

PALO VERDE NUCLEAR GENERATING STATION

UNIT 1

INSERVICE INSPECTION REPORT

3rd REFUELING OUTAGE

FEBRUARY 1992

ARIZONA PUBLIC SERVICE

P. O. BOX 52034

PHOENIX, AZ 85072

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# UNIT 1 INSERVICE INSPECTION REPORT

## 1.0 Introduction

This report is a summary of the examinations performed from July 6, 1990 to May 23, 1992 at the Palo Verde Nuclear Generating Station (PVNGS) Unit 1. The examinations completed all requirements for Interval 1 Period 1 and include all examinations conducted for Period 2 through the 3rd refueling outage.

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

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 Class 2 Safety Injection piping systems in accordance with 10 CFR 50.55a.

This report is a running summary of all examinations performed to date. The examinations performed since the last Summary Report are numbered with 91-1XXX or 92-1XXX.

## 2.0 Examination Summary

The evaluation of the results from the ISI examinations indicated the integrity of the systems had been maintained. All discrepancies were corrected in accordance with PVNGS work control practices and ASME Section XI. The abnormal conditions detected are listed in Section 7.

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### 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
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 Arizona Public Service, MQS, 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. Hartford Steam Boiler Inspection and Insurance Company provided the Authorized Nuclear Inservice Inspector.

### 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.





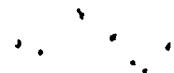
## 7.0 Repairs and Replacements

The following is a list of all abnormal conditions detected as a result of the examination:

ZONE	ITEM ID	ABNORMAL CONDITION
48	48-25	Seven linear indications
51	51-33	Linear indication
58	58-13	Three linear indications
61	61-3	Three linear indications
61	61-4	Linear indication
61	61-5	Linear indication
3	Steam Generator Manway Studs	Corrosive pitting (2 studs)
5	Pressurizer Manway nut	
31	PSV Flange Nuts	Galled thread (1 nut)
20	RC-028-H844	Galled threads(2 nuts)
22	SI-193-H008	Loose nut
37	CH-005-H032	Loose nut
39	SI-248-H018	Loose spherical bearing and nut
48	SG-207-H001	Spring travel impeded
94	SI-241-H006	Bent Strut
94	SI-241-H017	Loose jam nut
96	SI-202-H015	Rotated pipe clamp

The linear indications detected were removed by filing/grinding as per the requirement of each individual Material Nonconformance Report. Pipe thickness readings were taken in the areas where filing or grinding had taken place to verify that the required pipe thickness was maintained. The steam generator manway studs were replaced with new studs. The pressurizer manway nut and PSV flange nuts were replaced with new nuts. All hanger abnormalities were either repaired or conditionally released for future repair or replacement.

The applicable records and reports for the specific repair or replacement are maintained on file at Palo Verde. A preservice examination was performed on the repaired or replaced items listed above.



APPENDIX A

INSERVICE INSPECTION  
SUMMARY REPORT



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## 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 Numbers are listed in the Code, Subsections IWB and IWC. The item number prefixes are defined below:

AHE - Augmented high energy systems piping  
B - ASME Class 1 systems  
BFLYWH - Reactor coolant pump flywheels  
BIWF - ASME Class 1 supports  
C - ASME Class 2 systems  
CIWF - ASME Class 2 supports  
FR - 10 CFR 50 augmented examinations

Zone No: Area designation per PVNGS design

Comp/Sys: Component or system description

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

### Definition of terms continued

Acc:	Accessible
ADV:	Atmospheric Dump Valve
Aux:	Auxiliary
Atmos:	Atmospheric
CEDM:	Control Element Drive Mechanism
Circ:	Circumferential
Cont:	Containment
CS:	Containment Spray
CSP:	Containment Spray Pump
FW:	Feedwater
HPSI:	High Pressure Safety Injection
HTRS:	Heaters
ICI:	In Core Instrumentation
IEB:	Inspection and Enforcement Bulletin
Letdown HT Exch:	Letdown Heat Exchanger
LPSI:	Low Pressure Safety Injection
MS:	Main Steam
MT:	Magnetic Particle Test
Press Bound:	Pressure Boundary
PSE:	Preservice Examination
PSV:	Pressurizer Safety Valve
PZR:	Pressurizer
RCP:	Reactor Coolant Pump
RCS:	Reactor Coolant System
Reg HT Exch:	Regenerative Heat Exchanger
SD:	Shutdown
SG:	Steam Generator
Snub:	Snubber Reduction Program
Surf:	Surface
UT:	Ultrasonic Testing
Vis:	Visual
Vol:	Volumetric



1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

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# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
AHE 5.11 & AHE 5.12	51	Bypass V180	Two	20	51-101	92-1391	92-1360		
					51-102	92-1392	92-1360		
					51-103	92-1393	92-1360		
					51-104	92-1394	92-1360		
					51-105	92-1395	92-1360		
					51-106	92-1396	92-1360		
					51-107	92-1397	92-1360		
					51-108	92-1398	92-1360		
					51-109	92-1399	92-1360		
					51-110	92-1400	92-1360		
					51-111	92-1401	92-1360		
					51-112	92-1402	92-1360		
					51-113	92-1403	92-1360		
					51-114	92-1404	92-1360		
					51-115	92-1405	92-1360		
					51-116	92-1406	92-1360		
					51-117	92-1407	92-1360		
					51-118	92-1408	92-1360		
					51-119	92-1409	92-1360		
					51-120	92-1410	92-1360		
	53	Steam to Aux FW	One	10	51-121	92-1411	92-1360		
					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		
			Two	9	53-25	87-1424	87-1381		
					53-1	92-1438	92-1382		
					53-2	92-1439	92-1414		
					53-4	92-1440	92-1414		
					53-5	92-1441	92-1414		
					53-6	92-1442	92-1414		
					53-7	92-1443	92-1414		
					53-8	92-1444	92-1414		
					53-9	92-1445	92-1414		
					53-10	92-1446	92-1414		
AHE 5.21	47	MS SG 1 270	One	13	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		



