



Arizona Nuclear Power Project

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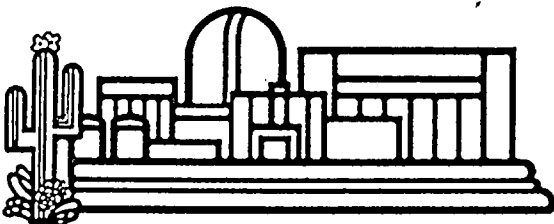
# Inservice Inspection Summary Report

PYNGS UNIT 3

INSERVICE INSPECTION REPORT

FIRST REFUELING

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PALO VERDE NUCLEAR GENERATING STATION

UNIT 3 INSERVICE INSPECTION REPORT

FIRST REFUELING OUTAGE

ARIZONA NUCLEAR POWER PROJECT

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REPORT DATE: 3/7/90



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## UNIT 3 INSERVICE INSPECTION REPORT

### 1.0 Introduction

This report is a summary of the examinations performed during the first Inservice Inspection (ISI) at Palo Verde Nuclear Generating Station - Unit 3. This was the initial ISI for Interval 1 - Period 1 and was conducted during the first refueling outage which began March 7, 1989 and the final exam was completed on December 13, 1989. Palo Verde - Unit 3 began commercial operation on January 8, 1988.

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 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 PYNGS UFSAR Section 6.6.8.
3. Augmented examinations of CHR, RHR, and ECCS piping systems in accordance with 10CFR50.55a.

### 2.0 Examination Summary

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

<u>ZONE</u>	<u>ITEM</u>	<u>DISCREPANCY</u>
3,4	SG Manway Studs	Galled Threads
31	5-29	Linear Indication
45	SG-042-H14	Linear Indication
51	51-3	Linear Indications
51	51-4	Linear Indications
85	SI-123-H6	Loose Bolting
92	SI-241-H21	Loose Bolting
95	SI-134-H12	Loose Bolting
100	SI-369-H1	Linear Indications

The discrepant items in Zones 31, 45, and 51 were repaired by light grinding/blending. The linear indication associated with the integral welded attachment in Zone 100 required rewelding following removal of the indication. All loose bolting on examined supports was tightened. The SG manway studs with galled threads were replaced. All discrepant items were re-examined following any rework. A pipe support (SI-43-H3) in Zone 79 was observed to be covered with boric acid residue. This condition was not rejectable, however, the residue was cleaned off and the support was re-examined.





### 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 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.

### 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 commercial operation until the end of the refueling outage. All repairs and replacements were performed to ASME Section XI requirements. The replacements include the following:

<u>ZONE</u>	<u>ITEM</u>	<u>ACTION</u>
3,4	SG Manway Studs	Replaced Studs
37	Charging Line Flange	Replaced Bolting
22	RC-68-H2	Replaced Snubber
28	RC-17-H46	Replaced Snubber
Note 1	SG-169-H6	Replaced Snubber

Note 1: This item is ASME Class 3 and is included in the Repair and Replacement Program, however, it is not included in the Summary Report tables in Appendix A as they apply to ASME Class 1 and 2 items only.

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#### 7.0 Repairs and Replacements (cont.)

Several items were repaired by grinding or blending and welding when necessary as noted in Section 2.0 above. 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.

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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 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.

