

8607230141 860717
PDR ADCK 05000529
Q PDR

INSERVICE INSPECTION
PROGRAM SUMMARY MANUAL

PALO VERDE
NUCLEAR GENERATING STATION

ARIZONA PUBLIC SERVICE COMPANY
P. O. Box 52034
Phoenix, Arizona 85072

PVNGS
4 Miles South
Wintersburg, Arizona 85343

PREPARED BY: Michael I Anderson DATE: 5/6/86

REVIEWED BY: T B Hansen DATE: 5-6-86

APPROVAL BY
ENGINEERING MANAGER: Anthony L Lepore DATE: 5/8/86

ANII CONCURRENCE: J C Keenan DATE: 5/9/86

PLANT REVIEW
BOARD APPROVAL: A J Zuniguel DATE: 5/29/86

COMMERCIAL
SERVICE DATE: 8/86*

PROGRAM NO: ISI-2
REVISION NO: 0

*anticipated

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 Summary	1-1
2.0 Code Applicability	1-1
3.0 Description	1-2
3.1 Scope	1-2
3.2 System Boundaries	1-3
3.3 Accessibility	1-3
3.4 Examination Techniques	1-3
3.5 Inspection Intervals	1-3
3.6 Examination Categories	1-4
3.7 Evaluation and Repair	1-4
3.8 System Pressure Tests	1-4
3.9 Augmented High Energy Piping	1-4
3.10 Exemptions	1-5
4.0 ASME Class 1 Examination Summary	4-1
5.0 ASME Class 2 Examination Summary	5-1
6.0 ASME Class 3 Examination Summary	6-1
7.0 Augmented High Energy Piping	7-1
8.0 RHR, ECCS, and CHR Piping	8-1
9.0 Requests for Relief	9-1
10.0 ISI Boundary Drawings	10-1

RECORD OF REVISIONS

<u>Page No</u>	<u>Revision No</u>
COVER	0
i and ii	0
1-1 through 1-5	0
4-1 and 4-2	0
TABLE 1-1 through 1-10	0
TABLE 1-12 through 1-16	0
TABLE 1-IWF	0
TABLE 1-RCP	0
5-1 and 5-2	0
TABLE 2-1 through 2-7	0
TABLE 2-IWF	0
6-1 and 6-2	0
TABLE 3-1	0
TABLE 3-IWF	0
7-1	0
TABLE 2-AHE	0
8-1	0
TABLE 2-CFR	0
9-1 through 9-5	0
10-1 and 10-2	0



PALO VERDE
NUCLEAR GENERATING STATION
UNIT II
INSERVICE INSPECTION - PROGRAM SUMMARY

1.0 SUMMARY

This document contains a detailed description of the Inservice Inspection Program for Palo Verde Nuclear Generating Station, Unit II. This program conforms to the requirements of 10CFR50, Section 50.55a(g) and the PVNGS Technical Specifications. In addition, the information is presented in a form consistent with applicable requirements of Standard Review Plan Sections 5.2.4 and 6.6, and the recommendations contained in NRC letter dated July 17, 1981, from Mr. R. L. Tedesco, Assistant Director for Licensing, Division of Licensing; subject: Guidance for Preparing Preservice and Inservice Inspection Programs and Relief Requests- Palo Verde Nuclear Generating Units 1, 2 and 3.

2.0 CODE APPLICABILITY

Based on paragraph 10CFR50, 55a(b)(2) that was published 12 months prior to the scheduled date (12-9-85) of issuance of the operating license, the 1980 Edition through and including the Winter 1981 Addenda of ASME Section XI was utilized to prepare this program. In addition, and in accordance with paragraph 10CFR50.55a(b)(2)(iv)(A), the extent of Class 2 piping welds for the PVNGS Safety Injection System (RHR, ECCS, and CHR systems) was determined in accordance with the 1974 Edition through and including the Summer 1975 Addenda of ASME Section XI.

This program will be updated for each inspection interval to conform with the requirements of the latest edition and addenda of the ASME Section XI Code referenced in paragraph (b) of 10CFR50, Section 50.55a. When a code required examination is considered to be impractical, because of plant design or other conditions, a request for relief from that requirement will be prepared and included in the program at the beginning of that inspection interval (Section 9.0). If a code required examination is identified to be impractical during the course of an inspection, a request for relief will be prepared and submitted with the next revision to the program.

81



3.0 DESCRIPTION

3.1 SCOPE

3.1.1 This Inservice Inspection - Program Summary includes all applicable nondestructive examinations as required by ASME Section XI and those identified in the PVNGS Technical specifications as identified below:

1. Examination of ASME Class 1,2 and 3 pressure retaining components and their supports.
2. Examination of the Reactor Coolant Pump Flywheels in accordance with PVNGS Technical Specifications Section 3/4.4.9.
3. Augmented high energy piping examinations in accordance with PVNGS FSAR Section 6.6.8.
4. Augmented examinations of CHR, RHR, and ECCS piping in accordance with 10CFR50.55a.
5. Special examinations to satisfy other commitments or concerns that are based on operating experiences, USNRC Circulars, Information Notices, or Bulletins, Combustion Engineering bulletins, INPO Reports, and etc. These examinations are scheduled throughout this program and reference the applicable notification documents.

3.1.2 Those items that would generally be included in an Inservice Inspection program, but are not included are identified below:

1. The inservice testing of snubbers will be performed in accordance with the PVNGS Technical Specifications Section 3/4.7.9.

Note: Request for Relief #1 in Section 9.0.

2. The pump and valve testing program is contained and submitted under a separate cover.

3.2 SYSTEM BOUNDARIES

A complete set of Inservice Inspection Boundary drawings was included in Section 10.0 of the Unit 1 Program submittal (Letter #ANPP-33266-EEVB/KLM dated 8-26-85). Please refer to these drawings for definition of the ASME Class 1, 2 and 3 systems, components and boundaries scheduled for examinations and pressure testing.



3.3 ACCESSIBILITY

The preservice examinations were performed with examination techniques, both automated and manual, similar to those planned for use for Inservice Inspection. The examination limitations noted during the preservice examinations were documented in requests for relief submitted with the preservice examination program. There have been no additional limitations noted during the formulation of this program.

All items that are scheduled for examination will be examined to the extent practical. In addition, any limitations that are noted during the examinations will be documented in the summary reports that are prepared after each outage.

3.4 EXAMINATION TECHNIQUES

The three (3) types of examinations utilized to perform Inservice Inspections, 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
		RT - Radiographic

All the above nondestructive examination methods will be performed using specific techniques and procedures that are identified in ASME Section XI, or alternative examinations that are demonstrated to be equivalent or superior to those identified.

3.5 INSPECTION INTERVALS

The Inservice Inspection Program was prepared in accordance with Program B of ASME Section XI. The initial 10 year inspection interval and corresponding inspection periods are defined below (from the anticipated commercial service date of 8/31/86):

First Inspection Interval: 8-31-86 to 8-30-96
Period One: 8-31-86 to 12-30-89
Period Two: 12-31-89 to 4-30-93
Period Three: 5-1-93 to 8-31-96

3.6 EXAMINATION CATEGORIES

The examination categories of ASME Section XI were utilized to develop this program for all systems, components, and supports. The Program summary tables contained in Section 4.0 and 5.0 are organized by examination category for ASME Class 1 and 2 systems respectively. For each examination category, these tables identify the system, line number or serial number, nondestructive examination method, total number of items, the required examination amount for each inspection period, and the running percentage. For ASME Class 3 systems, the examination categories are identified in Section 6.0.

