	E		0.672	>88
400003	NA	R		0.381	>88
400004	NA	R		0.359	>88
400005	NA	P		0.397	>88
400006	NA	E		0.427	>88
400007	NA	E		0.277	>88
400008	NA	P		0.265	>88
400009	NA	L		0.234	>88
400010	NA	E		0.252	>88
400011	NA	E		0.240	>88
400012	NA	P		0.160	>88
400013	NA	T		0.200	>88
400014	NA	P		0.102	<65
400015	NA	P		0.200	>88
400016	NA	P		0.195	>88
400017	NA	E		0.190	>88
400018	NA	P		0.200	>88
400019	NA	E		0.230	>88
400020	NA	P		0.195	>88
400021	NA	T		0.250	>88
400023	NA	P		0.180	>88
400024	NA	P		0.180	>88
400025	NA	E		0.230	>88
** DRAWING NUMBER M-89A					
400026	14	N		0.500	>88
400027	15	P		0.225	>88
400028	16	T		0.270	>88
400029	17	P		0.218	>88
400030	18	T		0.350	>88
400031	19	P		0.210	>88
400032	20	P		0.179	>88
400033	28	P		0.210	>88

Table 1

SUMMARY NUMBER	COMP NO.	TYPE	1989 MIN. READING	1990 MIN. READING	PERCENT NOMINAL
400034	29	T		0.270	>88
400035	30	P		0.210	>88
** DRAWING NUMBER M-89B					
400036	8A	P		0.190	88-82
400037	9	T		0.300	>88
400038	11	P		0.220	>88
400039	12	P		0.190	88-82
400040	24	P		0.170	>88
** DRAWING NUMBER M-89C					
400041	26	T		0.300	>88
400042	27	P		0.180	88-82
400043	28	E		0.300	>88
400044	29	P		0.190	88-82
400045	30	T		0.290	>88
400046	31	P		0.170	82-76
** DRAWING NUMBER NA					
400047	1	P		0.281	76-70
400048	2	P		0.261	76-70
400049	3	P		0.280	76-70
400050	4	P		0.274	76-70
400051	5	P		0.259	70-65
400052	6	P		0.267	76-70
400053	7	P		0.250	70-65
400054	8	P		0.253	70-65
400055	D	P		0.274	76-70
400056	C	P		0.234	<65
400057	B	P		0.247	70-65
400058	A	P		0.230	<65
** DRAWING NUMBER M-SW					
400059	1	E		0.360	>88
400060	2	E		0.361	>88
400061	3	E		0.350	>88
400062	4	E		0.359	>88
400063	5	P		0.337	>88
400064	6	P		0.342	>88
400065	7	P		0.332	>88
400066	8	P		0.321	88-82
400067	9	E		0.346	>88
400068	10	E		0.341	>88
400069	11	E		0.365	>88
400070	12	E		0.355	>88
400071	13	P		0.312	88-82
400072	14	P		0.331	>88
400073	15	P		0.353	>88
400074	16	P		0.346	>88
400075	17	P		0.322	88-82

Table 1

SUMMARY NUMBER	COMP NO.	TYPE	1989 MIN. READING	1990 MIN. READING	PERCENT NOMINAL
400076	18	T		0.468	>88
400077	19	P		0.325	88-82
400078	20	T		0.425	>88
400079	21	P		0.331	>88
400080	22	P		0.327	88-82
400081	23	P		0.335	>88
400082	24	T		0.458	>88
400083	25	P		0.330	88-82
400084	26	T		0.425	>88
400085	27	P		0.337	>88

Abbreviation	Component Type
D =	Downcomer
E =	Nozzle
P =	Pipe
R =	Reducer
T =	Tee

Table 1

GINNA NUCLEAR POWER STATION

Inservice Inspection Report

1990 - 1999 Interval, First Outage 1990

Attachment III

Miscellaneous NDE Examination Summary Report

This section consist of all examinations performed as a "service" by Materials Engineering and Inspection Services. The documented results of the below listed examinations have been submitted to the requesting individual and/or department for proper processing. The results of all examinations listed below in this "Miscellaneous" Section are acceptable unless otherwise specified.

