

PALO VERDE NUCLEAR GENERATING STATION

UNIT 1 INSERVICE INSPECTION REPORT

SECOND REFUELING OUTAGE

ARIZONA NUCLEAR POWER PROJECT

P. O. BOX 52034

PHOENIX, AZ 85072

PREPARED BY: Alex Mallow

DATE: 7-18-90

REVIEWED BY: R. Broening

DATE: 7-19-90

APPROVED BY: D. B. Hansen

DATE: 8-13-90

COMMERCIAL SERVICE DATE: 1/28/86

REPORT DATE: 7/18/90

9010050033 900924
PDR ADOCK 05000528
Q PDC



INDEX

1.0 INTRODUCTION

2.0 EXAMINATION SUMMARY

3.0 EXAMINATION TECHNIQUES

4.0 ACCESSIBILITY

5.0 PERSONNEL

6.0 EQUIPMENT AND MATERIALS

7.0 REPAIRS AND REPLACEMENTS

APPENDIX A - Inservice Inspection Summary Report

APPENDIX B - Inservice Inspection Code Limitations

APPENDIX C - Form NIS-1

1
2
3
4
5
6
7
8
9
10



UNIT 1 INSERVICE INSPECTION REPORT

1.0 Introduction

This report is a summary of the examinations performed during the second Inservice Inspection (ISI) at Palo Verde Nuclear Generating Station - Unit 1. This was the second ISI for Interval 1- Period 1 and was conducted during the second refueling outage which began March 5, 1989 and ended July 5, 1990. Palo Verde - Unit 1 began commercial operation on January 28, 1986.

This report identifies the components examined, the examination methods used, the examination report numbers and summarizes the examination results for each of the following categories of items:

1. ASME Section XI - Class 1 and 2 pressure retaining components and their supports.
2. Augmented high energy piping systems in accordance with PVNGS UFSAR Section 6.6.8.
3. Augmented examinations of CHR, RHR, and ECCS piping systems in accordance with 10CFR50.55a.

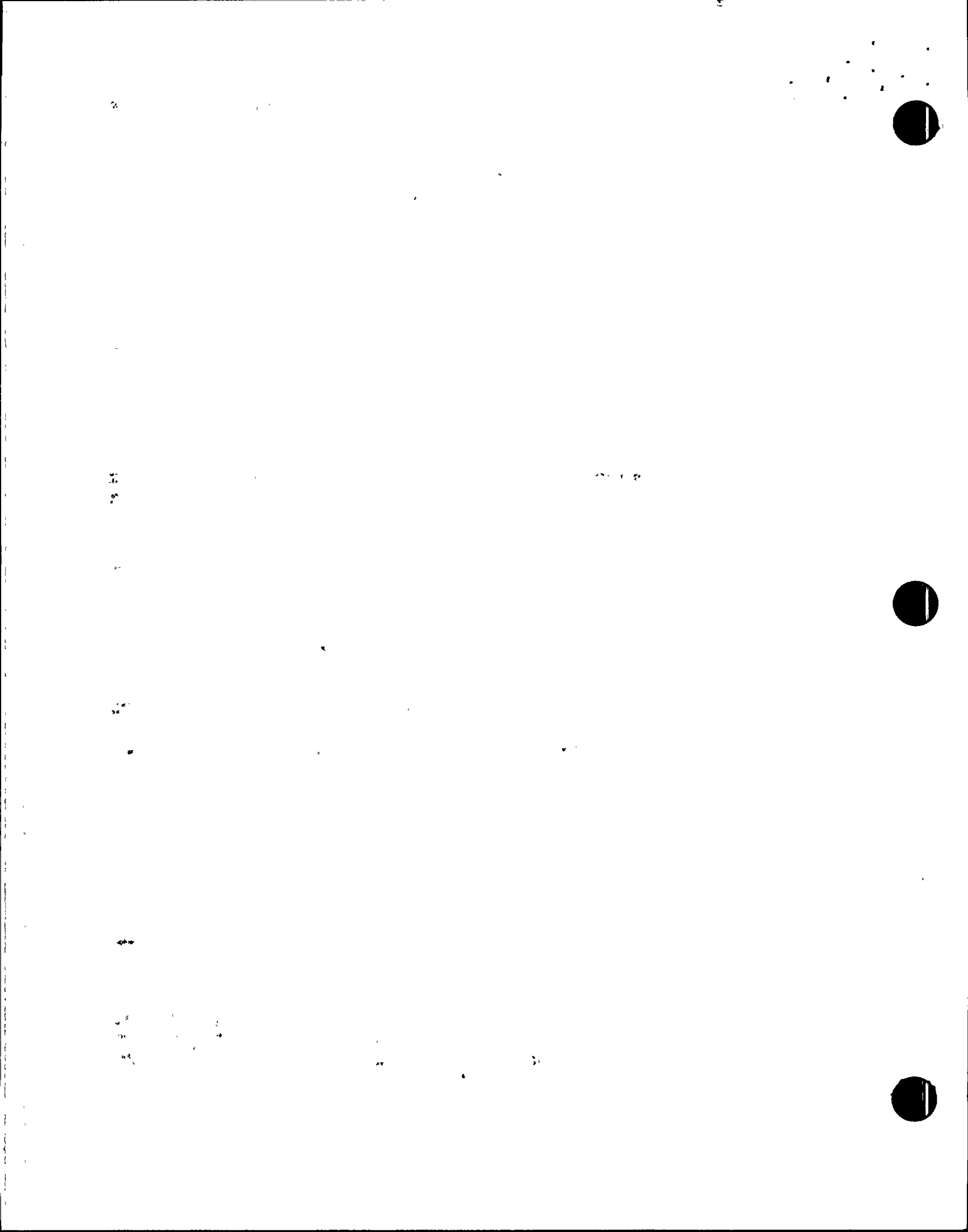
This report is a compilation of the period one refueling outages. All of the examination report numbers listed in Appendix A for the second refueling are numbered with an 89-1XXX or 90-1XXX.

2.0 Examination Summary

The evaluation of the results from the inservice inspection examinations indicated that the integrity of the systems has been maintained. All discrepancies were corrected in accordance with PVNGS work control practices and ASME Section XI. The discrepant findings noted are as follows:

<u>ZONE</u>	<u>ITEM</u>	<u>DISCREPANCY</u>
AFF-131	SG-82-H11	Broken Cotter pin
36	RC-91-HAK	Loose Lock Nut
54	SG-2-H13	Loose Lock Nut
64	SG-39-H12	Loose Lock Nut
64	SG-39-H13	Pipe Clamp Rotation
64	SG-39-H16	Missing Snap Ring
22	SI-193-H19	Spherical Bearing
54	SG-2-H4	Spherical Bearing
21	RC-51-H2	Pipe Clamp Rotation

All loose bolting on supports was tightened. The broken cotter pin in zone AFF-131 was replaced. The missing snap ring in zone 64 was replaced. The misaligned pipe clamps were all rotated to the correct orientation. The spherical bearings in zones 22 and 54 were all cleaned and inspected by plant personnel. All discrepant items were re-examined following any rework.



3.0 Examination Techniques

The three types of examinations utilized to perform the Inservice Examinations along with the actual nondestructive examination technique are identified in the legend below:

VT - Visual	VT-1	General Condition
	VT-2	Leakage
	VT-3	Structural Condition
	VT-4	Operability
S - Surface	PT	Liquid Penetrant
	MT	Magnetic Particle
	ET	Eddy Current
VOL - Volumetric	UT	Ultrasonic

All of the nondestructive examinations were performed using specific techniques and procedures that are indicated in ASME Section XI, or alternative examinations that are demonstrated to be equivalent or superior to those identified.

4.0 Accessibility

All items were examined to the extent practical. Any code limitations encountered during the examination are documented in Appendix B.

5.0 Personnel

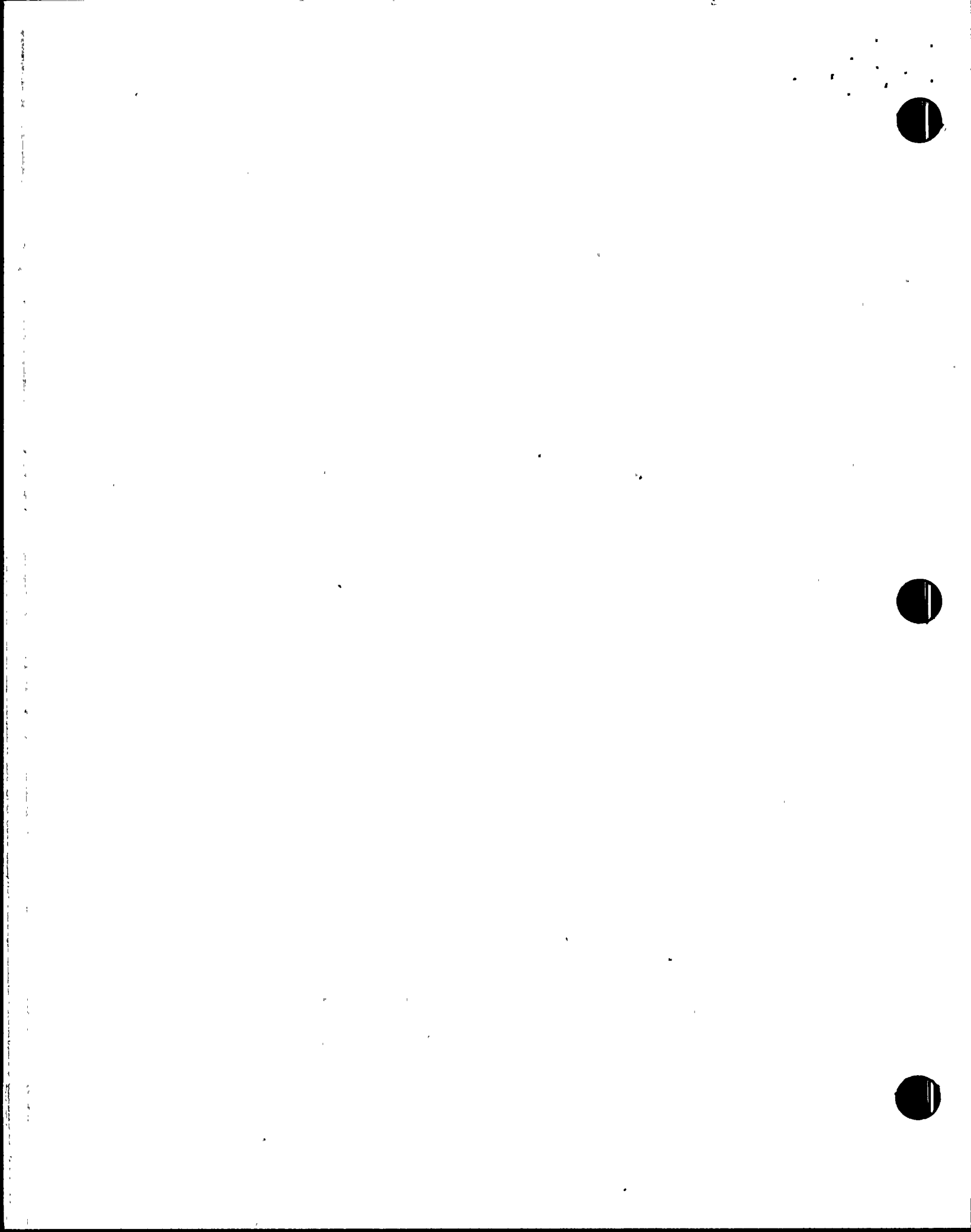
All nondestructive examinations were performed by either APS or Lambert, MacGill, Thomas, Inc. (LMT) personnel. All personnel were certified in accordance with programs written to comply with the applicable requirements of ASME Section XI. Copies of all certifications are maintained on file. Kemper Group provided the Authorized Nuclear Inservice Inspector until May 1, 1990. The Hartford Steam Boiler Inspection and Insurance Company provided the Authorized Nuclear Inservice Inspector after May 1, 1990.