3.7 EVALUATION AND REPAIR

The evaluation of all examination results will be performed in accordance with ASME Section XI Articles IWA and IWB-3000. In addition, all applicable repairs and replacements will be performed in accordance with ASME Section XI Articles IWA, IWB, IWC, IWD and IWF-4000 and 7000. Both the evaluation and repair or replacement will be performed in accordance with the 1980 Edition through and including the Winter 1981 Addenda of ASME Section XI, or later editions and addenda of ASME Section XI referenced in 10CFR50. These will also be summarized in the report prepared after each refueling outage in accordance with ASME Section XI.

3.8 SYSTEM PRESSURE TESTS

System pressure tests will be performed in accordance with ASME Section XI and as identified in Sections 4.0, 5.0, and 6.0 for ASME Class 1, 2 and 3 respectively. These tables also identify the type of pressure test, the test frequency, any applicable requests for relief, and references the appropriate ASME Section XI Article for each of the ASME Code Classes.

3.9 AUGMENTED HIGH ENERGY PIPING

Based on the PVNGS FSAR, an augmented examination is required for protection against postulated pipe failures. This augmented examination program includes the following high energy piping systems located between the containment penetration and the main steam support structure wall:

Main Steam
Feedwater
Steam Generator Blowdown
Downcomer Feedwater

The summary tables in Section 7.0 identifies each system, along with the required examination amounts, and frequencies. As shown by this table, a volumetric examination of all longitudinal and circumferential welds is scheduled. These welds will be examined to the maximum extent practical. Any limitations to the examinations will be included and documented in the summary report prepared in accordance with ASME Section XI after each refueling outage.



3.10 EXEMPTIONS

The exemption criteria identified in the 1980 Edition through and including the Winter 1981 Addenda of ASME Section XI was utilized for all ASME Class 1, 2 and 3 components and systems. This includes the PVNGS Safety Injection System (RHR, ECCS, and CHR systems) piping and components, even though 10CFR50.55a requires the 1974 Edition through and including the Summer 1975 Addenda be utilized. It was concluded after a detailed review that the exemption criteria identified in the Winter 1981 Addenda was more conservative in every case than those identified in the Summer 1975 Addenda, and more examinations would therefore be performed on Safety Injection systems piping and components.

A thorough review of all the systems and components was performed in accordance with the above exemptions and a complete set of color coded Inservice Inspection Boundary drawings was prepared. These drawings are maintained at the PVNGS site for review.



SECTION 4.0

ASME CLASS I

EXAMINATION SUMMARY



INDEX

TABLE		<u>EXAM CATEGORY</u>
1-1	B-A,	Pressure retaining welds in reactor vessel
1-2	B-B,	Pressure retaining welds in vessels other than reactor vessels
1-3	B-D,	Full penetration welds of nozzles in vessels - Inspection Program B
1-4	B-E,	Pressure retaining partial penetration welds in vessels
1-5	B-F,	Pressure retaining dissimilar metal welds
1-6	B-G-1,	Pressure retaining bolting, greater than 2 in. in diameter
1-7	B-G-2,	Pressure retaining bolting, 2 in. and less in diameter
1-8	B-H,	Integral attachments for vessels
1-9	B-J,	Pressure retaining welds in piping
1-10	B-K-1,	Integral attachments for piping, pumps and valves
1-12	B-L-1 & B-M-1,	Pressure retaining welds in pump casings and valve bodies and
	B-L-2 & B-M-2,	Pump casings and valve bodies
1-13	B-N-1,	Interior of reactor vessel
	B-N-2,	Integrally welded core support structures and interior attachments to reactor vessels
	B-N-3,	Removable core support structures
1-14	B-O,	Pressure retaining welds in control rod housings
1-15	B-P,	All pressure retaining components
1-16	B-Q,	Steam generator tubing
1-IWF	F-A,	Plate and shell type supports
	F-B,	Linear type supports
	F-C,	Component standard support
1-RCP	N/A,	Reactor coolant pump flywheel examinations Reg. Guide 1.14





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

1-1

TABLE 1 OF 2
PAGE 1 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B100	<u>EXAM CATEGORY B-A; PRESSURE RETAINING WELDS IN REACTOR VESSEL</u>								
110 111	<u>SHELL WELDS CIRCUMFERENTIAL 1-Reactor Vessel</u>	Butt Welds	SN 79173	Vol	3	0 0 3	One Two Three	0 0 100	<u>AUTOMATED EXAM CORE BARREL REMOVED</u>
112	<u>LONGITUDINAL 1-Reactor Vessel</u>	Butt Welds	SN 79173	Vol	9	0 0 9	One Two Three	0 0 100	<u>AUTOMATED EXAM CORE BARREL REMOVED</u>
120 121	<u>HEAD WELDS CIRCUMFERENTIAL</u>	None	-	-	-	-	-	-	
122	<u>MERIDIONAL 1-Reactor Vessel Bottom Head</u>	Butt Weld	SN 79173	Vol	1	0 0 1	One Two Three	0 0 100	<u>AUTOMATED EXAM CORE BARREL REMOVED. EXAMINE ENTIRE ACCESSIBLE LENGTH</u>
	2-Closure Head	Butt Weld	SN 79173	Vol	1	33% 33% 34%	One Two Three	33 66 100	<u>EXAMINE ENTIRE ACCESSIBLE LENGTH</u>
130	<u>SHELL-TO-FLANGE WELD 1-Reactor Vessel</u>	Butt Weld	SN 79173	Vol	1	50%* 0 100%**	One Two Three	50 50 100	*EXAM FROM FLANGE MATING SURFACE. **AUTOMATED EXAM CORE BARREL REMOVED





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

1-1

TABLE 2 OF 2
PAGE _____

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
140	<u>HEAD-TO-FLANGE WELD</u> 2-Closure Head	Butt Weld	SN 79173	Vol, S	1	33% 33% 34%	One Two Three	33 66 100	
150 151	<u>REPAIR WELDS</u> <u>BELTLINE REGION</u>	None	-	-	-	-	-	-	





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

TABLE 1-2
PAGE 1 OF 2

ASME ITEM NO.	ZONE-COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B200	<u>EXAM CATEGORY B-B: PRESSURE RETAINING WELDS IN VESSELS OTHER THAN REACTOR VESSELS</u>								
210	<u>PRESSURIZER SHELL-TO HEAD WELDS</u>								*1 FOOT MIN. OF EACH LONG WELD THAT INTER- SECTS THE SCHEDULED CIRC. WELDS WILL BE EXAMINED.
211	<u>CIRCUMFERENTIAL AND</u>								
212	<u>* LONGITUDINAL</u>								
	5-Pressurizer Shell to Bottom Head	Butt Weld	SN 79373	Vol	1	33% 33% 34%	One Two Three	33 66 100	
	5-Pressurizer Shell to Top Head	Butt Weld	SN 79373	Vol	1	33% 33% 34%	One Two Three	33 66 100	
220	<u>HEAD WELDS</u>	None	-	-	-	-	-	-	
221	<u>CIRCUMFERENTIAL</u>	None	-	-	-	-	-	-	
222	<u>MERIDIONAL</u>	None	-	-	-	-	-	-	
230	<u>STEAM GENERATORS HEAD WELDS</u>								
231	<u>CIRCUMFERENTIAL</u>								
	3-Steam Generator 1	Butt Welds	SN 79273-1	Vol	4	1 1 2**	One Two Three	25 50 100	**STAY- CYLINDER EXAMS
	4-Steam Generator 2	Butt Welds	SN 79273-2	Vol	4	1 1 2**	One Two Three	25 50 100	**STAY- CYLINDER EXAMS
232	<u>MERIDIONAL</u>								
	3-Steam Generator 1	Butt Welds	SN 79273-1	Vol	6	4 1 1	One Two Three	66 83 100	
	4-Steam Generator 2	Butt Welds	SN 79273-2	Vol	6	0 5 1	One Two Three	- 83 100	