CEB: Combustion Engineering issued information bulletin

BUL: NRC issued bulletin





# **APPENDIX A** **INSERVICE INSPECTION SUMMARY REPORT**

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vls	Remarks
AHE5.11	53	Steam to Aux FW	One	11	53-11	89-3351	89-3185		
					53-12	89-3365	89-3185		
					53-13	89-3352	89-3185		
					53-14	89-3353	89-3185		
					53-15	89-3354	89-3185		
					53-21	89-3355	89-3185		
					53-22	89-3356	89-3185		
					53-23	89-3357	89-3185		
					53-24	89-3358	89-3185		
					53-25	89-3359	89-3185		
AHE 5.21	47	MS SG1 270	One	9	47-1	89-3377	89-3302		
						89-3385	89-3302		Longseam weld
					47-2	89-3378	89-3302		
						89-3379	89-3302		Longseam weld
					47-4	89-3390	89-3312		
					47-8	89-3391	89-3312		
					47-12	89-3392	89-3312		
					47-16	89-3375	89-3312		
					47-20	89-3376	89-3312		
					47-24	89-3348	89-3311		
					47-25	89-3349	89-3311		
					47-28	89-3383	89-3303		
					47-29	89-3384	89-3303		
					47-30	89-3350	89-3311		
	51	Atmos Dump SG1	One	11	51-1	89-3592	89-3304		
					51-2	89-3593	89-3304		
					51-3	89-3594	89-3305		Reject
							89-3605		PSE/Re-exam
					51-4	89-3595	89-3305		Reject
							89-3605		PSE/Re-exam
					51-5	89-3596	89-3304		
					51-6	89-3597	89-3304		
					51-7	89-3598	89-3304		
					51-8A	89-3599	89-3304		
					51-8B	89-3600	89-3304		
					51-9	89-3601	89-3304		
					51-51	89-3602	89-3315		
					51-53	89-3668	89-3666		PSE/Block valve
					51-54	89-3669	89-3666		PSE/Block valve
	52	Atmos Dump SG2	One	0	51-55	89-3670	89-3666		PSE/Block valve
					51-56	89-3671	89-3666		PSE/Block valve
					52-53	89-3672	89-3667		PSE/Block valve
					52-54	89-3673	89-3667		PSE/Block valve
					52-55	89-3674	89-3667		PSE/Block valve
60	Downcomer FW SG1		One	9	52-56	89-3675	89-3667		PSE/Block valve
					60-7	89-3279	89-3168		
					60-8	89-3280	89-3168		
					60-9	89-3278	89-3168		
					60-11	89-3281	89-3168		
					60-12	89-3282	89-3168		
					60-14	89-3286	89-3168		
					60-15	89-3283	89-3168		
					60-16	89-3284	89-3168		
					60-17	89-3285	89-3168		



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# 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	89-3269	89-3191		
					66-2	89-3270	89-3191		
					66-3	89-3271	89-3191		
					66-5	89-3273	89-3191		
					66-6	89-3274	89-3191		
					66-7	89-3275	89-3191		
					66-8	89-3276	89-3191		
					66-9	89-3277	89-3191		
					66-25	89-3272	89-3301		
AHE 5.31	47	MS SG1 270	One	7	47-3	89-3386	89-3302		
					47-7	89-3387	89-3302		
					47-11	89-3388	89-3302		
					47-15	89-3389	89-3302		
					47-19	89-3380	89-3311		
					47-23	89-3381	89-3302		
					47-27	89-3382	89-3311		
B01.22	02	Closure Head	One	33%	2-4	89-3614	89-3619		0 degrees
						89-3615			45 degrees
						89-3618			60 degrees
B01.30	01	Reactor Vessel	One	50%	1-14				
B01.40	02	Closure Head	One	33%	2-1	89-3613	89-3619		0 degrees
						89-3616			45 degrees
						89-3617			60 degrees
B02.11	05	Pressurizer	One	33%	5-2	89-3517			0 degrees
						89-3519			45 degrees
						89-3541			60 degrees
					5-8	89-3465			0 degrees
						89-3467			45 degrees
						89-3469			60 degrees
B02.31	03	Steam Generator 1	One	1					
	04	Steam Generator 2	One	1					
B02.32	03	Steam Generator 1	One	4					
B02.40	03	Steam Generator 1	One	1					
B03.90	01	Reactor Vessel	One	2					
B03.100	01	Reactor Vessel	One	2					
B03.110	05	Pressurizer	One	33%	5-11	89-3466			0 degrees
						89-3468			45 degrees
						89-3470			60 degrees
					5-9	89-3518			0 degrees
						89-3520			45 degrees
						89-3542			60 degrees
B03.120	05	Pressurizer	One	2	5-11	89-3537			Nozzle Inner Radius
					5-9	89-3580			Nozzle Inner Radius
B03.130	03	Steam Generator 1	One	1					
	04	Steam Generator 2	One	1					
B03.140	03	Steam Generator 1	One	1					
	04	Steam Generator 2	One	1					
B04.12	02	Closure Head	One	8					
B04.13	01	Reactor Vessel	One	5					
B04.20	05	Pressurizer	One	3					
B05.40	20	Pressurizer Surge	One	1	5-34	89-3544	89-3543		
	31	Pressurizer Safety	One	1	5-29	89-3463	89-3442		Reject PSE/Re-exam
							89-3608		