# APPENDIX A

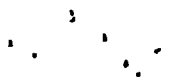
## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
AHE 5.21 & AHE 5.22	47	MS SG 1 270	One	13	47-29	87-1392	87-1373		
					47-30	87-1387	87-1373		
	48	MS SG 1 90	Two	13	48-1	92-1415	92-1380		
					48-2	92-1416	92-1380		
					48-4	92-1417	92-1380		
					48-8	92-1418	92-1380		
					48-12	92-1419	92-1380		
					48-14A	92-1420	92-1380		
					48-16	92-1421	92-1359		
					48-20	92-1422	92-1359		
					48-24	92-1423	92-1381		
						92-1437			
					48-25	92-1424	92-1381		Reject (surf)
							92-1474		Re-exam
					48-28	92-1452	92-1380		
					48-29	92-1453	92-1380		
					48-30	92-1427	92-1380		
	51	Atmos Dump SG 1	One	13	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		
					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
			Two	16	51-26	92-1454	92-1357		
					51-27	92-1455	92-1357		
					51-28	92-1456	92-1451		
					51-29	92-1457	92-1451		
					51-30	92-1458	92-1357		
					51-31	92-1459	92-1357		
					51-32	92-1460	92-1357		
					51-33	92-1461	92-1357		Reject (surf)
							92-1449		Re-exam
					51-34	92-1462	92-1357		
					51-37	92-1465	92-1357		
					51-49	92-1466	92-1357		
					51-86	92-1467	92-1357		
					51-87	92-1468	92-1357		
					51-88	92-1469	92-1357		
	52	Atmos Dump SG 2	One	0	52-84	89-1017	89-1021		PSE/Block valve
					52-85	89-1018	89-1021		PSE/Block valve
					52-86	89-1019	89-1021		PSE/Block valve
					52-87	89-1020	89-1012		PSE/Block valve

# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
AHE 5.21 & AHE 5.22	56	FW SG 1	One	5	56-1	92-1504	92-1497		
					56-3	92-1505	92-1497		
					56-4	92-1506	92-1497		
					56-6	92-1507	92-1497		
					56-7	92-1508	92-1497		
			Two	2	56-9	92-1502	92-1496		
							92-1497		
					56-11	92-1503	92-1496		
					60-7	87-1425	87-1398		
					60-8	87-1426	87-1398		
60	Downcomer	FW SG 1	One	9	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		
			Two	5	60-16	87-1431	87-1364		
					60-17	87-1432	87-1364		
					60-2	92-1491	92-1499		
					60-3	92-1492	92-1499		
					60-4	92-1493	92-1499		
61	Downcomer	FW SG 2	Two	5	60-5	92-1494	92-1499		
					60-6	92-1495	92-1499		
					61-2	92-1367	92-1358		
					61-3	92-1368	92-1358		Reject (surf)
							92-1450		Re-exam
			One	9	61-4	92-1369	92-1358		Reject (surf)
							92-1450		Re-exam
					61-5	92-1370	92-1358		Reject (surf)
							92-1450		Re-exam
					61-6	92-1371	92-1358		
66	Blowdown	SG 1	One	9	66-1	87-1370	87-1366		
					66-2	87-1407	87-1366		
					66-3		87-1366		Limited UT
					66-5	87-1408	87-1366		
					66-6	87-1409	87-1366		
			One	7	66-7	87-1410	87-1366		
					66-8	87-1411	87-1366		
					66-9	87-1412	87-1366		
					66-26	87-1371	87-1366		
					47-3	87-1388	87-1374		
AHE 5.31 & AHE 5.32	47	MS SG 1 270	One	7	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		
			Two	9	47-27	87-1439	87-1373		
					48-3	92-1428	92-1380		
					48-7	92-1429	92-1380		
					48-11	92-1430	92-1380		
					48-15	92-1431	92-1359		
					48-19	92-1432	92-1359		
48	MS SG 1 90		Two	9					
			Two	9					



# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
AHE 5.31 & AHE 5.32	48	MS SG 1 90	Two	9	48-23	92-1433	92-1359 92-1380		
					48-27	92-1434	92-1380		
					48-34	92-1435	92-1380		
					48-35	92-1436	92-1380		
B 1.22	02	Closure Head	One	33%	2-4	87-1603	87-1598		
						87-1604			
						87-1605			
B 1.30	01	Reactor Vessel	One	50%	1-14	92-1331			
						92-1332			
						92-1333			
B 1.40	02	Closure Head	One	33%	2-1	87-1603	87-1598		
						87-1604			
						87-1605			
B 2.11	05	PZR	One	33%	5-2	89-1190			
						89-1191			
						89-1192			
					5-8	89-1188			
						89-1199			
						89-1200			
B 2.31	03	SG 1	One	1	3-5	89-1222			
						89-1216			
						89-1210			
	04	SG 2	One	1	4-2	89-1146			
						89-1147			
						89-1148			
B02.32	03	SG 1	One	4	3-10	89-1224			
						89-1218			
						89-1212			
					3-11	89-1225			
						89-1219			
						89-1213			
					3-12	89-1226			
						89-1220			
						89-1214			
					3-13	89-1227			
						89-1221			
						89-1215			
B 2.40	03	SG 1	One	1	3-6	89-1223			
						89-1217			
						89-1211			
B 3.90	01	Reactor Vessel	One	2	1-15	89-W*			* Separate Report by Westinghouse
					1-18	89-W*			
B 3.100	01	Reactor Vessel	One	2	1-15	89-W*			
					1-18	89-W*			
B 3.110	05	PZR	One	33%	5-11	89-1189			
						89-1201			
						89-1202			
					5-9	89-1236			
						89-1237			
						89-1238			



# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
B 3.120	05	PZR	One	2	5-11	89-1234			Nozzle Inner Radius
					5-9	89-1235			Nozzle Inner Radius
B 3.130	03	SG 1	One	1	3-9	89-1163			
						89-1164			
	04	SG 2	One	1	4-9	89-1149			
						89-1150			
						89-1151			
B 3.140	03	SG 1	One	1	3-9	89-1182			Inner Radius
	04	SG 2	One	1	4-9	89-1183			Inner Radius
B 4.12	02	Closure Head	One	8	CEDM			90-1032	
			Two	8	CEDM			92-1558	
B 4.13	01	Reactor Vessel	One	5	ICI			90-1032	
			Two	5	ICI			92-1558	
B 4.20	05	PZR	One	3	HTRS			90-1032	
			Two	3	HTRS			92-1558	
B 5.40	20	PZR Surge	One	1	5-34	89-1233	89-1073		
	31	PZR Safety	One	1	5-29	87-1584	87-1526		
B 5.130	21	SD Cooling 1	One	1	6-11	89-1186	89-1170		
	23	Safety Injection 1A	One	1	9-10	89-1205	89-1107		
B 5.140	27	PZR Spray 1A	One	1	9-11	90-1020	89-1108		
	32	Drain Line 1A	One	1	8-18		87-1546		
	33	Drain Line 1B	Two	1	10-18		92-1316		
B 6.10	02	Closure Head Nuts	One	18	1 thru 18		89-1042		
							89-1045		
			Two	18	19 thru 36	92-1373	92-1365		
							92-1480		PSE #25
B 6.30	02	Closure Head Studs	One	18	1 thru 18	89-1034	89-1041		
							89-1044		
			Two	18	19 thru 36	92-1372	92-1364		
							92-1363		
						92-1544	92-1543		PSE #8
B 6.50	02	Closure Head Washers	One	18	1 thru 18		89-1043		
			Two	18	19 thru 36		92-1366		
							92-1481		PSE #25
B 6.180	16	RCP 1A Flange Studs	One	5	1 thru 16	87-1640	87-1633	87-1632	Vis/IEB 82-02
							89-1010		
							89-1011		
	17	RCP 1B Flange Studs	One	5	1 thru 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 thru 16	87-1642	87-1613	87-1614	Vis/IEB 82-02
							89-1010		
							89-1011		
	19	RCP 2B Flange Studs	One	5	1 thru 16	87-1643	87-1616	87-1617	Vis/IEB 82-02
							89-1010		
							89-1011		
B 6.190	NA	RCP Flange	One	1			89-1033		RCP 1A
B 6.200	16	RCP 1A Nuts & Rings	One	5	1 thru 16		87-1539		
	17	RCP 1B Nuts & Rings	One	5	1 thru 16		87-1540		