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

TABLE 1-2
PAGE 2 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
240	<u>TUBESHEET TO HEAD</u> 3-Steam Generator 1	Butt Welds	SN 79273-1	Vol	2	1 0 1*	One Two Three	50 50 100	*STAY- CYLINDER EXAMS
	4-Steam Generator 2	Butt Welds	SN 79273-2	Vol	2	0 1 1*	One Two Three	- 50 100	
250	<u>HEAT EXCHANGERS</u>	None	-	-	-	-	-	-	
251	<u>HEAD WELDS</u>	None	-	-	-	-	-	-	
252	<u>CIRCUMFERENTIAL</u>	None	-	-	-	-	-	-	
253	<u>MERIDIONAL</u>	None	-	-	-	-	-	-	
260	<u>LONGITUDINAL</u>								
261	<u>-TUBESHEET-TO-SHELL</u> <u>(OR HEAD) WELDS</u> <u>TUBESHEET-TO-SHELL</u>	None None	- -	- -	- -	- -	- -	- -	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-3
PAGE 1 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B300	<u>EXAM. CATEGORY B-D:</u> <u>FULL PENETRATION</u> <u>WELDS OF NOZZLES IN</u> <u>VESSELS-INSPECTION</u> <u>PROGRAM B</u>								
390 & 3100	<u>REACTOR VESSEL</u> <u>NOZZLE-TO-VESSEL</u> <u>WELDS</u> <u>AND</u> <u>NOZZLE INSIDE RADIUS</u> <u>SECTION</u>								
	1-Reactor Vessel	Outlets-2 Inlets-4	SN 79173	Vol	6	2 0 4*	One Two Three	33 33 100	*AUTOMATED EXAMS FROM SHELL SIDE WITH CORE BARREL REMOVED
3110 & 3120	<u>PRESSURIZER</u> <u>NOZZLE-TO-VESSEL</u> <u>WELDS</u> <u>AND</u> <u>NOZZLE INSIDE RADIUS</u> <u>SECTION</u>								
	5-Pressurizer	Surge-1 Spray-1 Safeties-4	SN-79373	Vol	6	2 2 2	One Two Three	33 66 100	REQUEST FOR RELIEF #2
3130 & 3140	<u>STEAM GENERATORS</u> <u>NOZZLE-TO-VESSEL</u> <u>WELDS</u> <u>AND</u> <u>NOZZLE INSIDE RADIUS</u> <u>SECTION</u>								
	3-Steam Generator 1	Inlet-1 Outlet-2	SN 79273-1	Vol	3	1 1 1	One Two Three	33 66 100	REQUEST FOR RELIEF #2
	4-Steam Generator 2	Inlet-1 Outlet-2	SN 79273-2	Vol	3	1 1 1	One Two Three	33 66 100	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-3
PAGE 2 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
3150 & 3160	HEAT EXCHANGERS <u>NOZZLE-TO-VESSEL</u> <u>WELDS</u> AND <u>NOZZLE INSIDE RADIUS</u> <u>SECTION</u>	None None None	- - -	- - -	- - -	- - -	- - -	- - -	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

1-4
TABLE
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS	
B400	<u>EXAM CATEGORY B-E; PRESSURE RETAINING PARTIAL PENETRATION WELDS IN VESSELS</u>								ALL EXAMS PERFORMED IN CONJUNC- TION WITH EXAM CATE- gory B-P	
410	<u>PARTIAL PENETRATION WELDS</u>	None	-	-	-	-	-	-		
411	<u>VESSEL NOZZLES</u>									
412	<u>CONTROL ROD DRIVE NOZZLES</u>									
	Reactor Vessel Closure Head	CCDM Nozzles	SN79173	VT-2	97	8 8 9	One Two Three	8 16 26		
413	<u>INSTRUMENT NOZZLES</u>	Bottom Head	SN 79173	VT-2	61	5 5 6	One Two Three	8 16 26		
	Reactor Vessel									
420	<u>PRESSURIZER HEATER PENETRATION WELDS</u>	Bottom Head	SN 79373	VT-2	36	3 3 3	One Two Three	8 17 25		





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-5
PAGE 1 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
8500	EXAM CATEGORY B-F: PRESSURE RETAINING DISSIMILAR METAL WELDS								
510	REACTOR VESSEL NOMINAL PIPE SIZE ≥ 4 IN. NOZZLE TO SAFE END BUTT WELDS	None	-	-	-	-	-	-	
520	NOMINAL PIPE SIZE < 4 IN. NOZZLE TO SAFE END BUTT WELDS	None	-	-	-	-	-	-	
530	NOZZLE TO SAFE END SOCKET WELDS	None	-	-	-	-	-	-	
540	PRESSURIZER NOMINAL PIPE SIZE ≥ 4 IN. NOZZLE TO SAFE END BUTT WELDS								
	20-Surge 29-Spray* 31-Safeties (4)	Buttwelds Buttwelds Buttwelds	RC-28-12" RC-18-4" RC-1-6" RC-3-6" RC-5-6" RC-7-6"	S, Vol	6	2 2 2	One Two Three	33 66 100	*RT SUPPLE- MENTAL EXAM FOR THERMAL SLEEVE INTEGRITY (NOTE 1EIN 82-09).
550	NOMINAL PIPE SIZE < 4 IN. NOZZLE TO SAFE END BUTT WELDS	None	-	-	-	-	-	-	
560	NOZZLE TO SAFE END SOCKET WELDS	None	-	-	-	-	-	-	
570	STEAM GENERATOR NOMINAL PIPE SIZE ≥ 4 IN. NOZZLE TO SAFE END BUTT WELDS	None	-	-	-	-	-	-	
580	NOMINAL PIPE SIZE < 4 IN. NOZZLE TO SAFE END BUTT WELDS	None	-	-	-	-	-	-	



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

TABLE 1-5
PAGE 2 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
590	<u>NOZZLE TO SAFE END SOCKET WELDS</u>	None	-	-	-	-	-	-	
5100	<u>HEAT EXCHANGERS NOMINAL PIPE SIZE ≥ 4 IN. NOZZLE TO SAFE END BUTT WELDS</u>	None	-	-	-	-	-	-	
5110	<u>NOMINAL PIPE SIZE < 4 IN. NOZZLE TO SAFE END BUTT WELDS</u>	None	-	-	-	-	-	-	
5120	<u>NOZZLE TO SAFE END SOCKET WELDS</u>	None	-	-	-	-	-	-	
5130	<u>PIPING NOMINAL PIPE SIZE ≥ 4 IN. DISSIMILAR METAL BUTT WELDS</u>								
	20-PZR Surge	Buttweld	RC-28-12"	S, Vol	1	1	Three	-	
	21-SD Cooling 1	Buttweld	RC-51-16"	S, Vol	1	1	One	-	
	22-SD Cooling 2	Buttweld	RC-68-16"	S, Vol	1	1	Two	-	
	23-Safety Inj 1A	Buttweld	SI-207-14"	S, Vol	1	1	One	-	
	24-Safety Inj 1B	Buttweld	SI-223-14"	S, Vol	1	1	Two	-	
	25-Safety Inj 2A	Buttweld	SI-160-14"	S, Vol	1	1	Three	-	
	26-Safety Inj 2B	Buttweld	SI-179-14"	S, Vol	1	1	Three	-	
5140	<u>NOMINAL PIPE SIZE < 4 IN. DISSIMILAR METAL BUTT WELDS</u>								
	27-PZR Spray 1A	Buttweld	RC-62-3"	S	1	1	One	-	
	28-PZR Spray 1B	Buttweld	RC-18-3"	S	1	1	Two	-	
	32-Drain 1A	Buttweld	RC-60-2"	S	1	1	One	28	
	33-Drain 1B	Buttweld	RC-58-2"	S	1	1	Two	-	
	34-Drain 2A	Buttweld	RC-96-2"	S	1	1	Two	-	
	36-Letdown	Buttweld	RC-91-2"	S	1	1	Three	100	
	37-Charging*	Buttweld	CH-5-3"	S	1	1	Two	64	
5150	<u>DISSIMILAR METAL SOCKET WELDS</u>	None	-	-	-	-	-	-	

ITEMS B5.130
& B5.140
SYSTEMS COM-
BINED FOR
PERCENTAGE

*RT SUPPLE-
MENTAL EXAM
FOR THERMAL
SLEEVE
INTEGRITY
(NOTE 1EIN
82-09).