# APPENDIX A INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks
B05.130	21	SD Cooling 1	One	1					
	23	Safety Injection 1A	One	1					
B05.140	27	PZR Spray 1A	One	1					
	32	Drain 1A	One	1	8-18		89-3432		
B06.010	02	Closure Head Nuts	One	18					
B06.030	02	Closure Head Studs	One	18					
B06.050	02	Closure Head Washers	One	18					
B06.180	16	RCP 1A Flange Studs	One	5	1-16	89-3623	89-3626	89-3630	Vis/BUL 82-02
						89-3634	89-3637	89-3638	Vis/BUL 82-02
	17	RCP 1B Flange Studs	One	5	1-16	89-3624	89-3627	89-3631	Vis/BUL 82-02
						89-3635	89-3636	89-3639	Vis/BUL 82-02
	18	RCP 2A Flange Studs	One	5	1-16	89-3625	89-3628	89-3632	Vis/BUL 82-02
						89-3640	89-3442	89-3644	Vis/BUL 82-02
	19	RCP 2B Flange Studs	One	5	1-16	89-3620	89-3621	89-3622	Vis/BUL 82-02
						89-3641	89-3643	89-3645	Vis/BUL 82-02
B06.200	16	RCP 1A Nuts & Rings	One	5	1-16			89-3686	
	17	RCP 1B Nuts & Rings	One	5	1-16			89-3687	
	18	RCP 2A Nuts & Rings	One	5	1-16			89-3662	
	19	RCP 2B Nuts & Rings	One	5	1-16			89-3663	
B07.20	05	PZR Manway Studs	One	20	20 Studs			89-3606	
B07.30	03	SG1 Manway Studs	One	40	40 Studs		89-3610	89-3609	Reject
								89-3651	PSE/Replacement
	04	SG2 Manway Studs	One	40	40 Studs		89-3610	89-3609	Reject
								89-3651	PSE/Replacement
B07.50	31	PZR PSY Flange Studs	One	1	PSY200		89-3629	89-3633	
					PSY201		89-3629	89-3633	
					PSY202		89-3629	89-3633	
					PSY203		89-3629	89-3633	
	37	Charging Line Flange	One	1	V435			89-3650	PSE/Replacement
								89-3657	PSE/Replacement
B07.60	16	RCP 1A Seal Housing	One	5	1-16			89-3686	
	17	RCP 1B Seal Housing	One	5	1-16			89-3687	
	18	RCP 2A Seal Housing	One	5	1-16			89-3662	
	19	RCP 2B Seal Housing	One	5	1-16			89-3663	
B07.70	21	SD Cooling 1	One	1	V653			89-3370	
	22	SD Cooling 2	One	1					
	23	Safety Injection 1A	One	1					
	24	Safety Injection 1B	One	1	V543			89-3611	
	25	Safety Injection 2A	One	1	V540			89-3371	
	26	Safety Injection 2B	One	1	V225			89-3612	
	28	PZR Spray 1B	One	2	V241			89-3430	
					V242			89-3430	
	31	PZR Safeties	One	1	PSY200			89-3680	
	32	Drain 1A	One	2	V234			89-3433	
					V334			89-3433	
	37	Charging Line	One	1	V240			89-3538	
	38	Loop 1 Drain	One	1					
	39	HPSI 1	One	1					
B07.80	02	Closure Head	One	1	CEDM 92			89-3167	
B08.20	05	Pressurizer	One	33%	5-1	89-3581	89-3551		0 degrees
						89-3582			45 degrees
						89-3583			60 degrees
B08.30	03	Steam Generator 1	One	33%					
B09.11	06	RCS Piping	One	7					



# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vls	Remarks
B09.11	20	PZR Surge	One	1	20-1	89-3545	89-3543		
	21	SD Cooling 1	One	2					
	22	SD Cooling 2	One	2					
	23	Safety Injection 1A	One	3					
	25	Safety Injection 2A	One	2	25-26	89-3424	89-3374		
					25-29	89-3423	89-3374		
	26	Safety Injection 2A	One	2	26-9	89-3395	89-3372		
					26-11	89-3396	89-3372		
	29	PZR Spray	One	2	29-10	89-3461	89-3416		
					29-11	89-3462	89-3416		
	31	PZR Safeties	One	1	31-1	89-3464	89-3441		
B09.21	27	PZR Spray 1A	One	3					
	28	PZR Spray 1B	One	4	28-31		89-3415		
					28-32		89-3415		
					28-39		89-3429		
					28-40		89-3429		
	30	Aux PZR Spray	One	4	30-1	89-3425	89-3417		Vol/BUL 88-08
					30-2	89-3425	89-3417		
					30-4		89-3417		
					30-7		89-3417		
					30-8		89-3459		
	32	Drain 1A	One	2	32-1		89-3432		
					32-2		89-3432		
	36	Letdown	One	4	36-8		89-3439		
					36-9		89-3439		
					36-28		89-3659		
					36-35		89-3659		
	37	Charging	One	5	37-41		89-3536		
					37-42		89-3536		
					37-43		89-3536		
					37-44		89-3536		
					37-45		89-3552		
					37-47		89-3552		
	39	HPSI 1	One	2	39-1		89-3373		
					39-5		89-3373		
	40	HPSI 2	One	3					
B09.31	06	RCS Piping	One	1					
B09.32	06	RCS Piping	One	1	8-17		89-3452		
	22	SD Cooling 2	One	1					
B09.40	32	Drain 1A	One	1	32-6		89-3455		
	38	Loop Drain 1	One	1					
B10.10	26	Safety Injection 2B	One	1	SI-179-H10		89-3372		
	36	Letdown	One	1	RC-91-H5		89-3659	89-3681	
B13.10	01	Reactor Vessel	One	100%	Acc Areas			89-3682	
B14.10	02	Closure Head	One	2	9-84	89-3653			
					9-88	89-3654			
					10-84	89-3655			
					10-88	89-3656			
B15.10	1,2	Reactor Vessel	One	N/A	Press Bound			89-3692	
B15.20	5	Pressurizer	One	N/A	Press Bound			89-3691	CEB 89-6
								89-3692	
B15.30	3	Steam Generator 1	One	N/A	Press Bound			89-3692	
	4	Steam Generator 2	One	N/A	Press Bound			89-3692	





# APPENDIX A INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vls	Remarks
B15.50	ALL	RCS Piping	One	N/A	Class 1			89-3692	
B15.60	16	RCP 1A	One	N/A	Press Bound			89-3692	
	17	RCP 1B	One	N/A	Press Bound			89-3692	
	18	RCP 2A	One	N/A	Press Bound			89-3692	
	19	RCP 2B	One	N/A	Press Bound			89-3692	
B15.70	ALL	RCS Valves	One	N/A	Class 1			89-3692	
BFLYWH	16	RCP 1A Flywheel	One	1					
	17	RCP 1B Flywheel	One	1					
	18	RCP 2A Flywheel	One	1					
	19	RCP 2B Flywheel	One	1					
BIWF	01	Reactor Vessel	One	1					
	03	Steam Generator 1	One	1	3-40			89-3451	
	16	RCP 1A	One	2	16-17			89-3688	
					16-18			89-3688	
	17	RCP 1B	One	2	17-17			89-3690	
					17-18			89-3689	
	18	RCP 2A	One	4	18-12			89-3457	
					18-13			89-3457	
					18-14			89-3457	
					18-15			89-3457	
	19	RCP 2B	One	4	19-12			89-3458	
					19-13			89-3458	
					19-14			89-3458	
					19-15			89-3458	
	20	PZR Surge	One	2	RC-28-H1			89-3426	
					RC-28-H2			89-3427	
					RC-28-H3			89-3428	BUL 88-11
					RC-28-H4			89-3453	BUL 88-11
					RC-28-H842			89-3436	BUL 88-11
					RC-28-H843			89-3437	BUL 88-11
					RC-28-H844			89-3438	BUL 88-11
	21	SD Cooling 1	One	7	SI-240-H10			89-3322	
					SI-240-H11			89-3345	
					SI-240-H13			89-3344	
	22	SD Cooling 2	One	4	RC-68-H2			89-3665	PSE/Replacement
	23	Safety Injection 1A	One	1					
	24	Safety Injection 1B	One	2	SI-223-H3			89-3324	
					SI-223-H4			89-3454	
	25	Safety Injection 2A	One	2	SI-156-H7			89-3337	
					SI-156-H9			89-3338	
	26	Safety Injection 2B	One	3	SI-179-H9			89-3664	
					SI-179-H10			89-3323	
					SI-179-H11			89-3343	
	27	PZR Spray 1A	One	9	RC-62-H27			89-3397	
					RC-62-H28			89-3398	
					RC-62-H29			89-3399	
					RC-62-H30			89-3400	
					RC-62-H31			89-3401	
					RC-62-H32			89-3402	
					RC-62-H33			89-3403	
					RC-62-H34			89-3404	
	28	PZR Spray 1B	One	9	RC-17-H24			89-3431	
					RC-17-H34			89-3405	
					RC-17-H35			89-3406	