1. Maintenance Inservice Inspection Program (MISIP):

The following examinations were performed under the Maintenance Inservice Inspection Program (MISIP).

A. Visual Examinations:
1. Reactor Coolant Pump Motor Lift Sling.
2. Reactor Vessel Head Lift Rig.
3. Reactor Vessel Internals Lift Rig.
4. Steam Generator "A" & "B"- Tubelane Blocking Device Tack Welds.

B. Magnetic Particle Examinations:
1. Containment Crane Hooks - 7 Hooks Total.
2. Reactor Head Chain Hoist Hooks - 3 Hooks Total.
3. Forklift Forks - 11 Forklift Trucks Total.
4. Pallet Cart Forks - 11 Pallet Carts Total.
5. Steam Generators "A" & "B" - Secondary Manway Covers.
6. Steam Generator "B" - #4 and #6 Wedge Port Covers.

C. Visual and Liquid Penetrant Examinations:
1. Steam Generator Nozzle Dams - 10 Dams Total.

D. Ultrasonic Examinations:
1. Steam Generator "B" - #4 and #6 Wedge Port Bolts.

E. Visual and Magnetic Particle Examinations:
1. Steam Generators "A" and "B" - Handhole Covers - North and South.

F. Visual, Magnetic Particle and Ultrasonic Examinations:

1. Steam Generators "A" and "B" - Secondary Manway Bolts.
2. Steam Generators "A" and "B" - Handhole Cover Bolts - North and South.
3. Steam Generator "A" - Outlet Nuts and Studs.
4. Steam Generator "B" - Inlet Nuts and Studs.
5. Steam Generator "B" - Outlet Nuts and Studs.

2. Turbine Components:

The following examinations were performed on Turbine Components. Note: Rejectable Examination results are reported to the Turbine Department for disposition and corrective action as required.

A. Visual Examinations:

1. Inner Cylinder (#2) - Stationary Blade Rings Governor End, Stages 8, 9, 10 and 11.

B. Liquid Penetrant Examinations:

1. L.P. Turbine - #3 Bearing Babbitt Surface.
2. Valve Stem Seat - Main Steam Stop Valve.
3. Stellite Seats - #2 and #4 Control Valves.
4. Outer Diaphragm - Top Outside Welds.
   Rejectable - Vertical Weld #3, 4 1/2" Linear Thru Wall Indication.
5. Outer Diaphragm - Bottom Inside Welds.
   Rejectable -Inside Welds; Vertical Weld #3, 4 1/2" Linear Thru Wall Indication; Welds # 7 & 8, 22 Cold Lap Indications.
6. Inner Diaphragm - Top Outside Welds.
7. Inner Diaphragm - Bottom Inside Welds.
8. "C" L.P. Rotor - Stellite Ends.
   Rejectable - Blade W7G at Governor End Stage 9 contained Linear Indication 1/4" Long at Blade Edge.
9. "1" L.P. Rotor - Outer Diaphragms - crossover Pipe.

C. Magnetic Particle Examinations:

1. L.P. Turbine Inner Cylinder-Blade Rings & Flow Dividers.
   Rejectable - #1 Inner Lower Cylinder 6th Stage contained 21 Linear Indications at Inner Edge of Blades; Upper Blade Ring 4th Stage Contained 9 Linear Indications on Inner Edge of Blades; Lower Blade Ring 2nd Stage Contained 4 Linear Indications on Inner Edge of Blades; Upper Blade Ring 2nd Stage contained 9 Linear Indications on Inner Edge of Blade; 3rd Stage Contained 2 Linear Indications on Inner Edge of Blade and Between the 3rd and 4th Stages had 1 Linear Indication on Base Surface; Lower Blade Ring 4th Stage Contained 45 Linear Indications on Inner Edge of Blades.

2. #2 Inner Cylinder - Governor End Stages.
   Rejectable - Upper 9th and 10th Stage, Nozzle to Base Weld-Steam Undercut on Base Side.