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

1-6
TABLE 1 OF 3
PAGE

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B600	<u>EXAM CATEGORY B-G-1: PRESSURE RETAINING BOLTING GREATER THAN 2 IN. IN DIAMETER</u>								
610	<u>REACTOR VESSEL CLOSURE HEAD NUTS</u>								
	2-Closure Head	Nuts	7.237" x 7.91"	S	54	18 18 18	One Two Three	33 66 100	
620	<u>CLOSURE STUDS, IN PLACE</u>	None*	-	-	-	-	-	-	*STUDS WILL BE REMOVED FOR EXAMINA- TION
630	<u>CLOSURE STUDS, WHEN REMOVED</u>								
	2-Closure Head	Studs	7.380" x 76.37"	S, Vol	54	18 18 18	One Two Three	33 66 100	
640	<u>THREADS IN FLANGE</u>								
	1-Reactor Vessel	Flange Ligaments	SN 79173	Vol	54	0 0 54	One Two Three	0 0 100	
650	<u>CLOSURE WASHERS, BUSHINGS</u>								
	1-Reactor Vessel	Washers	7.50"x1.27"	VT-1	54	18 18 18	One Two Three	33 66 100	
660	<u>PRESSURIZER BOLTS AND STUDS</u>	None	-	-	-	-	-	-	
670	<u>FLANGE SURFACE, WHEN CONNECTION DISAS- SEMBLED</u>	None	-	-	-	-	-	-	
680	<u>NUTS, BUSHINGS, AND WASHERS</u>	None	-	-	-	-	-	-	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-6
PAGE 2 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
690	STEAM GENERATORS	None	-	-	-	-	-	-	
6100	BOLTS AND STUDS FLANGE SURFACE, WHEN CONNECTION DISAS- SEMBLED	None	-	-	-	-	-	-	
6110	NUTS, BUSHINGS, AND WASHERS	None	-	-	-	-	-	-	
6120	HEAT EXCHANGERS	None	-	-	-	-	-	-	
6130	BOLTS AND STUDS FLANGE SURFACE, W-EN CONNECTION DISAS- SEMBLED	None	-	-	-	-	-	-	
6140	NUTS, BUSHINGS, AND WASHERS	None	-	-	-	-	-	-	
6150	PIPING	None	-	-	-	-	-	-	
6160	BOLTS AND STUDS FLANGE SURFACE, WHEN CONNECTION DISAS- SEMBLED	None	-	-	-	-	-	-	
6170	NUTS, BUSHINGS, AND WASHERS	None	-	-	-	-	-	-	
6180	PUMPS BOLTS AND STUDS**								
	16-Reactor Coolant Pump 1A	Flange Studs	4.33" x 32.87"	Vol*	16	5 5 6	One Two Three	31 62 100	*A SUPPLE- MENTAL VT-1 EXAM WILL BE PERFORMED 100% PER REFUELING OUTAGE (SEE IEIN 80-27) ** A SUPPLE- MENTAL SURFACE EXAM WILL BE PER- FORMED WHEN REMOVED (SEE IEB 82-02)
	17-Reactor Coolant Pump 1B	Flange Studs	4.33" x 32.87"	Vol*	16	5 5 6	One Two Three	31 62 100	
	18-Reactor Coolant Pump 2A	Flange Studs	4.33" x 32.87"	Vol*	16	5 5 6	One Two Three	31 62 100	
	19-Reactor Coolant Pump 2B	Flange Studs	4.33" x 32.87"	Vol*	16	5 5 6	One Two Three	31 62 100	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-6
PAGE 3 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
6190	<u>FLANGE SURFACE, WHEN CONNECTION DISSAS- SEMBLED</u>								
	16, 17, 18 and 19- Reactor Coolant Pumps 1A, 1B, 2A & 2B	Flange Surface	CASING SN 1A - 1255 1B - 1257 2A - 1256 2B - 1258	VT-1	16 per Pump	* * *	One Two Three	* * *	*100% EXAM WHEN DIS- ASSEMBLED THERE ARE NO BUSHINGS IN THE PUMP FLANGES
6200	<u>NUTS, BUSHINGS AND WASHERS**</u>								
	16-Reactor Coolant Pump 1A	Nuts & Clamping Ring	4.528"x 7.283"	VT-1	16	5 5 6	One Two Three	31 62 100	** THE CLAMPING RING WILL BE EXAMINED (THERE ARE NO WASHERS)
	17-Reactor Coolant Pump 1B	Nuts & Clamping Ring	4.528"x 7.283"	VT-1	16	5 5 6	One Two Three	31 62 100	
	18-Reactor Coolant Pump 2A	Nuts & Clamping Ring	4.528"x 7.283"	VT-1	16	5 5 6	One Two Three	31 62 100	
	19-Reactor Coolant Pump 2B	Nuts & Clamping Ring	4.528"x 7.283"	VT-1	16	5 5 6	One Two Three	31 62 100	
6210	<u>VALVES</u>								
6220	<u>BOLTS AND STUDS</u>	None	-	-	-	-	-	-	
	<u>FLANGE SURFACE, WHEN CONNECTION DISSAS- SEMBLED</u>	None	-	-	-	-	-	-	
6230	<u>NUTS, BUSHINGS, AND WASHERS</u>	None	-	-	-	-	-	-	





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

TABLE 1-7
PAGE 1 OF 4

ASME ITEM NO.	ZONE-COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
8700	<u>EXAM. CATEGORY B-G-2; PRESSURE RETAINING BOLTING 2 IN. AND LESS IN DIAMETER</u>								
710	<u>REACTOR VESSEL BOLTS, STUDS AND NUTS</u>	None							
720	<u>PRESSURIZER BOLTS, STUDS AND NUTS</u>								
	5-PZR Manway	Studs & Nuts	1.5"x14.5"	VT-1	*20 Pairs	20 20 20	One Two Three	100 100 100	*SUPPLE- MENTED BY SURFACE EXAMS WHEN REMOVED (SEE IEB 82-02)
730	<u>STEAM GENERATORS BOLTS, STUDS AND NUTS</u>								
	3-Steam Generator 1 Cold Leg and Hot Leg Manways	Studs & Nuts	1.5"x14.5"	VT-1	*40 Pairs	40 40 40	One Two Three	100 100 100	
	4-Steam Generator 2 Cold Leg and Hot Leg Manways	Studs & Nuts	1.5"x14.5"	VT-1	*40 Pairs	40 40 40	One Two Three	100 100 100	
740	<u>HEAT EXCHANGERS</u>	None							
750	<u>PIPING BOLTS, STUDS AND NUTS</u>								
	31-PZR Safeties	Flange Flange Flange Flange	RC-1-6" RC-3-6" RC-5-6" RC-7-6"	VT-1	*4	1 1 2	One Two Three	25 50 100	
	37-Charging Line	Flange	CH-5-3"	VT-1	1	1 0 0	One Two Three	100 100 100	