# APPENDIX A INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vls	Remarks
BIWF	28	PZR Spray 1B	One	9	RC-17-H36			89-3407	
					RC-17-H38			89-3408	
					RC-17-H39			89-3409	
					RC-17-H40			89-3410	
					RC-17-H41			89-3411	
					RC-17-H42			89-3412	
	29	PZR Combined Spray	One	2	RC-17-H46			89-3679	PSE/Replacement
					RC-18-H16			89-3413	
	32	Drain 1A	One	2	RC-18-H18			89-3414	
					RC-60-HA			89-3434	
	36	Letdown	One	9	RC-60-HB			89-3435	
					RC-91-H1			89-3660	
	37	Charging	One	9	RC-91-H5			89-3661	
					RC-91-HAA			89-3443	
					RC-91-HAK			89-3444	
					RC-91-HB			89-3445	
					RC-91-HD			89-3446	
					RC-91-HE			89-3447	
					RC-91-HY			89-3448	
					RC-91-HZ			89-3449	
					CH-5-H2			89-3554	
					CH-5-H3			89-3555	
					CH-5-H25			89-3556	
					CH-5-H26			89-3557	
					CH-5-H27			89-3558	
					CH-5-H28			89-3559	
	39	HPSI 1	One	14	CH-5-H30			89-3539	
					CH-5-H34			89-3560	
					CH-5-H35			89-3540	
					CH-5-H36			89-3561	
					CH-5-H42			89-3562	
					CH-5-H43			89-3563	
					CH-5-H44			89-3564	
					CH-5-HAA			89-3553	
					SI-248-H26			89-3326	
					SI-248-H27			89-3335	
	40	HPSI 2	One	3	SI-248-H28			89-3325	
					SI-248-H30			89-3333	
C01.10	41	Steam Generator 1	One	2					
	68	Reg HT Exchanger	One	1					
	69	Letdown HT Exch.	One	50%	69-1	89-3590			
C01.20	41	Steam Generator 1	One	1					
	68	Reg HT Exchanger	One	1					
C01.30	41	Steam Generator 1	One	1					
	69	Letdown HT Exch.	One	1	69-2	89-3591			
C02.21	41	Steam Generator 1	One	1					
	42	Steam Generator 2	One	1					
C03.10	41	Steam Generator 1	One	1					
C03.20	43	Main Steam SG1-90	One	1	SG-36-H17		89-3288		
	45	Main Steam SG2-270	One	3	SG-42-H14		89-3287		Reject PSE/Re-exam
							89-3607		
					SG-42-H15		89-3290		
					SG-42-H16		89-3290		