6.0 Equipment and Materials

The equipment and materials utilized were certified to the requirements of ASME Section XI. Copies of all certifications are maintained on file.

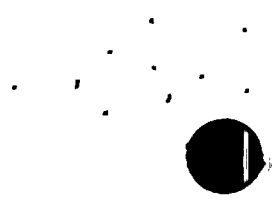
7.0 Repairs and Replacements

This report covers all repair and replacements completed in the time period from the first refueling outage until the end of this refueling outage. All repairs and replacements were performed to ASME Section XI requirements. The replacements included the steam generator manway bolting, and thirteen snubbers replaced under the snubber functional test program. In addition, four 12" block valves were installed in the Atmospheric Dump Valve (ADY) lines (Zone 51 and 52) and the applicable preservice examinations were performed on the new welds. The applicable records and reports for the specific repair or replacement are maintained on file. A preservice examination was performed on all repaired or replaced items.



APPENDIX A

INSERVICE INSPECTION
SUMMARY REPORT



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



APPENDIX A

Definition of Terms

The column headings for the tables on the following pages are defined below:

ASME Item No: The ASME Section XI category/Item Number as listed in the Code, Subsections IWB and IWC. The item number prefixes are as defined below:

AHE - Indicates augmented high energy system piping

B - Indicates ASME Class 1 systems

BFLYWH - Indicates reactor coolant pump flywheels

BIWF - Indicates ASME Class 1 supports

C - Indicates ASME Class 2 systems

CIWF - Indicates ASME Class 2 supports

FR - Indicates 10CFR50 augmented examinations

Zone No: Area designation per PYNGS design.

Comp/Sys: Component or system descriptor.

Insp Per: Inspection Period

Reqd: Number of items required to be completed in the Period.

Item ID: Item Identification per ISI Program/Zone drawings.

Reports (VOL): Volumetric exam report number.

(SURF): Surface exam report number

(VIS): Visual exam report number

Remarks: Re-exam or Replacement remarks indicate acceptable examination results.



APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks				
AHES.11	53	Steam to Aux FW	One	10	53-11	87-1415	87-1381	-					
					53-12	87-1416	87-1381	-					
					53-13	87-1417	87-1381	-					
					53-14	87-1418	87-1381	-					
					53-15	87-1419	87-1381	-					
					53-21	87-1420	87-1381	-					
					53-22	87-1421	87-1381	-					
					53-23	87-1422	87-1381	-					
					53-24	87-1423	87-1381	-					
					53-25	87-1424	87-1381	-					
AHE 5.21	47	MS SG1 270	One	9	47-1	87-1413	87-1374	-					
					47-2	87-1414	87-1374	-					
					47-4	87-1440	87-1374	-					
					47-8	87-1441	87-1374	-					
					47-12	87-1442	87-1374	-					
					47-14A	87-1382	87-1373	-					
					47-16	87-1443	87-1373	-					
					47-20	87-1444	87-1373	-					
					47-24	87-1385	87-1396	-					
					47-25	87-1386	87-1373	-					
					47-28	87-1391	87-1373	-					
					47-29	87-1392	87-1373	-					
					47-30	87-1387	87-1373	-					
					51	Atmos Dump SG1	One	11	51-1	87-1393	87-1377	-	
									51-2	87-1399	87-1378	-	
									51-3	87-1394	87-1378	-	
									51-4	87-1395	87-1378	-	
51-5	87-1400	87-1378	-										
51-6	87-1401	87-1380	-										
51-7	87-1402		-	Limited MT									
51-8A	87-1403		-	Limited MT									
51-8B	87-1404	87-1380	-										
51-9	87-1405	87-1380	-										
52	Atmos Dump SG2	One	0	51-51	87-1406	87-1397	-						
				51-84	89-1013	89-1021	-	PSE/Block valve					
				51-85	89-1014	89-1021	-	PSE/Block valve					
				51-86	89-1015	89-1021	-	PSE/Block valve					
				51-87	89-1016	89-1021	-	PSE/Block valve					
				52-84	89-1017	89-1021	-	PSE/Block valve					
				52-85	89-1018	89-1021	-	PSE/Block valve					
52	Atmos Dump SG2	One	0	52-86	89-1019	89-1021	-	PSE/Block valve					
				52-87	89-1020	89-1012	-	PSE/Block valve					
60	Downcomer FW SG1	One	9	60-7	87-1425	87-1398	-						
				60-8	87-1426	87-1398	-						
				60-9	87-1427	87-1364	-						
				60-11	87-1428	87-1364	-						
				60-12	87-1364		-	Limited UT					
				60-14	87-1429	87-1364	-						
				60-15	87-1430	87-1364	-						
				60-16	87-1431	87-1364	-						
60-17	87-1432	87-1364	-										



44

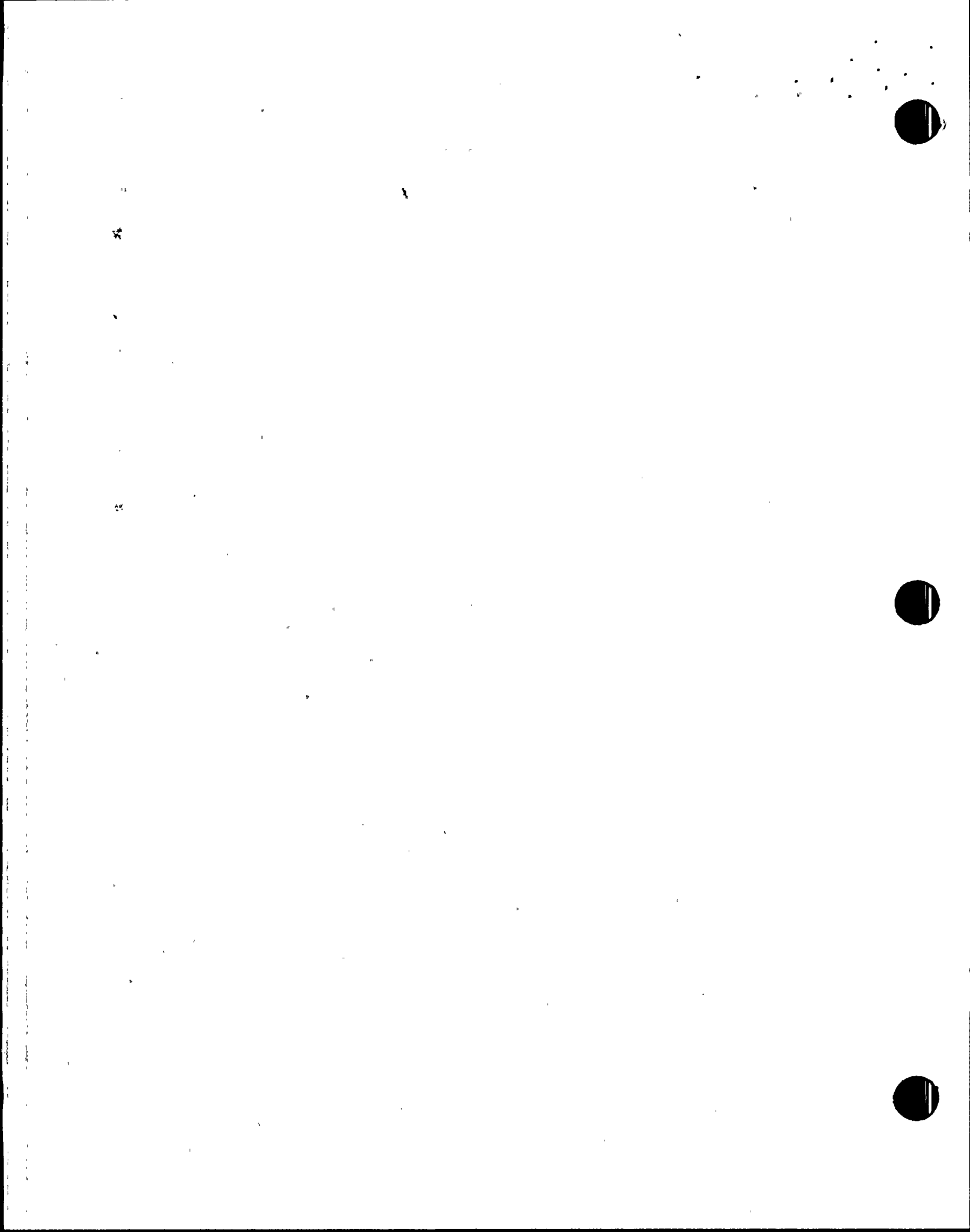
APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks
AHE5.21	66	Blowdown SG 1	One	9	66-1	87-1370	87-1366	-	Limited UT
					66-2	87-1407	87-1366	-	
					66-3		87-1366	-	
					66-5	87-1408	87-1366	-	
					66-6	87-1409	87-1366	-	
					66-7	87-1410	87-1366	-	
					66-8	87-1411	87-1366	-	
					66-9	87-1412	87-1366	-	
					66-26	87-1371	87-1366	-	
AHE 5.31	47	MS SG1 270	One	7	47-3	87-1388	87-1374	-	
					47-7	87-1389	87-1374	-	
					47-11	87-1390	87-1374	-	
					47-15	87-1438	87-1373	-	
					47-19	87-1383	87-1373	-	
					47-23	87-1384	87-1373	-	
					47-27	87-1439	87-1373	-	
B01.22	02	Closure Head	One	33%	2-4	87-1603	87-1598	-	0 degrees
						87-1604	-	-	45 degrees
						87-1605	-	-	60 degrees
B01.30	01	Reactor Vessel	One	50%	1-14	nxt refuel	-	-	
B01.40	02	Closure Head	One	33%	2-1	87-1603	87-1598	-	0 degrees
						87-1604	-	-	45 degrees
						87-1605	-	-	60 degrees
B02.11	05	Pressurizer	One	33%	5-2	89-1190	-	-	0 degrees
						89-1191	-	-	45 degrees
						89-1192	-	-	60 degrees
					5-8	89-1188	-	-	0 degrees
						89-1199	-	-	45 degrees
						89-1200	-	-	60 degrees
B02.31	03	Steam Generator 1	One	1	3-5	89-1222	-	-	0 degrees
						89-1216	-	-	45 degrees
						89-1210	-	-	60 degrees
	04	Steam Generator 2	One	1	4-2	89-1146	-	-	0 degrees
						89-1147	-	-	45 degrees
						89-1148	-	-	60 degrees
B02.32	03	Steam Generator 1	One	4	3-10	89-1224	-	-	0 degrees
						89-1218	-	-	45 degrees
						89-1212	-	-	60 degrees
					3-11	89-1225	-	-	0 degrees
						89-1219	-	-	45 degrees
						89-1213	-	-	60 degrees
					3-12	89-1226	-	-	0 degrees
						89-1220	-	-	45 degrees
						89-1214	-	-	60 degrees
					3-13	89-1227	-	-	0 degrees
						89-1221	-	-	45 degrees
						89-1215	-	-	60 degrees
B02.40	03	Steam Generator 1	One	1	3-6	89-1223	-	-	0 degrees
						89-1217	-	-	45 degrees
						89-1211	-	-	60 degrees