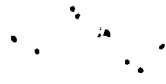


# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
B 6.200	18	RCP 2A Nuts & Rings	One	5	1 thru 16			87-1541	
	19	RCP 2B Nuts & Rings	One	5	1 thru 16			87-1542	
B 7.20	05	PZR Manway Studs	One	20	20 Studs		90-1029	90-1030	
								90-1031	
			Two	20	20 Studs		92-1489	92-1490	Reject (1 nut)
								92-1528	PSE (1 nut)
B 7.30	03	SG 1 Manway Studs	One	40	40 Studs		87-1594	87-1592	
								87-1611	
								87-1615	
								89-1009	
								89-1022	
			Two	40	40 Studs		92-1476	92-1478	Reject (2 studs)
							92-1488	92-1487	PSE (2 studs)
	04	SG 2 Manway Studs	One	40	40 Studs		87-1595	87-1593	
								89-1009	
								89-1022	
			Two	40	40 Studs		92-1477	92-1479	
B 7.50	31	PZR PSV Studs & Nuts	One	1	PSV200		87-1590	87-1589	
								87-1637	
								87-1638	
								87-1639	
								88-1008	
								91-1001	
					PSV201		87-1590	87-1589	
								88-1008	
								91-1001	
								91-1040	
					PSV202		87-1590	87-1589	
								88-1008	
								90-1034	
								91-1001	
					PSV203		87-1590	87-1589	
							87-1591	88-1008	
								90-1034	
								91-1040	
			Two	1	PSV200		92-1470	92-1384	
							92-1482		
								92-1527	PSE (1 stud)
					PSV201		92-1471	92-1385	
					PSV202		92-1472	92-1386	Reject (1 nut)
							92-1482		
								92-1527	PSE (2 nuts)
					PSV203		92-1473	92-1387	Reject (1 nut)
							92-1482		
								92-1527	PSE (2 nuts)
B 7.60	37	Charging Line Flange	One	1	V435			87-1576	
	16	RCP 1A Seal Housing	One	5	1 thru 16			87-1539	
	17	RCP 1B Seal Housing	One	5	1 thru 16			87-1540	





1. The first part of the document is a list of names and addresses.

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# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
B 7.60	18	RCP 2A Seal Housing	One	5	1 thru 16			87-1541	
	19	RCP 2B Seal Housing	One	5	1 thru 16			87-1542	
B 7.70	21	SD Loop 1	One	1	V653			87-1601	
	22	SD Loop 2	One	1	V654			89-1074	
	23	Safety Injection 1A	One	1	V237			89-1106	
	24	Safety Injection 1B	One	1	V543			87-1467	
	25	Safety Injection 2A	One	1	V540			87-1469	
	26	Safety Injection 2B	One	1	V225			87-1472	
	28	PZR Spray 1B	One	2	V241			87-1575	
					V242			87-1575	
	31	PZR Safeties	One	1	PSV200			87-1638	
								87-1639	
			Two	1	PSV200			92-1557	
					PSV201			92-1557	
					PSV202			92-1557	
					PSV203			92-1557	
	32	Drain 1A	One	2	V234			87-1543	
					V334			87-1543	
	33	Drain 1B	Two	2	V235			92-1315	
					V335			92-1315	
	34	Drain 2A	Two	2	V233			92-1318	
					V333			92-1318	
	37	Charging Line	One	1	V240			87-1602	
	38	Loop 1 Drain	One	1	V215			89-1153	
	39	HPSI Loop 1	One	1	V523			89-1075	
			Two	2	V522			92-1322	
					V957			92-1322	
	40	HPSI Loop 2	Two	1	V532			92-1447	
B 7.80	02	Closure Head	One	1	CEDM 92			87-1612	
					CEDM 96			87-1610	
B 8.20	05	PZR	One	33%	5-1	89-1196	89-1187		
						89-1197			
						89-1198			
B 8.30	03	SG 1	One	33%	3-1	89-1166	89-1102		
						89-1167			
						89-1168			
B 9.11 & B 9.12	06	RCS Piping	One	7	17-2	90-1017	89-1169		
						90-1018			
						90-1019			
					1-31	89-W*	92-1448		*Separate Report by Westinghouse
					1-34	89-W*	92-1448		
					3-30	89-1195	89-1072		
					4-30	89-1152	89-1071		
					6-7	89-W*	92-1448		
					7-7	89-W*	92-1448		
	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	89-1070		



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## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
B 9.11 & B 9.12	21	SD Cooling 1	Two	2	21-14	92-1337	92-1312		
					21-15	92-1338	92-1312		
	22	SD Cooling 2	One	2	22-11	89-1144	89-1061		
					22-23	89-1145	89-1061		
			Two	2	22-18	92-1390	92-1388		
	23	Safety Injection 1A	One	3	23-1	89-1206	89-1107		
					23-2	89-1207	89-1171		
					23-4	89-1208	89-1107		
	24	Safety Injection 1B	Two	3	24-14	92-1290	92-1235		
					24-16	92-1291	92-1235		
					24-19	92-1292	92-1235		
	25	Safety Injection 2A	One	2	25-26	87-1509	87-1468		
					25-27	87-1510	87-1468		
	26	Safety Injection 2B	One	2	26-8		89-194		PSE
					26-9	87-1581	87-1485		
					26-11	87-1558	87-1485		
			Two	1	26-12	92-1293	92-1234		
	29	Combined PZR Spray	One	2	29-10	87-1582	87-1531		
					29-11	87-1583	87-1531		
	31	PZR Safeties	One	1	31-1	87-1585	87-1525		
B 9.21 & B 9.22	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
						89-1052			
					30-2	89-1051	89-1050		Vol/IEB 88-08
						89-1052			
					30-7		87-1535		
					30-13		87-1535		
			Two	2	30-5		92-1349		
					30-6		92-1349		
					30-7		92-1352		
					30-13		92-1352		
	32	Drain Line 1A	One	2	32-1		87-1546		
					32-2		87-1546		
	33	Drain Line 1B	Two	2	33-1		92-1316		
					33-5		92-1316		
	36	Letdown	One	4	36-8		87-1580		
					36-9		87-1580		
					36-28		87-1609		
					36-35		87-1609		
	37	Charging	One	5	37-41		87-1536		
					37-42		87-1536		
					37-45		87-1536		
					37-46		87-1536		
					37-47		87-1536		