# APPENDIX A INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vls	Remarks
C03.20	55	Feedwater SG2	One	1					
	64	Blowdown SG1	One	3					
	65	Blowdown SG2	One	2					
	71	LPSI Discharge 1	One	1	SI-87-H11		89-3005		
	76	CS Suction 1	One	1	SI-9-H4		89-3007		
	88	SD Cooling 2	One	1	SI-72-H13		89-3129		
	89	LPSI Suction 2	One	1	SI-194-H14		89-3130		
	91	SD Cooling 1	One	4	SI-70-H9		89-3131		
					SI-70-H11		89-3131		
					SI-70-H12		89-3131		
					SI-70-H16		89-3131		
	92	LPSI Suction 1	One	1	SI-241-H21		89-3156		
	100	LPSI Suction 1	One	1	SI-369-H1		89-3420		Reject PSE/Re-exam PSE/Re-exam
							89-3658		
							89-3678		
C03.30	72	LPSI Pump 1	One	2	72-3A		89-3003		
					72-3B		89-3003		
	78	CS Pump 1	One	2	80-3A		89-3009		
					80-3B		89-3009		
C04.40	47	MS SG1 270	One	20	Y170	89-3393			
	48	MS SG1 90	One	20	Y180	89-3394			
C05.11	58	Aux & FW SG1	One	1	58-1	89-3521	89-3456		Vol/BUL 79-13 Vol/BUL 79-13
	59	Aux & FW SG2	One	1	59-1	89-3522	89-3516		
C05.21	43	MS SG1 90	One	3	43-1	89-3316	89-3288		
					43-2	89-3360	89-3288		
					43-22	89-3361	89-3288		
					44-26	89-3362	89-3289		
	44	MS SG1 270	One	3	44-28	89-3363	89-3289		
					44-30	89-3367	89-3289		
					46-25	89-3368	89-3291		
	46	MS SG2 90	One	2	46-27	89-3369	89-3291		
	54	FW SG1	One	5					
	55	FW SG2	One	5					
	58	Aux & FW SG1	One	3	58-19	89-3317	89-3259		
					58-20	89-3318	89-3259		
	59	Aux & FW SG2	One	2	59-33	89-3319	89-3260		
					59-34	89-3320	89-3260		
	62	Aux FW SG1	One	1	62-24	89-3267	89-3186		
	63	Aux FW SG2	One	1	63-4	89-3268	89-3186		
	64	Blowdown SG1	One	2					
	65	Blowdown SG2	One	4					
	41	Steam Generator 1	One	2					
CIWF	43	MS SG1 90	One	3	SG-36-H17		89-3296		
					SG-36-H884		89-3295		
					SG-36-H885		89-3294		
	44	MS SG1 270	One	2	SG-33-H17		89-3297		
					SG-33-H18		89-3298		
	45	MS SG2 270	One	3	SG-42-H14		89-3292		
					SG-42-H15		89-3293		
					SG-42-H16		89-3366		
	46	MS SG2 90	One	2	SG-45-H17		89-3299		
					SG-45-H18		89-3300		
	47	MS SG1 270	One	1	SG-206-H1		89-3306		
	51	ADY No. 1	One	1	SG-59-H6		89-3646		