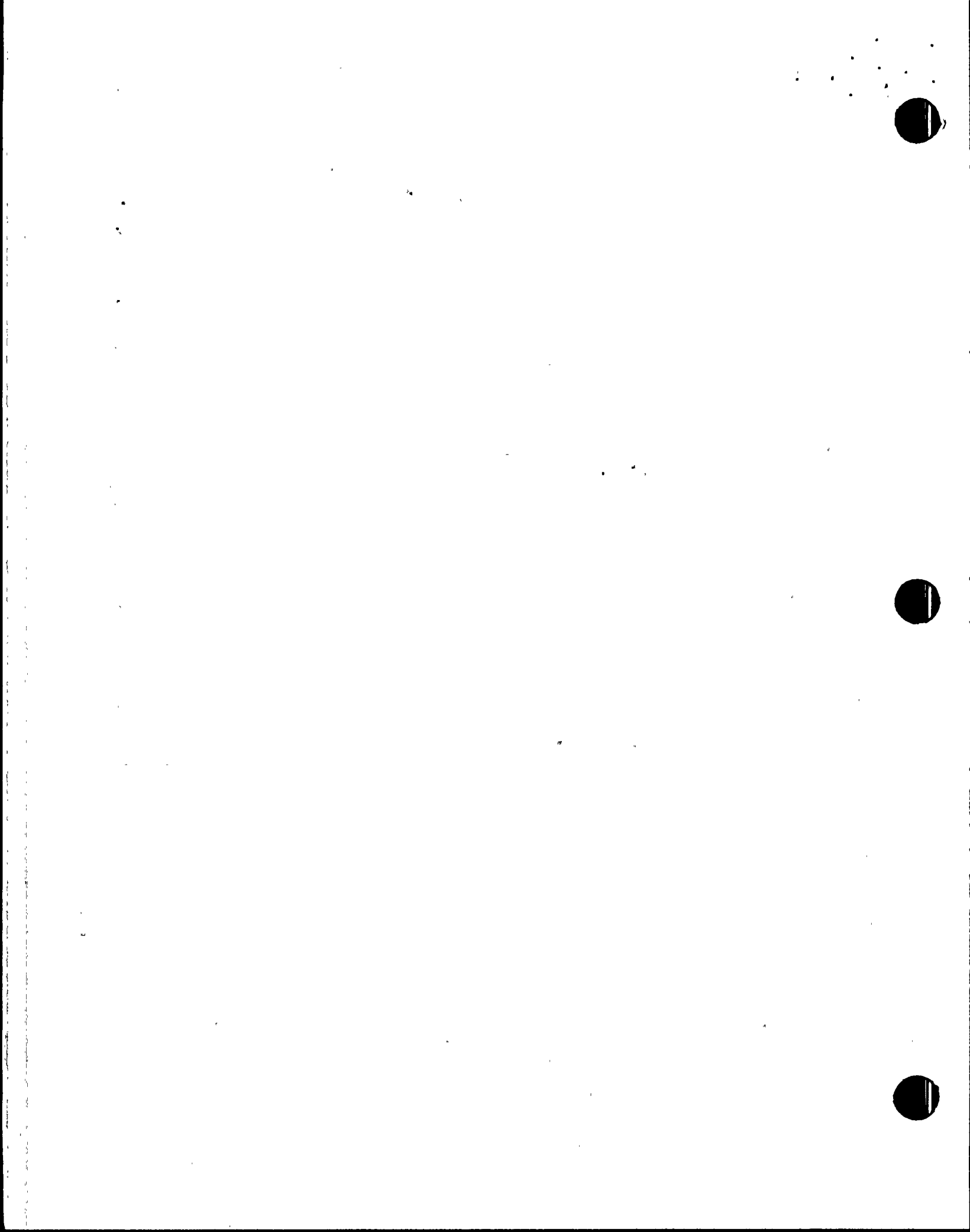
APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks
B03.090	01	Reactor Vessel	One	2	1-15	89-W*	-	-	*Seperate Report by Westinghouse
					1-18	89-W*	-	-	
B03.100	01	Reactor Vessel	One	2	1-15	89-W*	-	-	
					1-18	89-W*	-	-	
B03.110	05	Pressurizer	One	33%	5-11	89-1189	-	-	0 degrees
						89-1201	-	-	45 degrees
						89-1202	-	-	60 degrees
					5-9	89-1236	-	-	0 degrees
						89-1237	-	-	45 degrees
						89-1238	-	-	60 degrees
B03.120	05	Pressurizer	One	2	5-11	89-1234	-	-	Nozzle Inner Radius
					5-9	89-1235	-	-	Nozzle Inner Radius
B03.130	03	Steam Generator 1	One	1	3-9	89-1163	-	-	0 degrees
						89-1164	-	-	45 degrees
						89-1165	-	-	60 degrees
	04	Steam Generator 2	One	1	4-9	89-1149	-	-	0 degrees
						89-1150	-	-	45 degrees
						89-1151	-	-	60 degrees
B03.140	03	Steam Generator 1	One	1	3-9	89-1182	-	-	Inner Radius
	04	Steam Generator 2	One	1	4-9	89-1183	-	-	Inner Radius
B04.12	02	Closure Head	One	8	-	-	-	90-1032	
B04.13	01	Reactor Vessel	One	5	-	-	-	90-1032	
B04.20	05	Pressurizer	One	3	-	-	-	90-1032	
B05.040	20	Pressurizer Surge	One	1	5-34	89-1233	89-1073	-	
	31	Pressurizer Safety	One	1	5-29	87-1584	87-1526	-	
B05.130	21	SD Cooling I	One	1	6-11	89-1186	89-1170	-	
	23	Safety Injection 1A	One	1	9-10	89-1205	89-1107	-	
B05.140	27	PZR Spray 1A	One	1	9-11	90-1020	89-1108	-	
	32	Drain 1A	One	1	8-18	-	87-1546	-	
B06.010	02	Closure Head Nuts	One	18	1-18	-	89-1042	-	
						-	89-1045	-	
B06.030	02	Closure Head Studs	One	18	1-18	89-1034	89-1041	-	
						-	89-1044	-	
B06.050	02	Closure Head Washers	One	18	1-18	-	-	89-1043	
B06.180	16	RCP 1A Flange Studs	One	5	1-16	87-1640	87-1633	87-1632	Vis/IEB 82-02
						-	-	89-1010	
						-	-	89-1011	
	17	RCP 1B Flange Studs	One	5	1-16	86-185	86-186	-	PSE
						87-1641	87-1619	87-1618	Vis/IEB 82-02
						-	87-1634	87-1635	Vis/IEB 82-02
						-	-	89-1010	
						-	-	89-1011	
	18	RCP 2A Flange Studs	One	5	1-16	87-1642	87-1613	87-1614	Vis/IEB 82-02
						-	-	89-1010	
						-	-	89-1011	
	19	RCP 2B Flange Studs	One	5	1-16	87-1643	87-1616	87-1617	Vis/IEB 82-02
						-	-	89-1010	
						-	-	89-1011	
B06.190	NA	RCP Flange	One	1	-	-	-	89-1033	RCP 1A
B06.200	16	RCP 1A Nuts & Rings	One	5	1-16	-	-	87-1539	
	17	RCP 1B Nuts & Rings	One	5	1-16	-	-	87-1540	
	18	RCP 2A Nuts & Rings	One	5	1-16	-	-	87-1541	
	19	RCP 2B Nuts & Rings	One	5	1-16	-	-	87-1542	