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

1-7
TABLE 2
PAGE 4 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
760	<u>PUMPS BOLTS, STUDS AND NUTS</u>								
	16-Reactor Coolant Pump 1A Seal Cover Bolting	Seal Cover Studs & Nuts	1.5" x 8.27"	VT-1	16	5 5 6	One Two Three	31 62 100	
	17-Reactor Coolant Pump 1B Seal Cover Bolting	Seal Cover Studs & Nuts	1.5" x 8.27"	VT-1	16	5 5 6	One Two Three	31 62 100	
	18-Reactor Coolant Pump 2A Seal Cover Bolting	Seal Cover Studs & Nuts	1.5" x 8.27"	VT-1	16	5 5 6	One Two Three	31 62 100	
	19-Reactor Coolant Pump 2B Seal Cover Bolting	Seal Cover Studs & Nuts	1.5" x 8.27"	VT-1	16	5 5 6	One Two Three	31 62 100	
770	<u>VALVES BOLTS, STUDS AND NUTS</u>								
	21-SD Cooling Loop 1	UV-651 UV-653	RC-051-16" SI-240-16"	VT-1	2	1 0 1	One Two Three	50 50 100	
	22-SD Cooling Loop 2	UV-652 UV-654	RC-068-16" SI-193-16"	VT-1	2	1 1 0	One Two Three	50 100 100	
	23-SI Loop 1A	V-235 UV-634 V-237 V-542	SI-207-14" SI-207-14" SI-207-14" SI-203-12"	VT-1	4	1 2 1	One Two Three	25 75 100	
	24-SI Loop 1B	V-245 UV-644 V-247 V-543	SI-223-14" SI-223-14" SI-223-14" SI-221-12"	VT-1	4	1 2 1	One Two Three	25 75 100	
	25-SI Loop 2A	V-215 UV-614 V-217 V-540	SI-160-14" SI-160-14" SI-160-14" SI-156-12"	VT-1	4	1 1 2	One Two Three	25 50 100	



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

TABLE 1-7
PAGE 3 OF 4

ASME ITEM NO.	ZONE-COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
770	<u>CONTINUED</u>								
	26-SI Loop 2B	V-225 UV-624 V-227 V-541	SI-179-14" SI-179-14" SI-179-14" SI-175-12"	VT-1	4	1 2 1	One Two Three	25 75 100	
	27-PZR Spray Loop 1A	V-240 PV-100E V-243	RC-62-3" RC-62-3" RC-16-3"	VT-1	3	0 1 2	One Two Three	0 33 100	
	28-PZR Spray Loop 1B	V-241 PV-100F V-242	RC-17-3" RC-17-3" RC-18-3"	VT-1	3	2 1 -	One Two Three	66 100 -	
	29 Combined PZR Spray	V-244	RC-18-4"	VT-1	1	0 0 1	One Two Three	0 0 100	
	31-PZR Safeties	PSV-200 PSV-201 PSV-202 PSV-203	RC-1-6" RC-3-6" RC-5-6" RC-7-6"	VT-1	4	1 1 2	One Two Three	25 50 100	
	32-Drain Line Loop 1A	V-334 V-234	RC-60-2" RC-60-2"	VT-1	2	2 0 0	One Two Three	100 100 100	
	33-Drain Line Loop 1B	V-335 V-235	RC-58-2" RC-58-2"	VT-1	2	0 2 0	One Two Three	0 100 100	
	34-Drain Line Loop 2A	V-333 V-233	RC-96-2" RC-96-2"	VT-1	2	0 2 0	One Two Three	0 100 100	
	35-Drain Line Loop 2B	V-332 V-232	RC-89-2" RC-89-2"	VT-1	2	0 0 2	One Two Three	0 0 100	
	36-Letdown Line	UV-515 UV-516	RC-91-2" CII-1-2"	VT-1	2	0 0 2	One Two Three	0 0 100	
	37-Charging Line	V-433 PDV-240	CII-5-3" CII-5-3"	VT-1	3	1 0 1	One Two Three	50 50 100	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-7
PAGE 4 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
770	<u>CONTINUED</u> 38-Loop 1 Drain	V-215 V-216	RC-70-2" RC-70-2"	VT-1	2	1 0 1	One Two Three	50 50 100	
	39-HPSI Supply Loop 1	V-523 V-522	SI-248-3" SI-248-3"	VT-1	2	1 1 0	One Two Three	50 100 100	
	40-HPSI Supply Loop 2	V-533 V-532	SI-199-3" SI-199-3"	VT-1	2	0 1 1	One Two Three	0 50 100	!
780	<u>CRD HOUSINGS</u> <u>BOLTS, STUDS, AND</u> <u>NUTS</u> 2-RVLS Locations	Marmon Clamps	CEDM 92 CEDM 96	VT-1	2	1 0 1	One Two Three	50 50 100	/



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

TABLE 1-8
PAGE 1 OF 1

ASME ITEM NO.	ZONE-COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B800	<u>EXAM CATEGORY B-II: INTEGRAL ATTACH- MENTS FOR VESSELS</u>								
810	<u>REACTOR VESSEL INTEGRALLY WELDED ATTACHMENTS</u>	None	-	-	-	-	-	-	
820	<u>PRESSURIZER INTEGRALLY WELDED ATTACHMENTS</u>								
	5-Pressurizer	Support Skirt	SN 79373	S or Vol	1	33% 33% 34%	One Two Three	33 66 100	
830	<u>STEAM GENERATORS INTEGRALLY WELDED ATTACHMENTS</u>								
	3-Steam Generator 1	Support Skirt	SN 79273-1	S or Vol	1	33%* * 34%*	One Two Three	33* * 100*	*MULTIPLE VESSELS, EXAMINA- TIONS TOTAL 100% SUPPORT SKIRT WELD IN 1 STEAM GENERATOR.
	4-Steam Generator 2	Support Skirt	SN 79273-2	S or Vol	1	* 33%* *	One Two Three	66 * *	
840	<u>HEAT EXCHANGERS INTEGRALLY WELDED ATTACHMENTS</u>	None	-	-	-	-	-	-	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

1-9

TABLE 1 OF 5
PAGE

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B900	<u>EXAM CATEGORY B-J; PRESSURE RETAINING WELDS IN PIPING</u>								
910	<u>NOMINAL PIPE SIZE ≥ 4 IN.</u>								
911 912	<u>CIRCUMFERENTIAL AND *LONGITUDINAL WELDS</u>								*THE LESSOR OF 12" OR 1 PIPE DIAME- TER LENGTH FROM SCHED- ULED CIRC WELD INTER- SECTION WILL BE EXAMINED
	6-RCS Primary Piping	HL 1 HL 2 CL 1A to RCP CL 1B to RCP CL 2A to RCP CL 2B to RCP CL 1A to RPV CL 1B to RPV CL 2A to RPV CL 2B TO RPV	RC-32-42" ID RC-63-42" ID RC-33-30" ID RC-30-30" ID RC-73-30" ID RC-84-30" ID RC-34-30" ID RC-31-30" ID RC-79-30" ID RC-93-30" ID	S, Vol	62	7 6 9	One Two Three	11 21 35	AUTOMATED EXAM OF NOZZLE TO EXTENSION AND EXTEN- SION TO PIPE WELDS
	20-PZR Surge Line	Butt Welds	RC-28-12"	S, Vol	11	1 0 2	One Two Three	9 9 27	
	21-SD Cooling Loop 1	Butt Welds	RC-51-16" SI-240-16"	S, Vol	19	2 2 2	One Two Three	10 21 32	
	22-SD Cooling Loop 2	Butt Welds	RC-68-16" SI-193-16"	S, Vol	19	2 2 3	One Two Three	10 21 37	
	23-SI Loop 1A	Butt Welds	SI-207-14" SI-203-12"	S, Vol	18	3 0 2	One Two Three	17 17 28	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-9
PAGE 2 OF 5