3. Upper Inner Cylinder - Steam Seals, Control Valve Muffler and Baskets.
   Rejectable - #1 Upper Inner Cylinder Contained 39 Indications on Inner Edge of Blades; #1 Upper Inner Cylinder (other side) Contained 12 Indications on Inner Edge of Blades.
4. Inner Crossover Diaphragm.
5. Outer Crossover Diaphragm.
6. "C" L.P. Rotor - End Shafts.
7. "C" L.P. Rotor - Generator End - Stages 1 - 11.
8. "C" L.P. Rotor - Generator End - Stages 1 - 11.

D. Ultrasonic Examinations:

1. #5 Bearing - Top & Bottom Halves - Babbitt Bonding.
2. Inner & Outer Shell Dowel Studs - 14 Studs Total.
3. Inner & Outer Shell Studs - 92 Studs Total.
4. Control Valve Studs - 52 Studs Total.
5. Stop Valve Studs - 30 Studs Total.
6. Crossover Hi Hat Studs - 52 Studs Total.
7. Inner Cylinder Shell Studs - 55 Studs Total.
8. H.P. Coupling Studs - 20 Studs Total.
9. Stop Valve Pilot & Mummy Studs - 24 Studs Total.
10. Outer Cylinder Shell Studs - 52 Studs Total.
11. Jack Shaft Thrust Studs - 30 Studs Total.
12. Cross Pipe Vertical Joint - 44 Studs Total.
13. Crossover Pipe Diaphragm - 52 Bolts Total.
14. Crossover Studs - 5 Studs Total.
15. Inner Cylinder - 17 Studs Total.
16. Control Valve Tension Bolts - 2 Bolts Total.
17. Blade Ring - 4 Studs Total.
18. Stud 688J343-19 - 25 Studs Total.
19. Inner Shell Studs - 682J249-23 - 2 Studs Total.
20. Inner Shell Studs - 682J343-21 - 4 Studs Total.
21. Inner Shell Studs - 682J343-16 - 4 Studs Total.
22. Upper Studs - 885J343-19 - 25 Studs Total.
23. Inner Shell Studs - 682J342-15 - 12 Studs Total.
24. Miscellaneous Turbine Studs - 120 Studs Total.

E. Liquid Penetrant and Ultrasonic Examinations:

1. Upper Babbitt.
2. Lower Babbitt.

3. Engineering Work Requests (EWR's):

The following examinations were performed in support of Engineering Work Requests (EWR's).

A. Visual Examinations:
1. 1/2" Valves 1032-1 & 1032-2, Cleanliness-EWR 4613.
   Rejectable - Valve 1032-2 Contained a Burr on the I.D. of the Joint "Prep" Joint #3. Burr removed and verified by Fluor Daniel QC personnel - Accepted.
2. 20" Service Water Header, Cleanliness-EWR 4930.

B. Radiographic Examinations:
1. Containment Penetration - 2 Welds - EWR 4998.
   Rejectable - Weld #12 Contained Lack of Fusion, Porosity and Linear Indications. Repaired, Re-examined and Accepted.

C. Visual and Ultrasonic Examinations:
1. Heater Drain Tank Pump Barrels - "A" & "B" - EWR 5053.

4. Maintenance Work Orders (MWO's):

The following examinations were performed in support of Maintenance Work Orders (MWO's).

A. Visual Examinations:
1. CV Equipment Hatch - Geneva Latch - Plug Welds.
2. CV Floor Grating - Tack Welds.
3. Pressurizer Safety Line - Nuts for Valves 434 & 435 Replacements (48 nuts & 93 studs accepted).
   Rejectable - 3 Nuts Rejected at QA Receiving, 1 Nut Contained Axial Cracks in Hex Head, 2 Nuts Contained Thread Damage that Prevented Engagement on Stud.

B. Ultrasonic Thickness Examinations:
1. H.P. Turbine Drain Lines - Pipe & Fittings - Wall Thickness.

C. Visual and Liquid Penetrant Examinations:
1. 3/4" Nitrogen Supply to AOV-846, 8 Socket Welds.
2. Charging Pump "A" - 3/4" Valve 281C & Piping - 8 Welds.
3. Safety Injection Pump "B" - 3/4" Nipple to Elbow Weld.
4. MSIV 3516 - Lug & Nut Locking Weld.