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# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
B 9.21 & B 9.22	39	HPSI Loop 1	One	2	39-1		87-1488		
					39-5		87-1488		
			Two	3	39-12		92-1321		
					39-13		92-1321		
					39-24		92-1321		
	40	HPSI Loop 2	One	3	40-1		89-1062		
					40-2		89-1062		
					40-3		89-1062		
			Two	2	40-6		92-1327		
					40-7		92-1327		
B 9.31	06	RCS Piping	One	1	9-8	89-1231	89-1209		
B 9.32	06	RCS Piping	One	2	8-17		87-1559		
	22	SD Cooling Loop 2			22-7A		89-1061		
B 9.40	32	Drain Line 1A	One	1	32-6		87-1546		
B 9.40	33	Drain Line 1B	Two	1	33-6		92-1330		
					33-8		92-1316		
					33-9		92-1316		
	34	Drain Line 2A	Two	1	34-6		92-1317		
					34-8		92-1317		
					34-9		92-1317		
	38	Drain Line Loop 1	One	1	38-5		89-1154		
B 10.10	22	SD Cooling 2	Two	1	SI-193-H23		92-1389		
	26	Safety Injection 2B	One	1	SI-179-H10		87-1485		
	36	Letdown	One	1	RC-91-H5		87-1609		
B 12.20	16	RCP Casing	One	1	RCP 1A			89-1033	
B 13.10	01	Reactor Vessel	One	100%	Acc Areas			87-1596	
								87-1597	
			Two	100%	Acc Areas			92-1542	
B 14.10	02	Closure Head	One	2	9-84	89-1053			
					9-88	89-1055			
					10-84	89-1054			
					10-88	89-1056			
B 15.10 & B 15.11	1,2	Reactor Vessel	One	All	Press Bound			88-1007	
								90-1032	
			Two	All	Press Bound			92-1558	
B 15.20 & B 15.21	5	PZR	One	All	Press Bound			88-1007	
								90-1032	
			Two	All	Press Bound			92-1558	
								92-1559	
B 15.30 & B 15.31	3	SG 1	One	All	Press Bound			88-1007	
								90-1032	
			Two	All	Press Bound			92-1558	
	4	SG 4	One	All	Press Bound			88-1007	
								90-1032	
			Two	All	Press Bound			92-1558	
B 15.50 & B 15.51	All	RCS Piping	One	All	Press Bound			88-1007	
								90-1032	
			Two	All	Press Bound			92-1558	
B 15.60 & B 15.61	16	RCP 1A	One	All	Press Bound			88-1007	
								90-1032	
			Two	All	Press Bound			92-1558	



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## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
B 15.60 & B 15.61	17	RCP 1B	One	All	Press Bound			88-1007	
								90-1032	
	18	RCP 2A	Two	All	Press Bound			92-1558	
			One	All	Press Bound			88-1007	
	19	RCP 2B						90-1032	
			Two	All	Press Bound			92-1558	
			One	All	Press Bound			88-1007	
								90-1032	
			Two	All	Press Bound			92-1558	
			One	All	Class 1			88-1007	
B 15.70 & B 15.71	All	RCS Valves	One	All	Class 1			90-1032	
								92-1558	
	BFLYWH	16 RCP 1A Flywheel	Two	All	Class 1				
			One	1	N/A	89-1030	89-1029		*FLYWHEELS MOVED FROM UNIT 1 TO UNIT 2 DURING THIS OUTAGE.
						89-1032			
						89-1001*			
						89-1002*			
		17 RCP 1B Flywheel	One	1	N/A	89-1023	89-1028		
						89-1024			
						89-1005*			
						89-1006*			
		18 RCP 2A Flywheel	One	1	N/A	89-1031	89-1029		
						89-1032			
						89-1007*			
						89-1008*			
		19 RCP 2B Flywheel	One	1	N/A	89-1025	89-1027		
						89-1026			
						89-1003*			
						89-1004*			
BIWF	03	SG 1	One	1	3-40			87-1549	
			One	2	16-20			87-1458	
	16	RCP 1A			16-21			87-1458	
			Two	4	16-12			92-1298	
					16-13			92-1299	
					16-14			92-1300	
					16-15			92-1301	
			One	2	17-20			87-1459	
	17	RCP 1B			17-21			87-1459	
			Two	4	17-12			92-1302	
					17-13			92-1303	
					17-14			92-1304	
					17-15			92-1305	
			One	4	18-12			87-1460	
	18	RCP 2A			18-13			87-1460	
					18-14			87-1460	
					18-15			87-1460	
			Two	2	18-20			92-1306	
					18-21			92-1307	
			One	4	19-12			87-1461	
	19	RCP 2B			19-13			87-1461	
					19-14			87-1461	



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## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
BIWF	19	RCP 2B	One	4	19-15			87-1461	
			Two	2	19-20			92-1308	
					19-21			92-1309	
	20	PZR Surge	One	2	RC-28-H1			87-1445	
					RC-28-H2			87-1435	
			Two	2	RC-28-H842			92-1310	
					RC-28-H844			92-1311	Reject
								92-1546	Re-exam
	21	SD Cooling 1	One	7	SI-240-H10			87-1462	
					SI-240-H11			87-1463	
					SI-240-H13			87-1464	
					RC-51-H821			89-1157	
					RC-51-H1			89-1155	
					RC-51-H2			89-1156	Reject
								90-1033	Re-exam
			Two	7	RC-51-H3			89-1172	
					SI-240-H9			91-1004	
					RC-51-H822			92-1264	
					RC-51-H4			92-1262	
					RC-51-H5			92-1263	
					SI-240-H823			92-1267	
					SI-240-H824			92-1268	
					SI-240-H12			92-1266	
					SI-240-H2			92-1265	
					SI-240-H6			92-1529	PSE/Snub. Replace
	22	SD Cooling 2	One	4	SI-193-H17			89-1077	
					SI-193-H19			89-1109	Reject
								89-1241	Re-exam
					RC-68-H5			92-1236	
					RC-68-H6			92-1237	
			Two	5	SI-193-H20			92-1240	
					SI-193-H23			92-1374	
					SI-193-H25			92-1241	
					SI-193-H8			92-1238	Reject
								92-1362	Re-exam
	23	Safety Injection 1A	One	1	SI-193-H9			92-1239	
			Two	2	SI-207-H5			89-1110	
	24	Safety Injection 1B	Two	2	SI-207-H3			92-1547	PSE
			One	2	SI-223-H3			87-1437	
					SI-223-H4			87-1436	
					SI-223-H7			86-209	PSE
					SI-223-H8			86-210	PSE
			Two	2	SI-223-H1			92-1242	
								92-1541	PSE/Snub. Reduction
					SI-223-H2			92-1243	
	25	Safety Injection 2A	One	2	SI-156-H7			87-1623	
	26	Safety Injection 2B			SI-156-H9			87-1508	
			One	3	SI-179-H7			86-207	PSE
					SI-179-H8			86-208	PSE
					SI-179-H9			87-1473	
					SI-179-H10			87-1486	



# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
BIWF	26	Safety Injection 2B	One	3	SI-179-H11			87-1487	
			Two	3	SI-175-H21			92-1271	
								92-1531	PSE/Snub. Reduction
	27	PZR Spray 1A	One	9	SI-175-H22			92-1272	
					SI-175-H23			92-1273	
					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	
			Two	9	RC-62-H31			92-1523	PSE/Snub. Replace
			One	9	RC-17-H24			87-1566	
					RC-17-H34			87-1567	
					RC-17-H36			87-1568	
	28	PZR Spray 1B			RC-17-H38			87-1569	
					RC-17-H39			87-1570	
								89-1046	PSE/Replacement
					RC-17-H40			87-1571	
					RC-17-H41			87-1572	
					RC-17-H42			87-1573	
					RC-18-H11			87-1625	PSE
					RC-17-H35			92-1351	
			Two	8	RC-17-H41			92-1522	PSE/Snub. Replace
			One	2	RC-18-H16			87-1529	
	29	PZR Combined Spray			RC-18-H18			87-1530	
								89-1039	PSE/Replacement
								87-1544	
	32	Drain Line 1A	One	2	RC-60-HA			87-1545	
	33	Drain Line 1B	Two	2	RC-58-HA			92-1314	
					RC-58-HB			92-1313	
	34	Drain Line 2A	One	0	RC-96-HB			89-1040	PSE/Replacement
			Two	2	RC-96-HA			92-1319	
					RC-96-HB			92-1320	
	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	
	37	Charging	One	14	CH-5-H2			87-1553	
								89-1047	PSE/Replacement
					CH-5-H3			87-1554	

# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
BIWF	37	Charging	One	14	CH-5-H6			89-1048	PSE/Replacement
					CH-5-H10			89-1049	PSE/Replacement
					CH-5-H24			89-1058	PSE/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	
			Two	14	CH-5-H6			92-1520	PSE/Snub. Replace
					CH-5-H10			92-1521	PSE/Snub. Replace
					CH-5-H17			92-1545	PSE/Snub. Reduction
					CH-5-H22			92-1548	PSE/Snub. Reduction
					CH-5-H32			92-1549	PSE Reject
								92-1552	PSE/Re-exam
	38	Drain Loop 1	One	0	RC-70-HA			89-1059	PSE/Replacement
	39	HPSI Loop 1	One	4	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	
			Two	5	SI-248-H17			92-1244	
					SI-248-H18			92-1270	Reject
								92-1519	Reject
								92-1530	Re-exam
					SI-248-H19			92-1245	
					SI-248-H20			92-1383	
					SI-248-H29			92-1246	
	40	HPSI Loop 2	One	3	SI-199-H13			89-1079	
					SI-199-H14			89-1080	
					SI-199-H21			89-1081	
			Two	4	SI-199-H15			92-1274	
					SI-199-H16			92-1275	
					SI-199-H17			92-1276	
					SI-199-H18			92-1277	
C 1.10	41	SG 1	One	1	41-3 (50%)	90-1008			
						90-1009			
						90-1010			
					41-4(50%)	90-1011			
						90-1012			
						90-1013			
	68	Reg HT Exch.	One	1	68-7	89-1203			
	69	Letdown HT Exch.	One	50%	69-1	87-1587			
	84	SD Cooling A	Two	50%	74-123	92-1218			
						92-1219			



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## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
C1.20	41	SG 1	One	50%	41-5	90-1014 90-1015 90-1016			
	68	Reg HT Exch.	One	1	68-6	89-1204			
C 1.30	41	SG 1	One	50%	41-1	90-1005 90-1006 90-1007			
C 1.30	84	SD Cooling A	Two	50%	74-124	92-1220 92-1221			
	69	Letdown HT Exch.	One	50%	69-2	87-1588			
C 2.21	41	SG 1	One	1	41-34	89-1193	89-1228		
& C 2.22	42	SG 2	One	1	42-35	89-1194	89-1229		
	84	SD Cooling A	Two	1	74-122	92-1214 92-1215 92-1216	92-1217		Nozzle Inner Radius
C 3.10	41	SG 1	One	1	41-42		90-1001		
C 3.20	43	MS SG 1 90	One	1	SG-36-H17		87-1515		
	45	MS SG 2 270	One	3	SG-42-H14 SG-42-H15 SG-42-H16		87-1538 87-1517 87-1517		
	55	FW SG 2	One	1	SG-5-H9		89-1076		
	64	Blowdown SG 1	One	3	SG-39-H15 SG-39-H17 SG-53-H1		89-1064 89-1064 89-1130		
	65	Blowdown SG 2	One	2	SG-48-H20 SG-52-H1		89-1067 89-1065		
	71	LPSI Discharge 1	One	1	SI-87-H11		87-1304		
	76	CS Suction 1	One	1	SI-9-H4		87-1268		
	83	SD Cooling 1	Two	2	SI-87-H4 SI-90-H1		92-1143 92-1144		
	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 SI-70-H11 SI-70-H12 SI-70-H16		87-1335 87-1336 87-1335 87-1337		
	92	LPSI Suction 1	One Two	1 2	SI-241-H21 SI-239-H1 SI-241-H16		87-1334 92-1170 92-1148		
	93	CS Discharge 1	Two	1	SI-89-H13		92-1142		
	94	SD Cooling A	Two	2	SI-70-H5 SI-70-H8		92-1361 92-1222		
	99	LPSI 2B	Two	1	SI-174-H13		92-1379		
	100	CSP-LPSI Suction 1	One Two	1 1	SI-369-H1 84-5		87-1433 92-1483		
C 3.30	72	LPSI Pump A	One  Two	2  1	72-3A 72-3B 72-3A 72-3B 72-3C		87-1362 87-1362 92-1230 92-1230 92-1230		