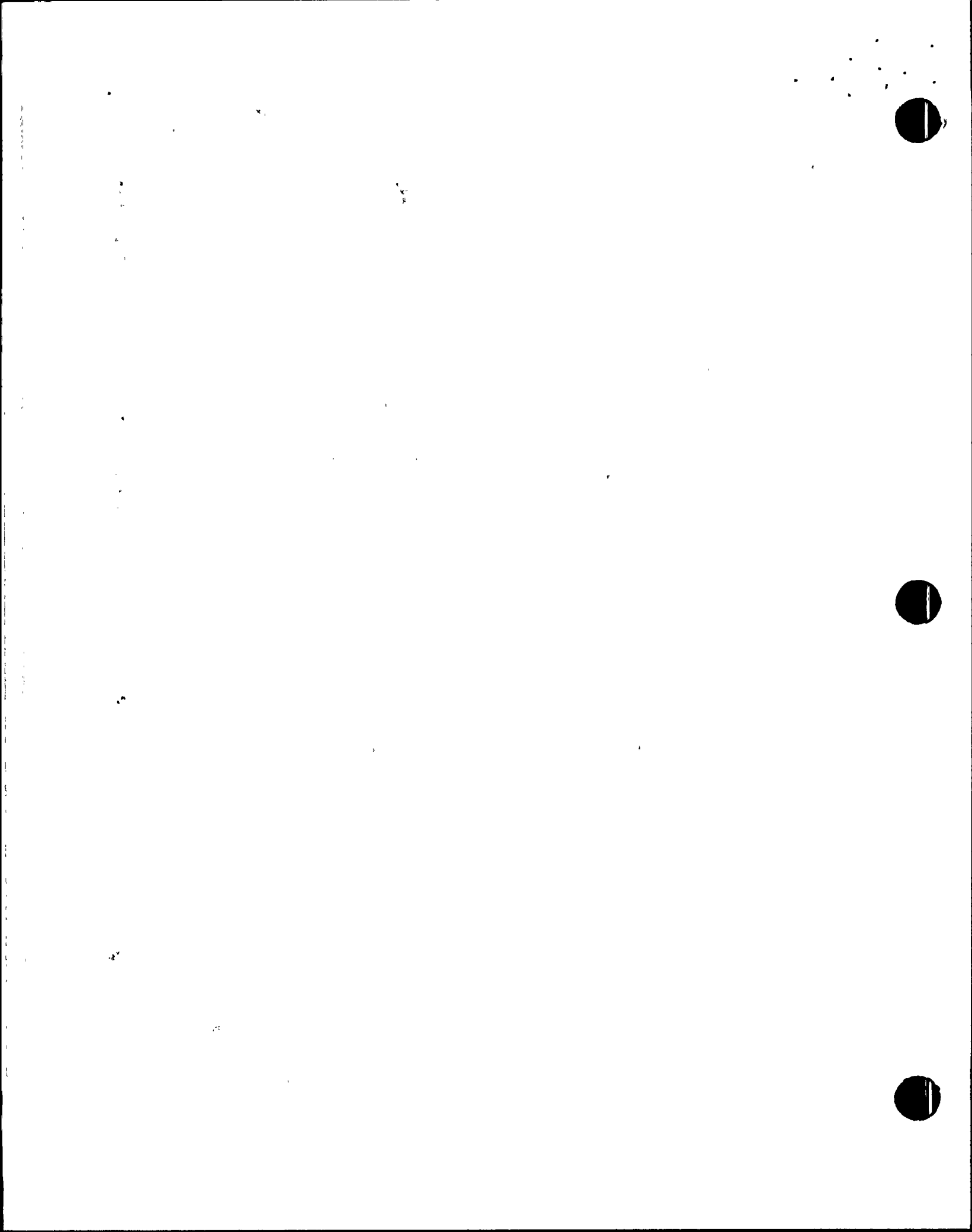
APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Yrs	Remarks
B07.20	05	PZR Manway Studs	One	20	20 Studs	-	90-1029	90-1030	
							-	90-1031	
B07.30	03	SG1 Manway Studs	One	40	40 Studs	-	87-1594	87-1592	
							-	87-1611	
							-	87-1615	
							-	89-1009	
							-	89-1022	
	04	SG2 Manway Studs	One	40	40 Studs	-	87-1595	87-1593	
							-	89-1009	
							-	89-1022	
B07.50	31	PZR PSY Flange Studs	One	1	PSY200	-	87-1590	87-1589	
							-	87-1637	
							-	87-1638	
							-	87-1639	
					PSY201	-	87-1590	87-1589	
					PSY202	-	87-1590	87-1589	
					PSY203	-	87-1590	87-1589	
							-	87-1591	
	37	Charging Line Flange	One	1	Y435	-	-	87-1576	
B07.60	16	RCP 1A Seal Housing	One	5	16 Studs	-	-	87-1539	
	17	RCP 1B Seal Housing	One	5	16 Studs	-	-	87-1540	
	18	RCP 2A Seal Housing	One	5	16 Studs	-	-	87-1541	
	19	RCP 2B Seal Housing	One	5	16 Studs	-	-	87-1542	
B07.70	21	SD Cooling 1	One	1	Y653	-	-	87-1601	
	22	SD Cooling 2	One	1	Y654	-	-	89-1074	
	23	Safety Injection 1A	One	1	Y237	-	-	89-1106	
	24	Safety Injection 1B	One	1	Y543	-	-	87-1467	
	25	Safety Injection 2A	One	1	Y540	-	-	87-1469	
	26	Safety Injection 2B	One	1	Y225	-	-	87-1472	
	28	PZR Spray 1B	One	2	Y241	-	-	87-1575	
					Y242	-	-	87-1575	
	31	PZR Safeties	One	1	PSY200	-	-	87-1638	
							-	87-1639	
	32	Drain 1A	One	2	Y234	-	-	87-1543	
					Y334	-	-	87-1543	
	37	Charging Line	One	1	Y240	-	-	87-1602	
	38	Loop 1 Drain	One	1	Y215	-	-	89-1153	
	39	HPSI 1	One	1	Y523	-	-	89-1075	
B07.80	02	Closure Head	One	1	CEDM 92	-	-	87-1612	
					CEDM 96	-	-	87-1610	
B08.20	05	Pressurizer	One	33%	5-1	89-1196	89-1187	-	0 degrees
						89-1197	-	-	45 degrees
						89-1198	-	-	60 degrees
B08.30	03	Steam Generator 1	One	33%	3-1	89-1166	89-1102	-	0 degrees
						89-1167	-	-	45 degrees
						89-1168	-	-	60 degrees
B09.11	06	RCS Piping	One	7	17-2	90-1017	89-1169	-	0 degrees
						90-1018	-	-	45 degrees
						90-1019	-	-	60 degrees
					1-31	89-W*	nxt refuel	-	*Seperate Report
					1-34	89-W*	nxt refuel	-	by Westinghouse
					3-30	89-1195	89-1072	-	
					4-30	89-1152	89-1071	-	
					6-7	89-W*	nxt refuel	-	
					7-7	89-W*	nxt refuel	-	