# APPENDIX A INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vls	Remarks
CIWF	53	Steam to Aux FW	One	4	SG-81-H1			89-3169	
					SG-81-H2			89-3588	
					SG-81-H1			89-3170	
					SG-83-H2			89-3171	
54	FW SG1		One	6					
55	FW SG2		One	9					
58	Aux & FW SG1		One	7					
59	Aux & FW SG2		One	6	AF-6-H1			89-3261	
					SG-11-H8			89-3262	
					SG-11-H9			89-3263	
					SG-11-H10			89-3264	
					SG-11-H11			89-3265	
					SG-11-H12			89-3266	
60	Downcomer FW SG1		One	1	SG-200-H9			89-3172	
62	Aux FW SG1		One	1	AF-4-H3			89-3187	
63	Aux FW SG2		One	2	AF-6-H2			89-3189	
					AF-16-H1			89-3190	
64	Blowdown SG1		One	12					
65	Blowdown SG2		One	12					
70	LPSI A Suction		One	1	SI-67-H4			89-3001	
71	LPSI A Discharge		One	1	SI-87-H-11			89-3006	
72	LPSI Pump A		One	2	72-3A			89-3002	
					72-3B			89-3002	
76	CS Pump A Suction		One	1	SI-9-H4			89-3010	
77	CS Pump A Discharge		One	4	SI-79-H1			89-3015	
					SI-79-H2			89-3011	
					SI-79-H3			89-3012	
					SI-79-H4			89-3013	
78	CS Pump A		One	2	80-3A			89-3014	
					80-3B			89-3014	
79	CS Pump B Suction		One	3	SI-34-H1			89-3565	
					SI-34-H2			89-3566	
					SI-34-H3			89-3585	
								89-3685	Boric Acid Re-exam
80	CS Pump B Discharge		One	3	SI-119-H7			89-3603	
					SI-119-H8			89-3567	
					SI-119-H9			89-3568	
82	Shutdown Cooling A		One	2	SI-78-H5			89-3114	
					SI-79-H10			89-3115	
83	Shutdown Cooling A		One	4	SI-87-H9			89-3116	
					SI-89-H1			89-3117	
					SI-89-H2			89-3118	
					SI-89-H3			89-3119	
85	Shutdown Cooling B		One	3	SI-119-H10			89-3569	
					SI-123-H6			89-3570	
								89-3683	
					SI-123-H7			89-3571	
86	Shutdown Cooling B		One	3	SI-129-H10			89-3572	
					SI-129-H11			89-3573	
					SI-129-H12			89-3574	
88	LPSI B		One	10	SI-72-H11			89-3133	
					SI-72-H13			89-3134	
					SI-72-H14			89-3135	
					SI-72-H21			89-3136	
									Reject PSE/Re-exam



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# APPENDIX A INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks
CIWF	88	LPSI B	One	10	SI-72-H22			89-3137	
					SI-73-H1			89-3138	
					SI-73-H2			89-3139	
	89	LPSI B	One	4	SI-73-H3			89-3140	
					SI-194-H12			89-3141	
					SI-194-H13			89-3142	
					SI-194-H14			89-3143	
					SI-194-H23			89-3144	
	91	LPSI A	One	7	SI-70-H9			89-3145	
					SI-70-H10			89-3146	
					SI-70-H11			89-3147	
					SI-70-K12			89-3148	
					SI-70-H13			89-3149	
					SI-70-H15			89-3150	
					SI-70-H16			89-3151	
	92	LPSI A	One	5	SI-239-H3			89-3152	
					SI-241-H12			89-3157	
					SI-241-H14			89-3153	
					SI-241-H15			89-3154	
					SI-241-H21			89-3158	Reject
	94	LPSI A	One	3				89-3676	PSE/Re-exam
					SI-89-H7			89-3023	
					SI-89-H8			89-3024	
	95	LPSI B	One	6	SI-89-H9			89-3025	
					SI-72-H8			89-3575	
					SI-72-H10			89-3576	
					SI-134-H11			89-3577	
					SI-134-H12			89-3586	Reject
FR05.11	70	LPSI A Suction	One	3				89-3684	PSE/Re-exam
					SI-194-H3			89-3578	
					SI-194-H5			89-3579	
					SI-202-H7			89-3340	
					SI-202-H8			89-3339	
	96	LPSI To Loop 1A	One	3	SI-202-H9			89-3341	
					SI-220-H8			89-3330	
					SI-220-H9			89-3336	
					SI-220-H10			89-3347	
					SI-220-H11			89-3329	
	97	LPSI To Loop 1B	One	10	SI-220-H12			89-3328	
					SI-220-H13			89-3331	
					SI-220-H14			89-3321	
					SI-220-H15			89-3332	
					SI-220-H19			89-3450	
	98	LPSI To Loop 2A	One	2	SI-220-H22			89-3342	
					SI-155-H5			89-3334	
					SI-155-H6			89-3327	
					SI-241-H19			89-3346	
					SI-369-H1			89-3440	
	71	LPSI B Discharge	One	3	70-58	89-3016	89-3004		
					70-69	89-3017	89-3004		
					70-104	89-3018	89-3004		
					72-5	89-3019	89-3005		
					72-6	89-3020	89-3005		
					72-8	89-3021	89-3005		