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
911 & 912	<u>CONTINUED</u>								
	24-SI Loop 1B	Butt Welds	SI-223-14" SI-221-12"	S, Vol	18	0 3 2	One Two Three	0 16 26	
	25-SI Loop 2A	Butt Welds	SI-160-14" SI-156-12"	S, Vol	22	2 3 1	One Two Three	9 23 28	
	26-SI Loop 2B	Butt Welds	SI-179-14" SI-175-12"	S, Vol	18	2 1 2	One Two Three	11 17 28	
	28 & 29-PZR Spray Loop 1B and Combined	Butt Welds	RC-18-4"	S, Vol	15	2 1 2	One Two Three	13 20 33	
	31-PZR Safeties	Butt Welds	RC-1-6" RC-3-6" RC-5-6" RC-7-6"	S, Vol	12	1 2 2	One Two Three	8 25 42	
	36-Letdown Line Delay Coil	Butt Welds	RC-91-16"	S, Vol	4	0 1 0	One Two Three	0 25 25	
920	<u>NOMINAL PIPE SIZE < 4 IN.</u>								*THE LESSER OF 12" OR 1 PIPE DIAM- ETER LENGTH FROM SHIELD- ED CIRC WELD INTER- SECTION WILL BE EX- AMINED
921 & 922	<u>CIRCUMFERENTIAL AND *LONGITUDINAL WELDS</u>								
	27-PZR Spray Loop 1A	Butt Welds	RC-62-3" RC-16-3"	S	38	3 3 4	One Two Three	8 16 26	
	28-PZR Spray Loop 1B	Butt Welds	RC-17-3" RC-18-3"	S	36	4 3 3	One Two Three	11 19 28	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

1-9
TABLE 3 OF 5
PAGE

ASME ITEM NO.	ZONE-COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
921 & 922	<u>CONTINUED</u>								
	30-Aux PZR Spray	Butt Welds	CH-521-2"	S	11	2 2 0	One Two Three	18 36 36	
	32-Drain Line Loop 1A	Butt Welds	RC-60-2"	S	5	2 0 0	One Two Three	40 40 40	
	33-Drain Line Loop 1B	Butt Welds	RC-58-2"	S	5	0 2 -	One Two Three	0 40 40	
	34-Drain Line Loop 2A	Butt Welds	RC-96-2"	S	5	0 2 0	One Two Three	0 0 40	
	35-Drain Line Loop 2B	Butt Welds	RC-89-2"	S	5	0 0 2	One Two Three	0 0 40	
	36-Letdown Line	Butt Welds	RC-91-2"	S	70	4 6 8	One Two Three	6 14 26	
	37-Charging Line	Butt Welds	CH-5-3"	S	60	5 6 6	One Two Three	8 18 28	
	38-Drain Line Loop 1	Butt Welds	RC-70-2"	S	4	0 1 0	One Two Three	0 25 25	
	39-HPSI Supply Loop 1	Butt Welds	SI-248-3"	S	36	2 3 4	One Two Three	6 14 25	
	40-HPSI Supply Loop 2	Butt Welds	SI-199-3"	S	25	3 2 2	One Two Three	12 20 28	



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

TABLE 1-9
PAGE 4 OF 5

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
930	<u>BRANCH PIPE CONNEC- TION WELDS</u>								
931	<u>NOMINAL PIPE SIZE ≥ 4 IN.</u>								ITEM B9.31, SYSTEMS COMBINED FOR PERCENT- AGE
	6-RCS Primary Piping	Surge	RC-28-42" ID	S, Vol	1	1	Three	-	
		SD Cooling 1	RC-32-42" ID	S, Vol	1	0	-	-	
		SD Cooling 2	RC-63-42" ID	S, Vol	1	0	-	-	
		SI 1A	RC-34-30" ID	S, Vol	1	1	One	14	
		SI 1B	RC-31-30" ID	S, Vol	1	1	Three	-	
		SI 1C	RC-79-30" ID	S, Vol	1	1	Two	29	
		SI 1D	RC-93-30" ID	S, Vol	1	1	Three	71	
932	<u>NOMINAL PIPE SIZE < 4 IN.</u>								ITEM B9.32, SYSTEMS COMBINED FOR PERCENT- AGE
	6-RCS Primary Piping	Drain 1A	RC-33-30" ID	S	1	1	One	-	
		PZR Spray 1A	RC-34-30" ID	S	1	0	-	-	
		Drain 1B	RC-30-30" ID	S	1	0	-	-	
		PZR Spray 1B	RC-31-30" ID	S	1	0	-	-	
		Drain 2A	RC-73-30" ID	S	1	0	-	-	
		Charging	RC-79-30" ID	S	1	1	Two	-	
		Letdown	RC-84-30" ID	S	1	1	Three	42	
	21-SD Cooling Loop 1	2" Drain	RC-051-16"	S	2	0	One	-	
		3" HPSI				0	Two	-	
						0	Three	-	
	22-SD Cooling Loop 2	3" HPSI	RC-068-16"	S	1	1	One	14	
						0	Two	-	
						0	Three	-	
	36-Letdown Line	2" Delay Coil	RC-091-16"	S	4	0	One	-	
						2	Two	36	
						0	Three	-	
940	<u>SOCKET WELDS</u>								
	32-Drain Line Loop 1A	Socket Welds	RC-060-2"	S	3	1	One	33	
						0	Two	33	
						0	Three	33	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-9
PAGE 5 OF 5

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
940	<u>CONTINUED</u>								
	33-Drain Line Loop 1B	Socket Welds	RC-058-2"	S	3	0 1 0	One Two Three	0 33 33	
	34-Drain Line Loop 2A	Socket Welds	RC-096-2"	S	3	0 1 0	One Two Three	0 33 33	
	35-Drain Line Loop 2B	Socket Welds	RC-089-2"	S	3	0 0 1	One Two Three	0 0 33	
	38-Drain Line Loop 1	Socket Welds	RC-070-2"	S	3	1 0 0	One Two Three	33 33 33	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-10
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B100	<u>EXAM CATEGORY B-K-1; INTEGRAL ATTACHMENTS FOR PIPING, PUMPS, AND VALVES</u>								
1010	<u>PIPING INTEGRALLY WELDED ATTACHMENTS</u>								
	22-SD Cooling Loop 2	Lugs	SI-193-16"	S	1	1	Two	-	ITEM B10.10 COMBINED FOR PERCENT- AGE !
	24-SI Loop 1B	Stanchion	SI-223-14"	S	1	1	Three	-	
	25-SI Loop 2A	Stanchion	SI-160-14"	S	1	1	Three	100	
	26-SI Loop 2B	Stanchion	SI-179-14"	S	1	1	One	-	
	36-Letdown Line	Lugs	RC-091-16"	S	2	1 1	One Two	33 66	
	<u>PUMPS INTEGRALLY WELDED ATTACHMENTS</u>	None	-	-	-	-	-	-	
1020									
1030	<u>VALVES INTEGRALLY WELDED ATTACHMENTS</u>	None	-	-	-	-	-	-	