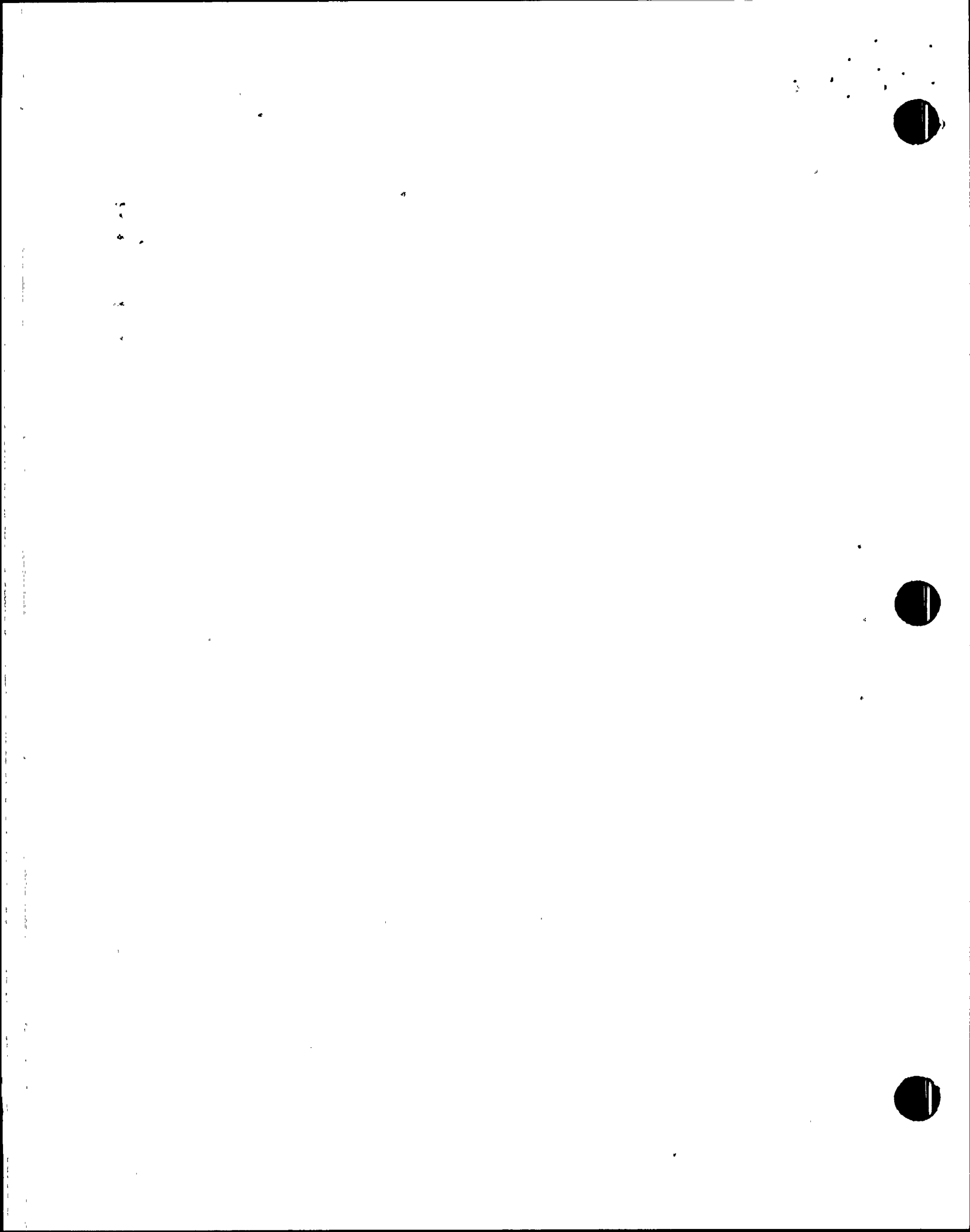
APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Reports			Remarks
						Vol	Surf	Vis	
B09.11	20	PZR Surge	One	1	20-1	89-1232	89-1073	-	
	21	SD Cooling 1	One	2	21-18	89-1184	89-1170	-	
					21-20	89-1185	89-1170	-	
					22-23	89-1144	89-1061	-	
	22	SD Cooling 2	One	2	22-11	89-1145	89-1061	-	
					23-1	89-1206	89-1107	-	
					23-2	89-1207	89-1171	-	
	23	Safety Injection 1A	One	3	23-4	89-1208	89-1107	-	
					25-26	87-1509	87-1468	-	
					25-27	87-1510	87-1468	-	
	25	Safety Injection 2A	One	2	26-8		86-194	-	PSE
					26-9	87-1581	87-1485	-	
					26-11	87-1558	87-1485	-	
29	PZR Spray	One	2	29-10	87-1582	87-1531	-		
				29-11	87-1583	87-1531	-		
				31-1	87-1585	87-1525	-		
B09.21	27	PZR Spray 1A	One	3	27-42	-	89-1108	-	
					27-43	-	89-1108	-	
					27-44	-	89-1108	-	
	28	PZR Spray 1B	One	4	28-31	-	87-1552	-	
					28-32	-	87-1552	-	
					28-39	-	87-1574	-	
					28-40	-	87-1574	-	
	30	Aux PZR Spray	One	4	30-1	89-1051	89-1050	-	Vol/IEB 88-08
					30-2	89-1052	-	-	
					30-2	89-1051	89-1050	-	Vol/IEB 88-08
					30-7	-	87-1535	-	
					30-13	-	87-1535	-	
	32	Drain 1A	One	2	32-1	-	87-1546	-	
32-2					-	87-1546	-		
36	Letdown	One	4	36-8	-	87-1580	-		
				36-9	-	87-1580	-		
				36-28	-	87-1609	-		
				36-35	-	87-1609	-		
				37-41	-	87-1536	-		
37	Charging	One	5	37-42	-	87-1536	-		
				37-45	-	87-1536	-		
				37-46	-	87-1536	-		
				37-47	-	87-1536	-		
				39-1	-	87-1488	-		
39	HPSI 1	One	2	39-5	-	87-1488	-		
				40-1	-	89-1062	-		
40	HPSI 2	One	3	40-2	-	89-1062	-		
				40-3	-	89-1062	-		
				9-8	89-1231	89-1209	-		
B09.31	06	RCS Piping	One	1	9-8	89-1231	89-1209	-	
B09.32	06	RCS Piping	One	1	8-17	-	87-1559	-	
	22	SD Cooling 2	One	1	22-7A	-	89-1061	-	
B09.40	32	Drain 1A	One	1	32-6	-	87-1546	-	
	38	Loop Drain 1	One	1	38-5	-	89-1154	-	



APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp		Item ID	Vol	Reports		Remarks								
			Per	Reqd			Surf	Vis									
B10.10	26	Safety Injection 2B	One	1	SI-179-H10	-	87-1485	-									
	36	Letdown	One	1	RC-91-H5	-	87-1609	-									
B12.20	16	RCP Casing	One	1	RCP 1A	-	-	89-1033									
B13.10	01	Reactor Yessel	One	100%	Acc Areas	-	-	87-1596									
								87-1597									
B14.10	02	Closure Head	One	2	9-84	89-1053	-	-									
					9-88	89-1055	-	-									
					10-84	89-1054	-	-									
					10-88	89-1056	-	-									
B15.10	1,2	Reactor Yessel	One	N/A	Press Bound	-	-	88-1007									
								90-1032									
B15.20	5	Pressurizer	One	N/A	Press Bound	-	-	*									
B15.30	3	Steam Generator 1	One	N/A	Press Bound	-	-	*									
								4	Steam Generator 2	One	N/A	Press Bound	-	-	*		
B15.50	ALL	RCS Piping	One	N/A	Press Bound	-	-	*									
B15.60	16	RCP 1A	One	N/A	Press Bound	-	-	*	* Reports, 88-1007 and 90-1032 were used for all with " * "								
								RCP 1B		One	N/A	Press Bound	-	-	*		
								RCP 2A		One	N/A	Press Bound	-	-	*		
								RCP 2B		One	N/A	Press Bound	-	-	*		
B15.70	ALL	RCS Valves	One	N/A	Press Bound	-	-	*									
BFLYWH	16	RCP 1A Flywheel	One	1			89-1030	89-1029	-								
							89-1032	-	-								
							89-1023	89-1028	-								
							89-1024	-	-								
							89-1031	89-1029	-								
B15.70	19	RCP 2B Flywheel	One	1			89-1032	-	-								
							89-1025	89-1027	-								
							89-1026	-	-								
BIWF	01	Reactor Yessel	One	1	1-40	-	-		Not Accessable								
					03	Steam Generator 1	One	1		3-40	-	-	87-1549				
					16	RCP 1A	One	2		16-20	-	-	87-1458				
										16-21	-	-	87-1458				
					17	RCP 1B	One	2		17-20	-	-	87-1459				
										17-21	-	-	87-1459				
					18	RCP 2A	One	4		18-12	-	-	87-1460				
										18-13	-	-	87-1460				
										18-14	-	-	87-1460				
										18-15	-	-	87-1460				
										19-12	-	-	87-1461				
					19	RCP 2B	One	4		19-13	-	-	87-1461				
										19-14	-	-	87-1461				
										19-15	-	-	87-1461				
										20	PZR Surge	One	2	RC-28-H1	-	-	87-1445
										21	SD Cooling 1	One	7	RC-28-H2	-	-	87-1435
					RC-51-H1	-	-	89-1155									
					RC-51-H2	-	-	89-1156									
						-	-	90-1033									
	-	-	89-1172														
22	SD Cooling 2	One	4	RC-51-H3	-	-	89-1157										
				RC-51-H821	-	-	87-1462										
				SI-240-H10	-	-	87-1463										
				SI-240-H11	-	-	87-1464										
				SI-240-H13	-	-	89-1077										
				SI-193-H17	-	-	89-1109	Reject Re-exam									
				SI-193-H19	-	-	89-1241										



APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks
BIWF	23	Safety Injection 1A	One	1	SI-207-H5	-	-	89-1110	
	24	Safety Injection 1B	One	2	SI-223-H3	-	-	87-1437	
					SI-223-H4	-	-	87-1436	
					SI-223-H7	-	-	86-209	PSE
					SI-223-H8	-	-	86-210	PSE
	25	Safety Injection 2A	One	2	SI-156-H7	-	-	87-1623	
					SI-156-H9	-	-	87-1508	
	26	Safety Injection 2B	One	3	SI-179-H7	-	-	86-207	PSE
					SI-179-H8	-	-	86-208	PSE
					SI-179-H9	-	-	87-1473	
					SI-179-H10	-	-	87-1486	
					SI-179-H11	-	-	87-1487	
	27	PZR Spray 1A	One	9	RC-62-H26	-	-	89-1181	
					RC-62-H27	-	-	87-1550	
					RC-62-H28	-	-	87-1551	
					RC-62-H29	-	-	87-1560	
					RC-62-H30	-	-	87-1561	
					RC-62-H31	-	-	87-1562	
					RC-62-H32	-	-	87-1563	
					RC-62-H33	-	-	87-1564	
					RC-62-H34	-	-	87-1565	
						-	-	87-1624	
	28	PZR Spray 1B	One	9	RC-17-H24	-	-	87-1566	
					RC-17-H34	-	-	87-1567	
					RC-17-H36	-	-	87-1568	
					RC-17-H38	-	-	87-1569	
					RC-17-H39	-	-	87-1570	
						-	-	89-1046	Replacement
					RC-17-H40	-	-	87-1571	
					RC-17-H41	-	-	87-1572	
					RC-17-H42	-	-	87-1573	
					RC-18-H11	-	-	87-1625	PSE
	29	PZR Combined Spray	One	2	RC-18-H16	-	-	87-1529	
					RC-18-H18	-	-	87-1530	
						-	-	89-1039	Replacement
	32	Drain 1A	One	2	RC-60-HA	-	-	87-1544	
					RC-60-HB	-	-	87-1545	
	34	Drain 1B	One	0	RC-96-HB	-	-	89-1040	Replacement
	36	Letdown	One	9	RC-91-H1	-	-	87-1607	
					RC-91-H5	-	-	87-1608	
					RC-91-HAA	-	-	87-1446	
					RC-91-HAK	-	-	89-1078	Reject
						-	-	90-1025	Re-exam
					RC-91-HB	-	-	87-1447	
					RC-91-HD	-	-	87-1448	
					RC-91-HE	-	-	87-1449	
					RC-91-HY	-	-	87-1450	
					RC-91-HZ	-	-	87-1451	



APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks							
BIWF	37	Charging	One	14	CH-5-H2	-	-	87-1553	Replacement							
						-	-	89-1047								
										CH-5-H3	-	-	87-1554			
										CH-5-H6	-	-	89-1048	Replacement		
										CH-5-H10	-	-	89-1049	Replacement		
										CH-5-H24	-	-	89-1058	Replacement		
										CH-5-H25	-	-	87-1578			
										CH-5-H26	-	-	87-1465			
										CH-5-H27	-	-	87-1466			
										CH-5-H28	-	-	87-1474			
										CH-5-H30	-	-	87-1475			
										CH-5-H34	-	-	87-1476			
										CH-5-H35	-	-	87-1477			
										CH-5-H36	-	-	87-1478			
										CH-5-H42	-	-	87-1579			
										CH-5-H43	-	-	87-1555			
										CH-5-H44	-	-	87-1556			
										CH-5-HAA	-	-	87-1577			
						38	Drain Loop 1	One		4	RC-70-HA	-	-	89-1059	Replacement	
						39	HPSI 1				SI-248-H19	-	-	87-1636	PSE	
			SI-248-H26	-	-	87-1489										
			SI-248-H27	-	-	87-1490										
			SI-248-H28	-	-	87-1491										
			SI-248-H30	-	-	87-1492										
	40	HPSI 2	SI-199-H13	-	-	89-1079										
			SI-199-H14	-	-	89-1080										
			SI-199-H21	-	-	89-1081										
C01.10	41	Steam Generator 1	One	2	41-3	90-1008	-		-		0 degrees					
						90-1009	-		-		45 degrees					
						90-1010	-		-		60 degrees					
						41-4	90-1011		-		-	0 degrees				
					90-1012		-		-		45 degrees					
					90-1013		-		-		60 degrees					
					68		Reg HT Exchanger		One		1	68-7	89-1203	-	-	
					69	Letdown HT Exch.	One		50%		69-1	87-1587	-	-		
					C01.20	41	Steam Generator 1		One		1	41-5	90-1014	-	-	0 degrees
													90-1015	-	-	45 degrees
90-1016	-	-	60 degrees													
C01.30	41	Steam Generator 1	One	1	41-1	89-1204	-	-								
						90-1005	-	-	0 degrees							
						90-1006	-	-	45 degrees							
						90-1007	-	-	60 degrees							
	69	Letdown HT Exch.	One	1	69-2	87-1588	-	-								
C02.21	41	Steam Generator 1	One	1	41-34	89-1193	89-1228	-								
						89-1194	89-1229	-								
	42	Steam Generator 2	One	1	42-35	-	-	-								
C03.10	41	Steam Generator 1	One	1	41-42	-	90-1001	-								
C03.20	43	Main Steam SG1-90	One	1	SG-36-H17	-	87-1515	-								
					SG-42-H14	-	87-1538	-								
					SG-42-H15	-	87-1517	-								
	45	Main Steam SG2-270	One	3	SG-42-H16	-	87-1517	-								



APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks
CO3.20	55	Feedwater SG2	One	1	SG-5-H9	-	89-1076	-	
	64	Blowdown SG1	One	3	SG-39-H15	-	89-1064	-	
					SG-39-H17	-	89-1064	-	
					SG-53-H1	-	89-1130	-	
	65	Blowdown SG2	One	2	SG-48-H20	-	89-1067	-	
					SG-52-H1	-	89-1065	-	
	71	LPSI Discharge 1	One	1	SI-87-H11	-	87-1304	-	
	76	CS Suction 1	One	1	SI-9-H4	-	87-1268	-	
	88	SD Cooling 2	One	1	SI-72-H13	-	87-1324	-	
	89	LPSI Suction 2	One	1	SI-194-H14	-	87-1322	-	
	91	SD Cooling 1	One	4	SI-70-H9	-	87-1335	-	
					SI-70-H11	-	87-1336	-	
					SI-70-H12	-	87-1335	-	
SI-70-H16					-	87-1337	-		
92	LPSI Suction 1	One	1	SI-241-H21	-	87-1334	-		
CO3.30	100	LPSI Suction 1	One	1	SI-369-H1	-	87-1433	-	
	72	LPSI Pump 1	One	2	72-3A	-	87-1362	-	
					72-3B	-	87-1362	-	
	78	CS Pump 1	One	2	80-3A	-	87-1261	-	
					80-3B	-	87-1261	-	
CO4.40	47	MS SG1 270	One	20	Y170	87-1375	-	-	Vol/IEB 79-13
	48	MS SG1 90	One	20	Y180	87-1376	-	-	Vol/IEB 79-13
CO5.11	58	Aux & FW SG1	One	1	58-1	90-1004	90-1002	-	
	59	Aux & FW SG2	One	1	59-1	89-1115	89-1069	-	
CO5.21	43	MS SG1 90	One	3	43-1	87-1557	87-1527	-	
					43-2	87-1547	87-1527	-	
					43-22	87-1532	87-1515	-	
	44	MS SG1 270	One	3	44-26	87-1548	87-1528	-	
					44-28	87-1533	87-1528	-	
					44-30	87-1534	87-1528	-	
	46	MS SG2 90	One	2	46-25	87-1523	87-1519	-	
					46-27	87-1524	87-1519	-	
	54	FW SG1	One	5	54-25A	89-1127	89-1129	-	
					54-27	89-1128	89-1104	-	
					54-41	89-1112	89-1063	-	
					54-49	89-1113	89-1063	-	
					54-50	89-1114	89-1063	-	
	55	FW SG2	One	5	42-44	89-1117	89-1066	-	
					55-11	89-1118	89-1066	-	
					55-12	89-1119	89-1068	-	
					55-15	89-1116	89-1066	-	
	58	Aux & FW SG1	One	3	55-26	89-1120	89-1066	-	
					58-19	87-1481	87-1480	-	
58-20					87-1482	87-1480	-		
41-39					90-1003	90-1002	-		



APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks
C05.21	59	Aux & FW SG2	One	2	59-33	87-1483	87-1479	-	
					59-34	87-1484	87-1479	-	
	62	Aux FW SG1	One	1	62-24	87-1367	87-1359	-	
					63	87-1368	87-1360	-	
	64	Blowdown SG1	One	2	64-1	89-1121	89-1105	-	
					64-2	89-1122	89-1105	-	
	65	Blowdown SG2	One	4	65-22	89-1123	89-1065	-	
					65-24	89-1124	89-1065	-	
					65-27	89-1125	89-1065	-	
					65-28	89-1126	89-1065	-	
CIWF	41	Steam Generator 1	One	2	41-42	-	-	90-1023	
					41-43	-	-	90-1024	
	43	MS SG1 90	One	3	SG-36-H17	-	-	87-1513	
					SG-36-H884	-	-	87-1522	
					SG-36-H885	-	-	87-1514	
	44	MS SG1 270	One	2	SG-33-H17	-	-	87-1600	
					SG-33-H18	-	-	87-1516	
	45	MS SG2 270	One	3	SG-42-H14	-	-	87-1537	
					SG-42-H15	-	-	87-1599	
					SG-42-H16	-	-	87-1518	
	46	MS SG2 90	One	2	SG-45-H17	-	-	87-1520	
					SG-45-H18	-	-	87-1521	
	47	MS SG1 270	One	1	SG-206-H1	-	-	87-1240	
	51	ADY No. 1	One	1	SG-59-H6	-	-	87-1606	
	53	Steam to Aux FW	One	4	SG-81-H1	-	-	87-1241	
					SG-81-H2	-	-	87-1242	
					SG-83-H1	-	-	87-1243	
					SG-83-H2	-	-	87-1244	
	54	FW SG 1	One	6	SG-2-H4	-	-	89-1111	Reject
						-	-	89-1239	Re-exam
					SG-2-H5	-	-	89-1082	
					SG-2-H12	-	-	89-1158	
					SG-2-H13	-	-	89-1083	Reject
						-	-	90-1022	Re-exam
					SG-2-H14	-	-	89-1084	
					SG-2-H15	-	-	89-1085	
					SG-2-H803	-	-	89-1159	
55					FW SG 2	One	9	SG-5-H8	-
				SG-5-H9	-	-	89-1131		
				SG-5-H10	-	-	89-1132		
				SG-5-H11	-	-	89-1133		
				SG-5-H12	-	-	89-1134		
				SG-5-H805	-	-	89-1137		
				SG-5-H809	-	-	90-1026		
				SG-5-H812	-	-	89-1138		
				SG-14-H1	-	-	89-1135		
				SG-14-H804	-	-	89-1136		



APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp		Item ID	Vol	Reports		Remarks			
			Per	Reqd			Surf	Vis				
CIWF	58	Aux & FW SG1	One	7	SG-8-H2	-	-	89-1173				
					SG-8-H3	-	-	89-1174				
					SG-8-H4	-	-	89-1175				
					SG-8-H5	-	-	89-1176				
					SG-8-H20	-	-	89-1177				
					SG-8-H901	-	-	89-1178				
					SG-8-H903	-	-	89-1179				
	59	Aux & FW SG2	One	6	AF-6-H1	-	-	87-1452				
					SG-11-H8	-	-	87-1453				
					SG-11-H9	-	-	87-1454				
					SG-11-H10	-	-	87-1455				
					SG-11-H11	-	-	87-1456				
					SG-11-H12	-	-	87-1457				
	60	Downcomer FW SG1	One	1	SG-200-H9	-	-	87-1296				
	62	Aux FW SG1	One	1	AF-4-H3	-	-	87-1245				
	63	Aux FW SG2	One	2	AF-6-H2	-	-	87-1246				
					AF-16-H1	-	-	87-1247				
	64	Blowdown SG1	One	12	SG-39-H10	-	-	89-1086				
					SG-39-H11	-	-	89-1087				
					SG-39-H12	-	-	89-1088	Reject			
						-	-	90-1021	Reject			
						-	-	90-1027	Re-exam			
					SG-39-H13	-	-	89-1089	Reject			
						-	-	89-1240	Re-exam			
					SG-39-H14	-	-	89-1090				
					SG-39-H15	-	-	89-1091				
					SG-39-H16	-	-	89-1092	Reject			
						-	-	90-1028	Re-exam			
					SG-39-H17	-	-	89-1093				
					SG-39-H26	-	-	89-1094				
					SG-53-H1	-	-	89-1160				
					SG-53-H2	-	-	89-1161				
					SG-53-H924	-	-	89-1162				
65	Blowdown SG2	One	12	SG-48-H2	-	-	89-1139					
				SG-48-H3	-	-	89-1095					
				SG-48-H4	-	-	89-1096					
				SG-48-H19	-	-	89-1097					
				SG-48-20	-	-	89-1098					
				SG-48-H21	-	-	89-1099					
				SG-48-H925	-	-	89-1143					
				SG-52-H1	-	-	89-1140					
				SG-52-H2	-	-	89-1141					
				SG-52-H3	-	-	89-1100					
				SG-52-H4	-	-	89-1101					
				SG-52-H923	-	-	89-1142					
				70	LPSI A Suction	One	1	SI-67-H4	-	-	87-1301	
				71	LPSI A Discharge	One	1	SI-87-H-11	-	-	87-1302	
				72	LPSI Pump A	One	2	72-3A	-	-	87-1369	
72-3B	-	-	87-1369									



APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks
CIWF	76	CS Pump A Suction	One	1	SI-9-H4	-	-	87-1259	
	77	CS Pump A Discharge	One	4	SI-79-H1	-	-	87-1267	
SI-79-H2					-	-	87-1264		
SI-79-H3					-	-	87-1265		
SI-79-H4					-	-	87-1266		
78	CS Pump A	One	2	80-3A	-	-	87-1260		
				80-3B	-	-	87-1260		
79	CS Pump B Suction	One	3	SI-34-H1	-	-	87-1253		
				SI-34-H2	-	-	87-1254		
				SI-34-H3	-	-	87-1255		
80	CS Pump B Discharge	One	3	SI-119-H7	-	-	87-1256		
				SI-119-H8	-	-	87-1331		
				SI-119-H9	-	-	88-1006		
82	Shutdown Cooling A	One	2	SI-78-H5	-	-	87-1278		
				SI-79-H10	-	-	87-1279		
83	Shutdown Cooling A	One	4	SI-87-H9	-	-	87-1280		
				SI-89-H1	-	-	87-1281		
				SI-89-H2	-	-	87-1282		
				SI-89-H3	-	-	87-1283		
85	Shutdown Cooling B	One	3	SI-119-H10	-	-	87-1252		
				SI-123-H6	-	-	88-1005		
				SI-123-H7	-	-	87-1249		
86	Shutdown Cooling B	One	3	SI-129-H10	-	-	87-1248		
				SI-129-H11	-	-	87-1250		
				SI-129-H12	-	-	87-1251		
				SI-72-H11	-	-	87-1314		
88	LPSI B	One	8	SI-72-H13	-	-	87-1315		
				SI-72-H14	-	-	87-1316		
				SI-72-H21	-	-	87-1317		
				SI-72-H22	-	-	87-1318		
				SI-73-H1	-	-	87-1319		
				SI-73-H2	-	-	87-1320		
				SI-73-H3	-	-	87-1321		
				SI-194-H12	-	-	87-1310		
89	LPSI B	One	4	SI-194-H13	-	-	87-1311		
				SI-194-H14	-	-	87-1312		
				SI-194-H18	-	-	87-1626	PSE	
				SI-194-H23	-	-	87-1313		
91	LPSI A	One	7	SI-70-H9	-	-	87-1342		
				SI-70-H10	-	-	88-1001		
				SI-70-H11	-	-	87-1343		
				SI-70-H12	-	-	87-1344		
				SI-70-H13	-	-	88-1003		
				SI-70-H15	-	-	87-1345		
				SI-70-H16	-	-	87-1644		