# APPENDIX A INSERVICE INSPECTION SUMMARY REPORT

ASME Item No	Zone	Comp/Sys	Insp Per	Reqd	Item ID	Vol	Reports Surf	Vis	Remarks
FR05.11	76	CS A Suction	One	2	80-10	89-3027	89-3007		
					80-16	89-3022	89-3007		
	77	CS A Discharge	One	3	82-1	89-3029	89-3008		
					82-1A	89-3028	89-3008		
					82-2A	89-3030	89-3008		
	82	SD Cooling A	One	2	72-48	89-3120	89-3112		
					72-61	89-3121	89-3112		
	83	SD Cooling A	One	6	74-19	89-3126	89-3111		
					74-21	89-3127	89-3111		
					74-74	89-3122	89-3111		
					74-87	89-3123	89-3113		
					74-100	89-3124	89-3111		
					74-105	89-3125	89-3111		
	91	LPSI A	One	2	74-44	89-3161	89-3131		
					76-2	89-3160	89-3131		
	92	LPSI A	One	5	70-2	89-3163	89-3132		
					70-16	89-3164	89-3156		
					70-17	89-3165	89-3156		
					70-80	89-3162	89-3132		
					70-85	89-3159	89-3156		
	94	LPSI A	One	2	82-47	89-3031	89-3026		
					82-48	89-3032	89-3026		
	100	LPSI A Suction	One	1	70-134	89-3460	89-3419		
FR05.21	88	LPSI B	One	1	78-16	89-3166	89-3128		
	98	LPSI to Loop 2A	One	2	78-45	89-3422	89-3418		
					78-47	89-3421	89-3418		
FR05.31	82	SD Cooling A	One	1	72-49B		89-3112		
	91	LPSI A	One	1	74-102		89-3131		

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APPENDIX B

INSERVICE INSPECTION  
CODE LIMITATIONS



APPENDIX B  
CODE LIMITATIONS

No Code Limitations were identified  
during the first Inservice Inspection.

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APPENDIX C

FORM  
NIS-1



25

# 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 STATION

ADDRESS 4 MILES SOUTH WINTERSBURG, ARIZONA

3. UNIT NUMBER: 3

4. OWNERS CERTIFICATE OF AUTHORIZATION NONE

5. COMMERCIAL SERVICE DATE: 1/8/88

6. COMPONENTS INSPECTED:

COMPONENT OR APPURTENANCE	MANUFACTURER OR INSTALLER	SERIAL NUMBER	STATE OR PROVINCE	NATIONAL BOARD NO
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See Appendix A for a listing of the Items examined and their respective report numbers.



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ANPP

NIS-1 BACK

## OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

7. EXAM DATES 1/8/88 TO 12/13/89  
8. INSPECTION INTERVAL FROM 1/8/88 TO 3/17/97 \* \* Common Interval Date  
9. ABSTRACT OF EXAMINATIONS. INCLUDE A LIST OF EXAMINATIONS AND A STATEMENT CONCERNING STATUS OF WORK REQUIRED FOR CURRENT INTERVAL.

All Items scheduled for examination in Period 1, Interval 1 are listed alphanumerically according to ASME XI Categories in Appendix A. The Items examined during this outage exhibit report numbers in the appropriate column(s).

## 10. ABSTRACT OF CONDITIONS NOTED.

Several unacceptable linear indication were detected on various systems. In addition, five steam generator manway studs were found to have galled threads and three hangers had loose bolting.

(See Section 2.0 "Examination Summary" for specific Items).

## 11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN.

All linear indications were removed by light blending or grinding and repaired by welding as necessary and the affected area re-examined. The loose bolting was properly torqued and the manway studs replaced. All work was performed in accordance with ASME Section XI and APS work control procedures and the respective documentation is maintained on file at APS.

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 12/20/89 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY [Signature]

## 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 KEMPER GROUP OF LONG GROVE, ILLINOIS HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD 1/8/88 TO 12/13/89, 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 [Signature] COMMISSIONS NB 4685 ARIZONA 264  
DATE 21 Dec 89 NAT'L BOARD, STATE, PROVINCE