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## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
C 3.30	75	LPSI Pump B	Two	1	73-3A		92-1509		
					73-3B		92-1509		
					73-3C		92-1509		
	78	CS Pump A	One	2	80-3A		87-1261		
					80-3B		87-1261		
			Two	1	80-3A		92-1224		
					80-3B		92-1225		
					80-3C		92-1226		
					81-3A		92-1463		
	81	CS Pump B	Two	1	81-3B		92-1463		
					81-3C		92-1463		
C 4.40	47	MS SG 1 270	One	20	V170	87-1375			Vol/IEB 79-13
	48	MS SG 1 90	One	20	V180	87-1376			Vol/IEB 79-13
	56	FW SG 1	Two	20	V132	92-1501			
			Two	20	V174	92-1500			
C 5.11 & 5.12	58	Aux & FW SG 1	One	1	58-1	90-1004	90-1002		
			Two	2	58-12	92-1412	92-1378		
					58-13	92-1413	92-1378		Reject(surf) Re-exam
							92-1475		
					58-16	92-1339	92-1343		
					58-16A	92-1340	92-1343		
			One	1	59-1	89-1115	89-1069		
					59-12	92-1347	92-1344		
					59-13	92-1348	92-1344		
					59-16	92-1341	92-1328		
					59-16A	92-1342	92-1328		
	59	Aux & FW SG 2	One	1	59-1	89-1115	89-1069		
					59-12	92-1347	92-1344		
			Two	3	59-13	92-1348	92-1344		
					59-16	92-1341	92-1328		
					59-16A	92-1342	92-1328		
					43-1	87-1557	87-1527		
					43-2	87-1547	87-1527		
					43-22	87-1532	87-1515		
	44	MS SG 1 270	One	3	44-26	87-1548	87-1528		
					44-28	87-1533	87-1528		
					44-30	87-1534	87-1528		
	46	MS SG 2 90	One	2	46-25	87-1523	87-1519		
					46-27	87-1524	87-1519		
	54	Feedwater SG 1	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		
					42-44	89-1117	89-1066		
					55-11	89-1118	89-1066		
	55	Feedwater SG 2	One	5	55-12	89-1119	89-1068		
					55-15	89-1116	89-1066		
					55-26	89-1120	89-1066		
					41-39	90-1003	90-1002		
					58-19	87-1481	87-1480		
					58-20	87-1482	87-1480		
	59	Aux & FW SG 2	One	2	59-33	87-1483	87-1479		
					59-34	87-1484	87-1479		
	62	Aux & FW SG 1	One	1	62-24	87-1367	87-1359		
	63	Aux & FW SG 2	One	1	63-4	87-1368	87-1360		



# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
C 5.21 & C 5.22	64	Blowdown SG 1	One	2	64-1	89-1121	89-1105		
					64-2	89-1122	89-1105		
	65	Blowdown SG 2	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		
C 7.10	N/A	Pressure Vessels	One	All	Press Bound			*	* 91-1005, 91-1020
C 7.30	N/A	Piping	One	All	Press Bound			*	91-1021, 91-1026
C 7.50	N/A	Pumps	One	All	Press Bound			*	91-1027, 91-1028
C 7.70	N/A	Valves	One	All	Press Bound			*	91-1029, 91-1030 91-1036
CIWF	41	SG 1	One	2	41-42			90-1023	
					41-43			90-1024	
	43	MS SG 1 90	One	3	SG-36-H17			87-1513	
					SG-36-H884			87-1522	
					SG-36-H885			87-1514	
	44	MS SG 1 270	One	2	SG-33-H17			87-1600	
					SG-33-H18			87-1516	
	45	MS SG 2 270	One	3	SG-42-H14			87-1537	
					SG-42-H15			87-1599	
					SG-42-H16			87-1518	
	46	MS SG 2 90	One	2	SG-45-H17			87-1520	
					SG-45-H18			87-1521	
	47	MS SG 1 270	One	1	SG-206-H1			87-1240	
								92-1553	
	48	MS SG 1 90	Two	1	SG-207-H001			92-1350	Reject
								92-1554	Re-exam
	49	MS SG 2 90	Two	0	SG-208-H001			92-1555	
	50	MS SG 2 270	Two	0	SG-209-H001			92-1556	
	51	ADV # 1	One	1	SG-59-H6			87-1606	
			Two	1	SG-70-H6			92-1278	
	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	
			Two	2	SG-81-H4			92-1279	
					SG-83-H4			92-1280	
	54	FW SG 1	One	7	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			86-98	PSE
					SG-5-H9			89-1131	
					SG-5-H10			89-1132	
					SG-5-H11			89-1133	
					SG-5-H12			89-1134	



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# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
CIWF	55	FW SG 2	One	9	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	
			Two	7	SG-5-H14			92-1524	PSE/Snub. Replace
56	FW SG 1		Two	1	SG-202-H001			92-1511	
58	Aux & FW SG 1		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	
			Two	7	SG-8-H10			92-1525	PSE/Snub. Replace
59	Aux & FW SG 2		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 SG 1		One	1	SG-200-H9			87-1296	
61	Downcomer FW SG 2		Two	2	SG-203-H13			92-1281	
					SG-203-H14			92-1282	
62	Aux FW SG 1		One	1	AF-4-H3			87-1245	
63	Aux FW SG 2		One	2	AF-6-H2			87-1246	
					AF-16-H1			87-1247	
64	Blowdown SG 1		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 SG 2		One	12	SG-48-H2			89-1139	
					SG-48-H3			89-1095	
					SG-48-H4			89-1096	
					SG-48-H19			89-1097	
					SG-48-H20			89-1098	
					SG-48-H21			89-1099	
					SG-48-H925			89-1143	
					SG-52-H1			89-1140	