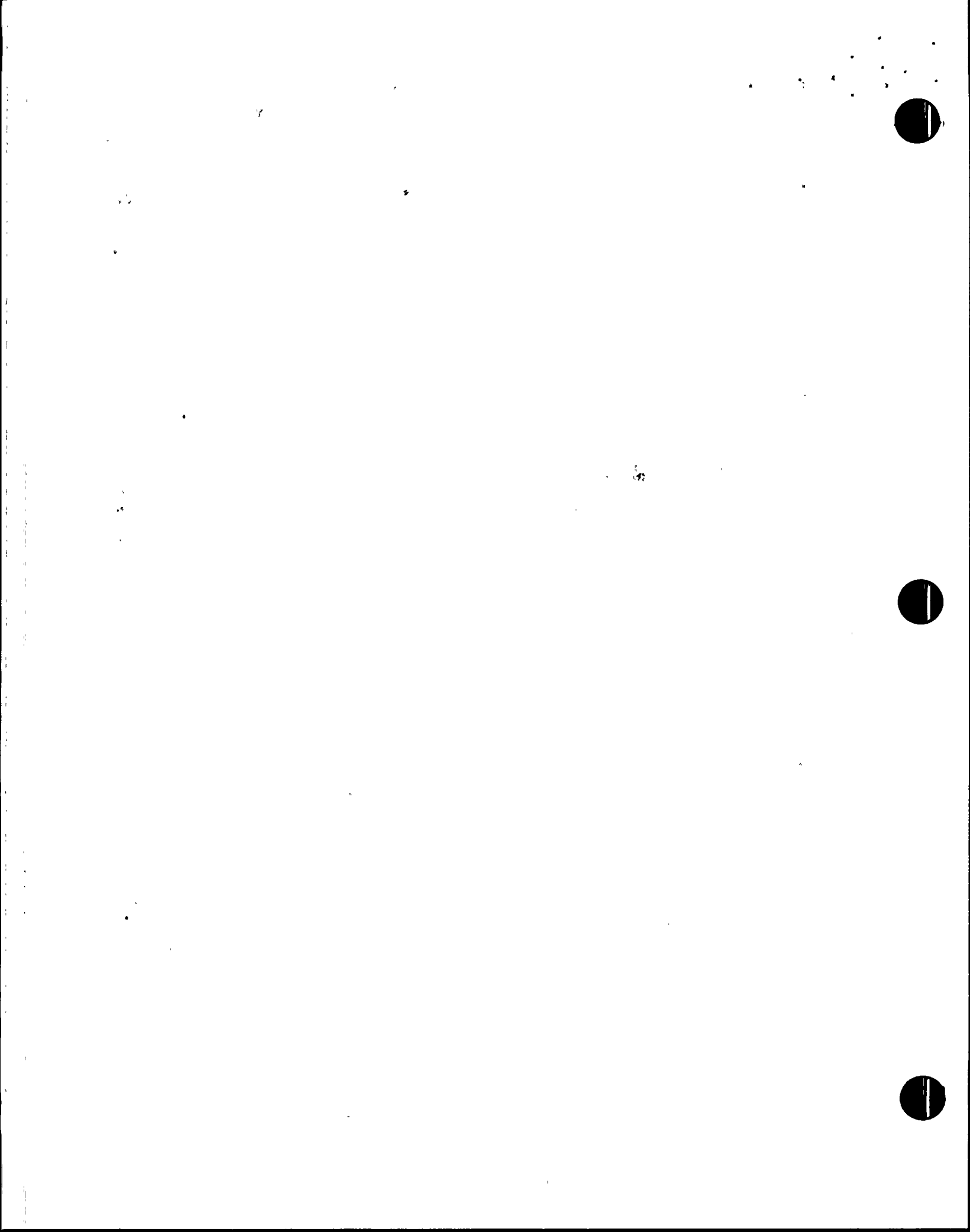
1111

1111



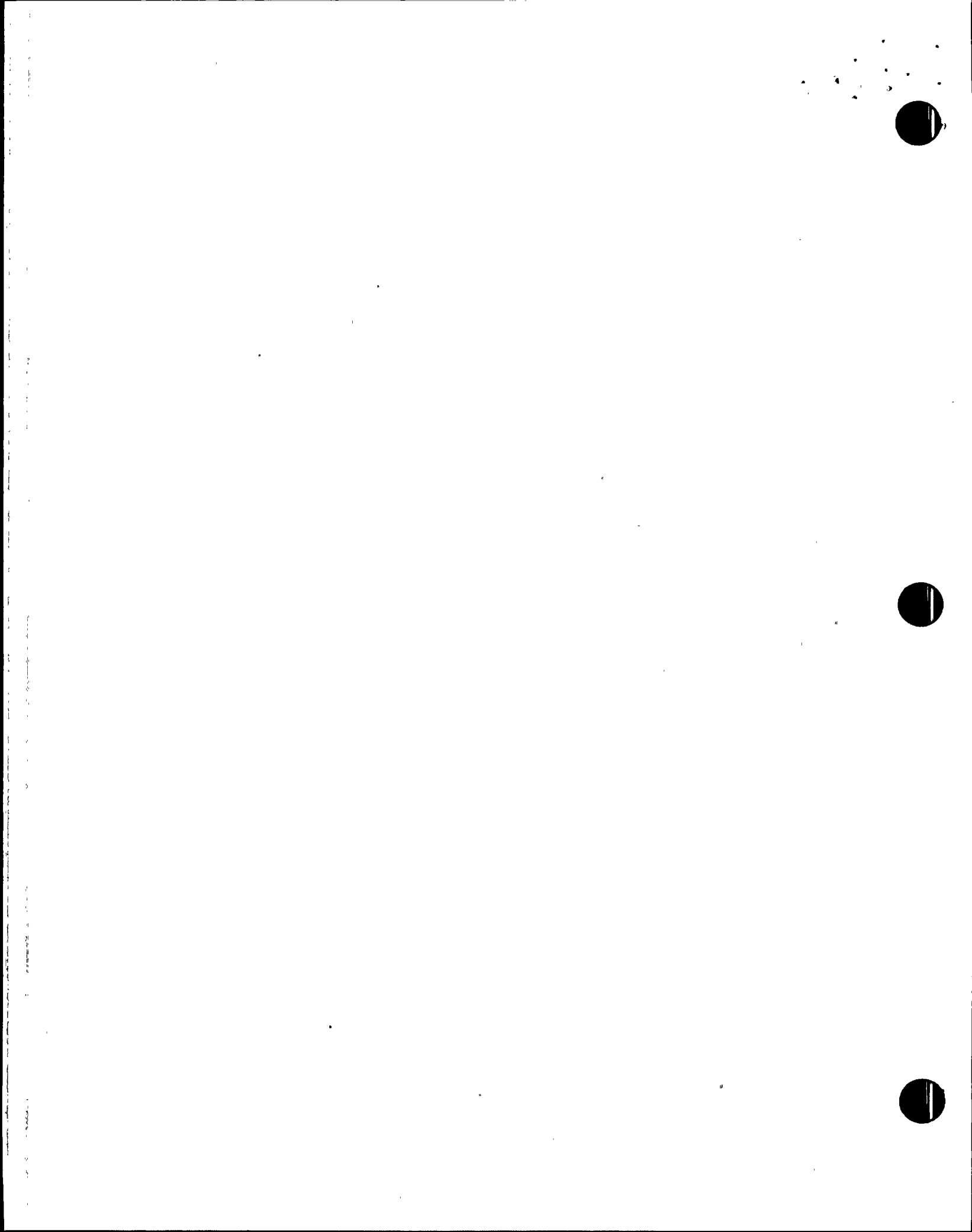
APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Yrs	Remarks
CIWF	92	LPSI A	One	5	SI-239-H3	-	-	87-1341	
					SI-241-H12	-	-	87-1339	
					SI-241-H14	-	-	87-1349	
					SI-241-H15	-	-	87-1350	
					SI-241-H21	-	-	87-1340	
	94	LPSI A	One	3	SI-89-H7	-	-	87-1291	
					SI-89-H8	-	-	87-1292	
					SI-89-H9	-	-	87-1293	
	95	LPSI B	One	6	SI-72-H8	-	-	87-1289	
					SI-72-H10	-	-	87-1290	
					SI-134-H11	-	-	87-1294	
					SI-134-H12	-	-	87-1295	
					SI-194-H3	-	-	87-1258	
	96	LPSI To Loop 1A	One	3	SI-202-H7	-	-	87-1493	
					SI-202-H8	-	-	87-1494	
					SI-202-H9	-	-	87-1495	
	97	LPSI To Loop 1B	One	10	SI-220-H8	-	-	89-1180	
					SI-220-H9	-	-	87-1496	
					SI-220-H10	-	-	87-1497	
					SI-220-H11	-	-	87-1498	
					SI-220-H12	-	-	87-1499	
SI-220-H13					-	-	87-1500		
SI-220-H14					-	-	87-1501		
SI-220-H15					-	-	87-1506		
SI-220-H19					-	-	87-1502		
SI-220-H22					-	-	87-1507		
98	LPSI To Loop 2A	One	2	SI-155-H4	-	-	87-1627	PSE	
				SI-155-H5	-	-	87-1503		
				SI-155-H6	-	-	87-1504		
100	LPSI A Suction	One	2	SI-241-H19	-	-	87-1471		
FR05.11	70	LPSI A Suction	One	3	70-58	87-1325	87-1303	-	
					70-69	87-1363	87-1361	-	
					70-104	87-1326	87-1303	-	
	71	LPSI B Discharge	One	3	72-5	87-1327	87-1304	-	
					72-6	87-1328	87-1304	-	
					72-8	87-1329	87-1304	-	
	76	CS A Suction	One	2	80-10	87-1271	87-1262	-	
					80-16	87-1270	87-1263	-	
	77	CS A Discharge	One	3	82-1	87-1273	87-1269	-	
					82-1A	87-1272	87-1269	-	
					82-2	87-1274	87-1269	-	
	82	SD Cooling A	One	2	72-48	87-1284	87-1275	-	
					72-61	87-1285	87-1275	-	



APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Reports			Remarks				
						Vol	Surf	Vis					
FR05.11	83	SD Cooling A	One	6	74-19	87-1299	87-1277	-					
					74-21	87-1300	87-1277	-					
					74-74	87-1286	87-1276	-					
					74-87	87-1287	87-1276	-					
					74-100	87-1297	87-1277	-					
					74-105	87-1298	87-1277	-					
	91	LPSI A	One	2	74-44	87-1358	87-1335	-					
					76-2	87-1354	87-1338	-					
	92	LPSI A	One	5	70-2	87-1355	87-1332	-					
					70-16	87-1356	87-1333	-					
70-17					87-1357	87-1333	-						
70-80					87-1353	87-1333	-						
70-85					87-1352	87-1333	-						
94	LPSI A	One	2	82-47	87-1308	87-1288	-						
				82-48	87-1307	87-1288	-						
100	LPSI A Suction	One	1	70-134	87-1586	87-1433	-						
FR05.21	88	LPSI B	One	1	78-16	87-1330	87-1323	-					
					98	LPSI to Loop 2A	One	2	78-45	87-1511	87-1505	-	
									78-47	87-1512	87-1505	-	
FR05.31	82	SD Cooling A	One	1	72-49A	-	87-1275	-					
	91	LPSI A	One	1	74-102	-	87-1351	-					



APPENDIX B

INSERVICE INSPECTION
CODE LIMITATIONS

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



APPENDIX B
CODE LIMITATIONS

No Code Limitations were identified
during the second Inservice Inspection.



APPENDIX C

FORM
NIS-1



ANPP

NIS-1 FORM

OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

1. OWNER ARIZONA PUBLIC SERVICE COMPANY, ET AL

ADDRESS P.O. BOX 53999 PHOENIX, ARIZONA

2. PLANT PALO VERDE NUCLEAR GENERATING PLANT

ADDRESS 4 MILES SOUTH WINTERSBURG, ARIZONA

3. UNIT NUMBER: 1

4. OWNERS CERTIFICATE OF AUTHORIZATION NONE

5. COMMERCIAL SERVICE DATE: JANUARY 28, 1986

6. COMPONENTS INSPECTED:

COMPONENT OR APPURTENANCE	MANUFACTURER OR INSTALLER	SERIAL NUMBER	STATE OR PROVINCE	NATIONAL BOARD NO
---------------------------	---------------------------	---------------	-------------------	-------------------

THE ITEMS EXAMINED ALONG WITH THEIR EXAMINATION REPORT NUMBERS ARE LISTED IN APPENDIX A. ALL OF THE EXAMINATION REPORT NUMBERS FOR THE SECOND REFUELING ARE NUMBERED WITH AN 89-1XXX OR 90-1XXX REPORT NUMBER.



ANPP

NIS-1 BACK

OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

- 7. EXAM DATES 3/5/89 TO 7/5/90
- 8. INSPECTION INTERVAL FROM 1/28/86 TO 3/17/97
- 9. ABSTRACT OF EXAMINATIONS. INCLUDE A LIST OF EXAMINATIONS AND A STATEMENT CONCERNING STATUS OF WORK REQUIRED FOR CURRENT INTERVAL.

THE ITEMS EXAMINED ALONG WITH THEIR EXAMINATION REPORT NUMBERS ARE LISTED IN APPENDIX A. THE EXAMINATIONS ARE LISTED BY ASME NUMBERS WITH CORRESPONDING EXAMINATION REPORT NUMBERS. ALL OF THE EXAMINATION REPORT NUMBERS FOR THE SECOND REFUELING ARE NUMBERED WITH AN 89-1XXX OR 90-1XXX REPORT NUMBER.

- 10. ABSTRACT OF CONDITIONS NOTED.

THERE ARE NO OUTSTANDING REJECTABLE ITEMS IN UNIT 1. THE ONLY REJECTABLE ITEMS NOTED DURING THIS REFUELING CONCERNED PIPE SUPPORTS. PARAGRAPH 2.0 OF THE REPORT SUMARIZES THE LOOSE LOCKNUTS, MISSING COTTER PIN, MISSING SNAP RING, AND OTHER MISCELLANEOUS INDICATIONS DETECTED.

- 11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN.

THE LOOSE BOLTING WAS TIGHTENED, THE COTTER PIN WAS REPLACED, THE SNAP RING WAS REPLACED, AND THE PIPE CLAMPS WERE REALIGNED.

SEVERAL REPAIRS AND REPLACEMENTS HAVE BEEN PERFORMED SINCE COMMERCIAL OPERATIONS DUE TO ROUTINE AND CORRECTIVE MAINTENANCE, WORK WAS PERFORMED IN ACCORDANCE WITH ASME SECTION XI AND ANPP WORK CONTROL PROCEDURES. ALL DOCUMENTS ARE MAINTAINED AT ANPP.

WE CERTIFY THAT THE STATEMENTS MADE IN THIS REPORT ARE CORRECT AND THE EXAMINATIONS AND CORRECTIVE MEASURES TAKEN CONFORM TO THE RULES OF THE ASME CODE, SECTION XI.

DATE 8-16-90 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY DBH

CERTIFICATE OF INSERVICE INSPECTION

I, THE UNDERSIGNED, HOLDING A VALID COMMISSION ISSUED BY THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS AND THE STATE OF PROVINCE OF ARIZONA EMPLOYED BY HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY OF HARTFORD, CONNECTICUT HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD Aug. 1, 1990 TO Aug. 16, 1990, AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE OWNER HAS PERFORMED EXAMINATIONS AND TAKEN CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT IN ACCORDANCE WITH THE REQUIREMENTS OF THE ASME CODE, SECTION XI. BY SIGNING THIS CERTIFICATE NEITHER THE INSPECTOR NOR HIS EMPLOYER MAKES ANY WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE EXAMINATIONS AND CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT. FURTHERMORE, NEITHER THE INSPECTOR NOR HIS EMPLOYER SHALL BE LIABLE IN ANY MANNER FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE OR A LOSS OF ANY KIND ARISING FROM OR CONNECTED WITH THIS INSPECTION.

INSPECTOR Robert S. Jorgensen COMMISSIONS NB 9685 "N" "1" Az. 26A
 DATE 16 Aug 90 NAT'L BOARD, STATE, PROVINCE