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

TABLE 1-12
PAGE 1 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B120	<u>EXAM CATE B-1-1, B-M-1; PRESSURE RETAINING WELDS IN PUMP CASINGS AND VALVE BODIES; EXAM CATE B-1-2, B-M-2; PUMP CASINGS AND VALVE BODIES</u>								
1210	<u>PUMPS PUMP CASING WELDS</u>								
	16-RC Pump 1A 17-RC Pump 1B 18-RC Pump 2A 19-RC-Pump 2B	Circ Casing Welds	1255 1257 1256 1258	Vol	4	Examine the Weld in 1 Pump	*	100	
	16-RC Pump 1A 17-RC Pump 1B 18-RC Pump 2A 19-RC-Pump 2B	Outlet Nozzle to Casing Welds	1255 1257 1256 1258	Vol	4	Examine the Weld in 1 Pump	*	100	*BY THE END OF THE INTERVAL
1220	<u>PUMP CASINGS</u>								
	16-RC Pump 1A 17-RC Pump 1B 18-RC Pump 2A 19-RC-Pump 2B	Internal Surfaces	1255 1257 1256 1258	VT-3	4	Examine the Internal Surfaces in 1 Pump	*	100	
1230	<u>VALVES VALVES, NOMINAL PIPE SIZE < 4 IN. VALVE BODY WELDS</u>	None	-	-	-	-	-	-	
1240	<u>VALVES, NOMINAL PIPE SIZE ≥ 4 IN. VALVE BODY WELDS</u>								
	Borg Warner Gate Valves Utilizing Forged Construction	UV-651 UV-653 UV-652 UV-654 UV-634 UV-644 UV-614 UV-624	RC-51-16" SI-240-16" RC-68-16" SI-193-16" SI-207-14" SI-223-14" SI-160-14" SI-179-14"	Vol	8	Examine the Weld in 1 Valve	*	100	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-12
PAGE 2 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
1240	<u>CONTINUED</u> Borg Warner Check Valve Utilizing Forged Construction	V-244	RC-18-4"	Vol	1	1	*	100	
	Dresser Pressure Safety Valves Utilizing Forged Construction	PSV-200 PSV-201 PSV-202 PSV-203	RC-1-6" RC-3-6" RC-5-6" RC-7-6"	Vol	4	Examine the Weld in 1 Valve	*	100	
1250	<u>VALVE BODY, EXCEED- ING 4 IN NOMINAL PIPE SIZE</u> Borg Warner Gate Valves Utilizing Forged Construction	UV-651 UV-653 UV-652 UV-654 UV-634 UV-644 UV-614 UV-624	RC-51-16" SI-240-16" RC-68-16" SI-193-16" SI-207-14" SI-223-14" SI-160-14" SI-179-14"	VT-3	8	Examine the Internal Surfaces of 1 valve	*	100	*BY THE END OF THE INTERVAL
	Borg Warner Check Valves Utilizing Cast Construction	V-235 V-237 V-542 V-245 V-247 V-543 V-215 V-217 V-540 V-225 V-227 V-541	SI-207-14" SI-207-14" SI-203-12" SI-223-14" SI-223-14" SI-221-12" SI-160-14" SI-160-14" SI-156-12" SI-179-14" SI-179-14" SI-175-12"	VT-3	12	Examine the Internal Surfaces of 1 valve	*		
	Dresser Pressure Safety Valves Utilizing Forged Construction	PSV-200 PSV-201 PSV-202 PSV-203	RC-1-6" RC-3-6" RC-5-6" RC-7-6"	VT-3	4	Examine the Internal Surfaces of 1 Valve	*	100	



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

1-13

TABLE 1 OF 1
PAGE

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B130	<u>EXAM CATEGORY B-N-1; INTERIOR OF REACTOR VESSEL; B-N-2, INTEGRALLY WELDED CORE SUPPORT STRUC- TURES AND INTERIOR ATTACHMENTS TO RE- ACTOR VESSELS; B-N-3, REMOVABLE CORE SUP- PORT STRUCTURES</u>								
1310	<u>REACTOR VESSEL VESSEL INTERIOR</u> 1-Reactor Vessel	Examine the accessible areas above and below the reactor core that is made accessible for examina- tion by removal of compo- nents during normal re- fueling outages		VT-3	Acces- sible Areas	33% 33% 34%	*One *Two *Three	33 66 100	*EXAMINE AT 1ST REFUEL- ING OUTAGE, AND SUBSE- QUENTLY AT 3-YEAR INTERVALS
1320	<u>REACTOR VESSEL (BWR) INTERIOR ATTACHMENTS</u>	N/A							
1321	<u>CORE SUPPORT STRUC- TURE</u>	N/A							
1322									
1330	<u>INTERIOR ATTACHMENTS WITHIN BELTLINE REGION</u>	None	-	-	-	-	-	-	
1331	<u>INTERIOR ATTACHMENTS BEYOND BELTLINE REGION</u>	Examine the accessible welds and surrounding		VT-3	Acces- sible Welds	100%	*	100	*BY THE END OF THE INTERVAL
1332	<u>CORE SUPPORT STRUCTURE</u>	Examine the accessible core support structure		VT-3	Acces- sible Sur- faces	100%	*	100	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-14
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B1400	<u>EXAM CATEGORY B-0; PRESSURE RETAINING WELDS IN CONTROL ROD HOUSINGS</u>								
1410	<u>REACTOR VESSEL WELDS IN CRD HOUSING</u>								ITEM B14.10 COMBINED FOR PERCENTAGE
	2-Reactor Vessel Closure Head CEDM Housings	Lower Housing Welds	Housings #66 - #97	Vol	*97	0 0 0	One Two Three	- - -	*32 PERIPH- ERAL (126 TOTAL WELDS)
	2-Reactor Vessel Closure Head CEDM Housings	Upper Housing Welds	Housings #66 - #97	Vol	*97	2 2 3	One Two Three	- - -	**INCLUDES 2 RVLMS TRAN- HUBS
	2-Reactor Vessel Closure Head CEDM Housings	Tube Housing Lower Weld	Housings** #66 - #97	Vol	*97	2 2 3	One Two Three	3 6 11	
	2-Reactor Vessel Closure Head CEDM Housings	Tube Housing Upper Weld	Housings #66 - #97	Vol	*97	0 0 0	One Two Three	- - -	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-15
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B150	<u>EXAMINATION CATEGORY</u> <u>B-P, ALL PRESSURE</u> <u>RETAINING COMPONENTS</u>								
1510	<u>SYSTEM LEAKAGE TEST</u> Reactor Vessel	Pressure Retaining Boundary	-	VT-2	-	Entire Pres- sure retain- ing boundary IWA-5000 IWB-5000	*	100	*EACH REFUELING, OUTAGE
1520	Pressurizer								
1530	Steam Generators								
1540	Heat Exchangers								
1550	Piping								
1560	Pumps								
1570	Valves								
1511	<u>SYSTEM HYDRO-TEST</u> Reactor Vessel	Pressure Retaining Boundary	-	VT-2	-	Entire Pres- sure retain- ing boundary IWA-5000 IWB-5000	**	100	**BY THE END OF THE INTERVAL
1521	Pressurizer								
1531	Steam Generators								
1541	Heat Exchangers								
1551	Piping								
1561	Pumps								
1571	Valves								



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

TABLE 1-16
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
B160	<u>EXAMINATION CATEGORY</u> <u>B-Q, STEAM GENERATOR</u> <u>TUBING</u>								
1610	N/A								
1620	Per ASME Section XI and 10CFR50, All Eddy Current Exam- inations of Steam Generator Tubing will be performed in accordance with PVNGS Technical Specifications								