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# APPENDIX A

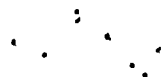
## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
CIWF	65	Blowdown SG 2	One	12	SG-52-H2			89-1141	
					SG-52-H3			89-1100	
					SG-52-H4			89-1101	
					SG-53-H923			89-1142	
	70	LPSI A Suction	One	1	SI-67-H4			87-1301	
	71	LPSI A Discharge	One	1	SI-87-H11			87-1302	
			Two	5	SI-78-H1			92-1109	
					SI-78-H2			92-1110	
					SI-87-H1			92-1111	
					SI-87-H2			92-1112	
					SI-87-H3			92-1108	
	72	LPSI Pump A	One	2	72-3A			87-1369	
					72-3B			87-1369	
			Two	1	72-3A			92-1231	
					72-3B			92-1232	
	73	LPSI Pump B Suction	Two	1	72-3C			92-1233	
					SI-308-H14			92-1125	
					73-3A			92-1510	
	75	LPSI Pump B Discharge	Two	1	73-3B			92-1510	
					73-3C			92-1510	
					SI-9-H4			87-1259	
	76	CS Pump A Suction	One	1	SI-79-H1			87-1267	
			One	4	SI-79-H2			87-1264	
					SI-79-H3			87-1265	
					SI-79-H4			87-1266	
	77	CS Pump A Discharge	Two	3	SI-79-H5			92-1113	
					SI-79-H6			92-1114	
					SI-82-H2			92-1115	
					80-3A			87-1260	
	78	CS Pump A	One	2	80-3B			87-1260	
			Two	1	80-3A			92-1227	
					80-3B			92-1228	
					80-3C			92-1229	
	79	CS Pump B Suction	One	3	SI-34-H1			87-1253	
			Two	2	SI-34-H2			87-1254	
					SI-34-H3			87-1255	
					SI-33-H3			92-1127	
	80	CS Pump B Discharge	One	3	SI-33-H4			92-1126	
					SI-119-H7			87-1256	
					SI-119-H8			87-1331	
					SI-119-H9			88-1006	
	81	CS Pump B	Two	4	SI-119-H1			92-1128	
					SI-119-H2			92-1129	
					SI-119-H3			92-1130	
					SI-119-H4			92-1131	
	82	SD Cooling A	One	2	81-3A			92-1425	
					81-3B			92-1425	
					81-3C			92-1425	
					SI-78-H5			87-1278	
					SI-79-H10			87-1279	

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## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks	
CIWF	83	SD Cooling A	One	4	SI-87-H9			87-1280		
					SI-89-H1			87-1281		
					SI-89-H2			87-1282		
					SI-89-H3			87-1283		
			Two	3	SI-87-H4			92-1104		
					SI-90-H1			92-1145		
					SI-90-H2			92-1105		
	85	SD Cooling B	One	3	SI-119-H10			87-1252		
					SI-123-H6			88-1005		
					SI-123-H7			87-1249		
			Two	6	SI-119-H11			92-1183		
					SI-119-H13			92-1184		
					SI-119-H14			92-1102		
					SI-123-H2			92-1185		
	86	SD Cooling B	One	3	SI-123-H5			92-1103		
					SI-123-H8			92-1186		
					SI-129-H10			87-1248		
					SI-129-H11			87-1250		
			Two	7	SI-129-H12			87-1251		
					SI-129-H7			92-1107		
					SI-129-H8			92-1106		
					SI-135-H1			92-1134		
	88	LPSIB			SI-135-H2			92-1135		
					SI-135-H3			92-1136		
					SI-72-H3			92-1526	PSE/Snub. Replace	
					SI-72-H5			92-1132		
			One	8	SI-72-H6			92-1133		
					SI-72-H11			87-1314		
					SI-72-H13			87-1315		
					SI-72-H14			87-1316		
	89	LPSIB			SI-72-H21			87-1317		
					SI-72-H22			87-1318		
					SI-73-H1			87-1319		
					SI-73-H2			87-1320		
			One	4	SI-73-H3			87-1321		
					SI-194-H12			87-1310		
					SI-194-H13			87-1311		
					SI-194-H14			87-1312		
	90	CS B	Two	2	SI-194-H18			87-1626		
					SI-194-H23			87-1313		
	91	LPSIA			SI-134-H9			92-1137		
					SI-134-H10			92-1138		
					SI-70-H9			87-1342		
					SI-70-H10			88-1001		
			Two	7	SI-70-H11			87-1343		
					SI-70-H12			87-1344		
					SI-70-H13			88-1003		
					SI-70-H15			87-1345		
			Two	2	SI-70-H16			87-1644		
					SI-71-H2			92-1139		
				SI-71-H3			92-1140			



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## APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
CIWF	92	LPSIA	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	
			Two	5	SI-239-H1			92-1323	
					SI-239-H2			92-1324	
					SI-241-H9			92-1164	
					SI-241-H11			92-1165	
					SI-241-H16			92-1166	
	93	CS Discharge 1	Two	2	SI-89-H10			92-1141	
					SI-89-H13			92-1182	
	94	LPSIA	One	3	SI-89-H7			87-1291	
					SI-89-H8			87-1292	
					SI-89-H9			87-1293	
			Two	7	SI-70-H4			92-1187	
					SI-70-H5			92-1223	
					SI-70-H8			92-1199	
					SI-241-H6			92-1123	Reject
					SI-241-H7			92-1124	
					SI-241-H8			92-1188	
					SI-241-H17			92-1189	Reject
								92-1551	PSE/Re-exam
	95	LPSIB	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	
			Two	10	SI-194-H5			87-1257	
					SI-72-H7			92-1101	
					SI-72-H9			92-1116	
					SI-194-H4			92-1117	
					SI-194-H7			92-1118	
					SI-194-H8			92-1119	
					SI-194-H9			92-1120	
					SI-194-H10			92-1190	
					SI-194-H11			92-1121	
					SI-194-H15			92-1191	
					SI-194-H21			92-1122	
	96	LPSI To Loop 1A	One	3	SI-202-H7			87-1493	
					SI-202-H8			87-1494	
					SI-202-H9			87-1495	
			Two	8	SI-202-H2			92-1284	
					SI-202-H3			92-1247	
								92-1533	PSE/Snub. Reduction
					SI-202-H4			92-1248	
					SI-202-H5			92-1249	
					SI-202-H6			92-1250	
					SI-202-H10			92-1251	
					SI-202-H11			92-1252	
					SI-202-H12			92-1534	PSE/Snub. Reduction





# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
CIWF	96	LPSI To Loop 1A	Two	8	SI-202-H15			92-1269	Reject
					SI-202-H15			92-1486	Re-exam
	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	
			Two	7	SI-220-H1			92-1253	
					SI-220-H7			92-1535	PSE/Snub. Reduction
					SI-220-H12			92-1536	PSE/Snub. Reduction
					SI-220-H16			92-1285	
					SI-220-H17			92-1254	
					SI-220-H18			92-1255	
					SI-220-H20			92-1286	
					SI-220-H21			92-1256	
					SI-220-H24			92-1537	PSE/Snub. Reduction
					SI-220-H27			92-1538	PSE/Snub. Reduction
					SI-220-H28			92-1287	
					SI-220-H29			92-1539	PSE/Snub. Reduction
	98	LPSI To Loop 2A	One	2	SI-155-H4			87-1627	PSE
					SI-155-H5			87-1503	
					SI-155-H6			87-1504	
			Two	5	SI-155-H1			92-1288	
					SI-155-H2			92-1289	
					SI-155-H3			92-1257	
					SI-155-H4			92-1258	
					SI-155-H6			92-1540	PSE/Snub. Reduction
					SI-155-H7			92-1259	
					SI-174-H7			92-1375	
	99	LPSI To Loop 2B	Two	5	SI-174-H8			92-1376	
								92-1532	PSE/Snub. Reduction
					SI-174-H9			92-1260	
					SI-174-H10			92-1261	
					SI-174-H13			92-1377	
					SI-241-H19			87-1471	
					SI-369-H1			87-1434	
	100	LPSI A Suction	One	2				92-1484	
					84-5				
FR 5.11 & 5.12	70	LPSI A Suction	Two	1					
					70-58	87-1325	87-1303		
					70-69	87-1363	87-1361		
			Two	4	70-104	87-1326	87-1303		
					70-44	92-1295	92-1283		
					70-46	92-1294	92-1283		
					70-61	92-1296	92-1283		
					70-103	92-1297	92-1283		

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# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
FR 5.11 & FR 5.12	71	LPSI B Discharge	One	3	72-5	87-1327	87-1304		
					72-6	87-1328	87-1304		
					72-8	87-1329	87-1304		
			Two	3	72-18	92-1353	92-1345		
					74-45	92-1354	92-1345		
					74-46	92-1355	92-1345		
	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		
			Two	3	82-15	92-1204	92-1203		
					82-16	92-1205	92-1203		
					82-31	92-1206	92-1203		
	79	CS Pump B Suction	Two	2	81-12	92-1207	92-1208		
					81-15	92-1209	92-1210		
	80	CS Pump B Discharge	Two	1	83-1A	92-1464	92-1426		
	82	SD Cooling A	One	2	72-48	87-1284	87-1275		
					72-61	87-1285	87-1275		
			Two	1	72-52	92-1211	92-1213		
						92-1212			
	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		
			Two	3	74-1	92-1200	92-1196		
						92-1201			
					74-3	92-1202	92-1196		
					74-117	92-1171	92-1149		
					74-118	92-1172	92-1149		
	85	SD Cooling B	Two	3	73-36	92-1194	92-1181		
					73-37	92-1195	92-1181		
					73-63	92-1197	92-1198		
	89	LPSI Suction 2	Two	1	71-79	92-1173	92-1146		
	90	LPSI B	Two	3	83-55	92-1174	92-1147		
					83-56	92-1175	92-1147		
					83-59	92-1176	92-1167		
	91	LPSI A	One	2	74-44	87-1358	87-1335		
					76-2	87-1354	87-1338		
			Two	2	77-8	92-1177	92-1180		
					77-10D	92-1178	92-1168		
	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		



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# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

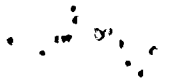
ASME Item no	Zone	Comp/sys	Insp per	Reqd	Item ID	Vol	Reports Surf	Visual	Remarks
FR 5.11	100	LPSI A Suction	One	1	70-134	87-1586	87-1433		
& FR 5.12			Two	1	70-116	92-1346	92-1326		
	101	LPSI B Suction	Two	1	71-130	92-1356	92-1329		
FR 5.21	88	LPSI B	One	1	78-16	87-1330	87-1323		
& FR 5.22	93	Cont. Sump Suction 1	Two	1	84-9	92-1179	92-1169		
	97	LPSI B	Two	3	77-22	92-1334	92-1325		
					77-27	92-1335	92-1325		
	97	LPSI B	Two	3	77-28D	92-1336	92-1325		
	98	LPSI to Loop 2A	One	2	78-45	87-1511	87-1505		
					78-47	87-1512	87-1505		
FR 5.31	82	SD Cooling A	One	1	72-49A		87-1275		
	91	LPSI A	One	1	74-102		87-1351		

APPENDIX B  
CODE LIMITATIONS

APPENDIX B  
CODE LIMITATIONS

No Code Limitations identified  
during Third Refueling Outage.





APPENDIX C

FORM  
NIS-1



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and Dr.

# APS

## NIS-1 FORM

### OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

1. OWNER *ARIZONA PUBLIC SERVICE COMPANY, et al*  
ADDRESS *P.O. BOX 52034, PHOENIX, ARIZONA 85072*
2. PLANT *PALO VERDE NUCLEAR GENERATING STATION*  
ADDRESS *5801 SOUTH WINTERSBURG ROAD; BUCKEYE, ARIZONA 85343*
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
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The items examined, with examination report numbers, are listed in Appendix A. This report is a running summary of all examinations performed to date for Unit 1. The examinations performed since the last Summary Report are numbered with 91-1XXX or 92-1XXX.



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# APS

## NIS-1 BACK

### OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

7. EXAM DATES 7-6-90 TO 5-23-92
8. INSPECTION INTERVAL FROM 1-28-86 TO 7-17-98
9. ABSTRACT OF EXAMINATIONS. INCLUDE A LIST OF EXAMINATIONS AND A STATEMENT CONCERNING STATUS OF WORK REQUIRED FOR CURRENT INTERVAL.

The items examined, with examination report numbers, are listed in Appendix A.

10. ABSTRACT OF CONDITIONS NOTED

The items noted with abnormal conditions during this outage included six areas having linear indications, two Steam Generator manway studs having corrosion, a Pressurizer Safety Valve flange nut and 2 Pressurizer manway nuts having galled threads and 8 supports having 5 loose nuts, 1 loose spherical bearing, 1 rotated pipe clamp, 1 bent strut, and a spring can with impeded travel.

11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

The linear indications were removed by filing/grinding. The Steam Generator manway studs, Pressurizer Safety Valve nuts and Pressurizer manway nut were replaced with new studs and nuts. The abnormal conditions found on supports were reworked in accordance with APS Work Control practices.

Several repairs and replacements have been performed since the last summary report, due to routine and corrective maintenance. The work was performed in accordance with ASME Section XI and APS Work Control procedures. All documents are maintained on file at Arizona Public Service Company.

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 8-11-92 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY TJBH

### CERTIFICATE OF INSERVICE INSPECTION

I, THE UNDERSIGNED, HOLDING A VALID COMMISSION ISSUED BY THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS AND THE STATE OR PROVINCE OF ARIZONA EMPLOYED BY HSBI & I CO. OF HARTFORD, CONNECTICUT HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD 7-6-90 TO 5-23-92, 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

*Paul S. Fyfe*

COMMISSIONS

NS 9685 "N" 1" Az. 264  
NAT'L BOARD, STATE, PROVINCE

DATE 8-11-92



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