5. MS Non-return Check Valve 3518B - Disc Stop Welds. Rejectable - Steam Erosion, Undercut and Porosity; Re-Examined after Repairs-Acceptable.
6. MS Non-return Check Valve 3519A - Disc Stop Welds. Rejectable - Undercut and Porosity in Disc Stop Welds; Re-Examined after Repairs-Acceptable.
7. "A" & "B" Service Water Pressure Gage - Header -Pipe - Coupling Welds. (1" pipe to coupling to 20" pipe)
8. Charging Pump "A", - Valve 285 to Pipe Weld.
9. Charging Pump "B", - Valve 284 to Pipe Weld.
10. Charging Pump "C", - Valve 283 to Pipe Weld. Rejectable - Linear Indication 1 1/4" to 1 1/2" Long on Weld Centerline. Reexamined after repairs - accepted.

D. Liquid Penetrant and Magnetic Particle Examinations:
1. "A" Preseparator - 16" Diameter Pipe Replacement - 3 Welds.

5. Miscellaneous Examinations:

The following examinations were performed in support of miscellaneous work.

A. Visual Examinations on Welds:
1. Astregal Plate Welds - Fire Door # 23.
2. Skin Repair - Fire Door # F-500.
3. Heater Drain Tank at Valve 3098, 1/2" Socket Welds - 3 Welds.
4. Freeze Plugs in Nitrogen Supply Lines.
5. "B" Reactor Coolant Pump - Insulation Support Welds.
6. Steam Generator Blowdown - Socket Welds.
7. DI System - Valve 8419 - Valve Cap.
8. Steam Generator Blowdown - Valve 5701, 2 Welds.
9. "B" Steam Extraction Line - 5 Welds.
10. Check Valve 4023 - Tack Welds.
11. Personnel Hatch - Outer Door - Geneva Latch Plate Plug Weld.
12. Steam Generator Blowdown - Valve 5735 - 8 Socket Welds.
13. Equipment Hatch Rollup Door - Channel to Plate, Angle and Lug.
14. "B" CCW Pump Motor Stand to Base Plate.

B. Visual Examinations on Components:
1. Class 2 Valve Upgrade for Henze - Valve Nuts.
2. Valve Stem - Feedwater Valve 4269.
3. Steam Generator Primary Manway Washers - 201 Washers Accepted. Rejectable - 2 Washers Contained Machine Cuts on ID Surface.

4. Main Steam Support S-4, Re-exam for NCRG89-365.
5. Service Water Headers - Screen House - Min Wall & Surface Condition.
6. Service Water 20" Header - Pipe Downstream of Support SWU-616.
7. Fire Doors #37, #46, #27, #26, #79, #61 and #62 - Fillet Welds.
8. Service Water Screen House - Surface Condition Downstream from Valve 4606.
   Rejectable - Undercut 1/32" to 3/64", UT Examination of Wall Thickness Resulted in Identifying Wall to be 0.355" Thick. Remaining Wall Thickness is 0.305". Wall Loss at This Area 14%.
9. Service Water Screen House - Surface Condition Downstream from Support SW-620.
   Rejectable - Random Pitting and Undercut Around Entire Circumference. Pitting 8 to 17% of Wall Thickness (1/64" to 1/16" Deep).
10. "A" Service Water Pump - 2 Rigid Restraints.

C. Liquid Penetrant Examinations on Components:

1. Ten Inch (10") SI Line, 2" Weld-O-Let to Pipe.
   Rejectable - 2 Linear Indications 1/2" & 1/8" Long. NCR 90-102 Generated. Defects were Repaired by Blending, Re-examined -Acceptable.
2. Freeze Plugs for Leakage Examination on Pipe - 2 Areas.
3. Main Feedwater Pump - Shaft & Impeller.
4. Feedwater Valve 4272 - Seat Examination.
5. Low Pressure Steam Extraction - Bellows Welds.
6. Valve 4270 - Stem, Seats, Plug & Gage.
7. Valve # 390 - Filter Vent Socket Weld.
8. CVCS - Pipe to Valve # 390.
9. Hanging Scaffolds, A1, A2, B1, B2 & B3, 25 Welds Total.
   Rejectable -Linear Indications in B1 & B2. These welds are to be repaired and reexamined before the 1991 AI&O.
10. Bolts from Check Valves 870A, 870B, 889A & 889B.

D. Magnetic Particle Examinations on Components:

1. Auxiliary Feedwater Valve 4017 - Seat Area.
   Rejectable - Linear Indications on Seat Area and in Body, NCR 90-96 was Generated. Defects were Repaired and Re-examined -Acceptable.
2. L.P. Steam Extraction to 2A Heater Bellows.
3. Steam Extraction Pipe to Elbow Welds.
4. Steam Extraction to 5A & 5B Heaters - Reducer Welds (2).
5. Blowdown to Blown Tank - Component 80 Pad Weld.

E. Ultrasonic Examinations on Components:

1. Auxiliary Feedwater-Three Supports-Verify Bolt Lengths.
2. 1A & 1B Diesel Generators-Ductwork-Verify Bolt Lengths.
3. Spent Fuel Pit "A" - Verify Bolt Lengths.
4. Support AFW-600, Verify Bolt Lengths.

5. Support SWU-623, Verify Bolt Lengths.
6. Service Water - 14" Diameter Pipe - Wall Thickness.
7. Support SWU-625, Verify Bolt Lengths.
8. S/G "A", Swirl Vane Wrapper- Wrapper Thickness.
   Rejectable - Wrapper Thickness Eroding, NCR 90-124 Generated. Fabricated and Installed 7 Impingement Plates on Severely Eroded Areas. Use-As-Is on Feedwater Tee Erosion. A Monitoring Program Initiated for the Feedwater Tee & Steam Generator Wrapper Erosion not Repaired in the 7 Areas Above.
9. S/G "B", Swirl Vane Wrapper- Wrapper Thickness.
   Rejectable - Wrapper Thickness Eroding, NCR 90-124 Generated, Action Taken was Incorporated into Item #8 Above.
10. Sampling Line at AOV 5736 - Wall Thickness.
11. Service Water Support SWU-631, SWU-632, SWU-633 and SWU-634, Verify Bolt Lengths.
12. Service Water Support SWU-568, Verify Bolt Lengths.

F. Visual and Liquid Penetrant Examinations on Components:
1. RHR System - By Valve 687B - Sock-o-let Weld.
2. Service Water Header - Valve 4799 - 2 Welds, Coupling and "Prep" Areas.

G. Visual and Magnetic Particle Examinations on Components:
1. "A" S/G - Swirl Vane Wrapper Patches.
   Rejectable - Wrapper Thickness Eroding, NCR 90-124 Generated, Action Taken was Incorporated into Items #8 & 9 in Paragraph E Above.
2. Main Steam System - Valve 3411 - Flange Seal Area.

H. Visual, Magnetic Particle & Ultrasonic Examinations on Components:
1. Retaining Block Studs - Baseline for Valves 870A, 870B, 880A and 880B.

I. Material Identification Employing the Alloy Analyzer.
1. Pipes and Elbows in the Min-Wall (Wall Thickness) Program.
2. "B" Reactor Coolant Pump Insulation Support Bushings.

J. Min-Wall (Wall Thickness) Examinations on Components:
1. Service Water - Elbow Downstream of Valve 9633B.
2. Standby Auxiliary Feedwater -Pipe by Support SWO-508
   Rejectable - Reading Numbers 1, 2, 4, 5, 7 & 10 are Below 0.207" Thickness.

K. Visual and Min-Wall (Wall Thickness) Examinations on Components:
1. 3/4" Chemical Feed Line to "A" S/G Feedwater.
   Rejectable - Loose Top Bolt and Missing Lower Bolt on Angle Iron. Missing Nut on U-Bolt.