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

1-IWF

TABLE 1
PAGE 1 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
* F110 F120 F130 F140 F210 F220 F230 F240 F310 F320 F330 F340 F350	EXAM CATEGORY F-A; PLATE AND SHELL TYPE SUPPORTS and EXAM CATEGORY F-B; LINEAR TYPE SUPPORTS and EXAM CATEGORY F-C; COMPONENT STANDARD SUPPORTS			**					REQUEST FOR RELIEF #1 & #3 *INCLUDES EXAM ITEMS IDENTIFIED AS APPLI- CABLE. **NDE METHOD INCLUDES VT-4 EXAMS, WHERE APPLI- CABLE.
	1-Reactor Vessel	Support Columns	SN 79173	VT-3	4	1 1 2	One Two Three	25 50 100	
	3-Steam Generator 1	Support Skirt	SN 79273-1	VT-3	1	1 0 0	One Two Three	100 100 100	
	4-Steam Generator 2	Support Skirt	SN 79273-2	VT-3	1	0 1 0	One Two Three	- 100 100	
	5-Pressurizer	Support Skirt	SN 79373	VT-3	1	0 0 1	One Two Three	- - 100	
	16-Reactor Coolant Pump 1A	Vertical and Lateral Sup- ports	SN-1110-1A	VT-3	10	2 4 4	One Two Three	20 60 100	
	17-Reactor Coolant Pump 1B	Vertical and Lateral Sup- ports	SN-1110-1B	VT-3	10	2 4 4	One Two Three	20 60 100	
	18-Reactor Coolant Pump 2A	Vertical and Lateral Sup- ports	SN 1110-2A	VT-3	10	4 2 4	One Two Three	40 60 100	
	19-Reactor Coolant Pump 2B	Vertical and Lateral Sup- ports	SN 1110-2B	VT-3	10	4 2 4	One Two Three	40 60 100	





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 1

TABLE 1-IWF
PAGE 2 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
F110 F120 F130 F140 F210 F220 F230 F240 F310 F320 F330 F340 F350	<u>CONTINUED</u>								
	20-PZR Surge Line	Supports	RC-28-12"	VT-3	7	2 2 3	One Two Three	29 58 100	
	21-SD Cooling Loop 1	Supports	RC-51-16" SI-240-16"	VT-3	22	7 7 8	One Two Three	32 64 100	
	22-SD Cooling Loop 2	Supports (1-B10.10)	RC-68-16" SI-193-16"	VT-3	13	4 5 4	One Two Three	31 69 100	
	23-SI Loop 1A	Supports	SI-207-14" SI-203-12"	VT-3	7	2 2 3	One Two Three	29 57 100	
	24-SI Loop 1B	Supports (1-B10.10)	SI-223-14" SI-221-12"	VT-3	8	2 2 4	One Two Three	25 50 100	
	25-SI Loop 2A	Supports (1-B10.10)	SI-160-14" SI-156-12"	VT-3	7	2 3 2	One Two Three	29 71 100	
	26-SI Loop 2B	Supports (1-B10.10)	SI-179-14" SI-175-12"	VT-3	9	3 3 3	One Two Three	33 67 100	
	27-PZR Spray Loop 1A	Supports	RC-62-3" RC-16-3"	VT-3	28	9 11 8	One Two Three	32 68 100	
	28-PZR Spray Loop 1B	Supports	RC-17-3" RC-18-3" RC-18-4"	VT-3	28	9 8 11	One Two Three	33 61 100	
	29-PZR Spray Loop 1B and Combined	Supports	RC-18-4"	VT-3	5	2 3 0	One Two Three	40 100 100	
	30-Aux PZR Spray	Supports	CH-521-2"	VT-3	2	0 0 2	One Two Three	- - 100	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 1

1-RCP

TABLE 1
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
N/A	<u>REACTOR COOLANT PUMP FLYWHEEL EXAMINA- TIONS REG. GUIDE 1.14</u> 16, 17, 18 and 19 Reactor Coolant Pumps 1A, 1B, 2A & 2B Flywheels	Flywheels		Vol*	4	4 4	One Two	100 100	REFERENCE PVNGS TECH SPEC 4.4.9 *AN ULTRA- SONIC EXAM- INATION WILL BE PERFORMED OF THE AREAS OF HIGHER STRESS CON- CENTRATION AT THE BORE AND KEYWAYS.
				**S, Vol	4	4	Three	100	**A SURFACE EXAM OF ALL EXPOSED SUR- FACES AND A COMPLETE ULTRASONIC EXAM TO THE EXTENT PRACTICAL WILL BE PER- FORMED.



SECTION 5.0

ASME CLASS 2

EXAMINATION SUMMARY

INDEX

TABLE		EXAM CATEGORY
2-1	C-A,	Pressure retaining welds in pressure vessels
2-2	C-B,	Pressure retaining nozzle welds in vessels
2-3	C-C,	Integral attachments for vessels, piping, pumps, and valves
2-4	C-D,	Pressure retaining bolting exceeding 2 in. in diameter
2-5	C-F,	Pressure retaining welds in piping
2-6	C-G,	Pressure retaining welds in pumps and valves
2-7	C-H,	All pressure retaining components
2-IWF	F-A,	Plate and shell type supports
	F-B,	Linear type supports
	F-C,	Component standard supports





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-1
PAGE 1 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
C100	<u>EXAM. CATEGORY C-A: PRESSURE RETAINING WELDS IN PRESSURE VESSELS</u>								
110	<u>STEAM GENERATORS</u> <u>SHELL CIRCUMFEREN- TIAL WELDS</u>								MULTIPLE VESSELS: PERCENTAGE COMBINED
	41-Steam Generator 1	Shell to Conical Welds	SN-79273-1	Vol	2	1* 0 0	One Two Three	50 - -	*50% EACH WELD
	42-Steam Generator 2	Shell to Conical Welds	SN-79273-2	Vol	2	0 0 1**	One Two Three	- - 100	**50% EACH WELD
120	<u>HEAD CIRCUMFEREN- TIAL WELDS</u>								
	41-Steam Generator 1	Head to Shell Weld	SN-79273-1	Vol	1	50% 0 0	One Two Three	50 - -	
	42-Steam Generator 2	Head to Shell Weld	SN-79273-2	Vol	1	0 0 50%	One Two Three	- - 100	
130	<u>TUBESHEET-TO-SHELL WELD</u>								
	41-Steam Generator 1	Outside Shell and Stay Cylinder	SN-79273-1	Vol	2	50%* 0 0	One Two Three	25 - -	*OUTSIDE SHELL WELDS
	42-Steam Generator 2	Outside Shell and Stay Cylinder	SN-79273-2	Vol	2	0 50%* 1**	One Two Three	- 50 100	**STAY CYLINDER EXAM



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

2-1

TABLE 2 OF 3
PAGE 2 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
110	<u>REGENERATIVE HEAT EXCHANGER</u> <u>SHELL CIRCUMFERENCE- TIAL WELDS</u> 68-Regenerative Heat Exchanger	Butt Welds	SN-79313	Vol	3	1 1 1	One Two Three	33 66 100	SINGLE VESSEL
120	<u>HEAD CIRCUMFERENCE- TIAL WELDS</u> 68-Regenerative Heat Exchanger	Head to Shell	SN-79313	Vol	2	1 0 1	One Two Three	50 50 100	
130	<u>TUBESHEET-TO-SHELL WELDS</u> 68-Regenerative Heat Exchanger	Butt Welds	SN-79313	Vol	4	0 2 2	One Two Three	0 50 100	
110	<u>LETDOWN HEAT EXCHANGER</u> <u>SHELL CIRCUMFERENCE- TIAL WELDS</u> 69-Letdown Heat Exchanger	Shell to Flange	SN-N2373	Vol	1	50% 0 50%	One Two Three	50 50 100	SINGLE VESSEL
120	<u>HEAD CIRCUMFERENCE- TIAL WELDS</u>	None	-	-	-	-	-	-	
130	<u>TUBESHEET-TO-SHELL WELD</u> 69-Letdown Heat Exchanger	Butt Weld	SN-N2373	Vol	1	50% 0 50%	One Two Three	50 50 100	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

TABLE 2-1
PAGE 3 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
110	<u>SHUTDOWN COOLING HEAT EXCHANGERS</u> <u>SHELL CIRCUMFEREN- TIAL WELDS</u> 74-SD Cooling Heat Exchanger 1	Shell to Flange	SN-S18343	Vol	1	0 50% 0	One Two Three	- 50 50	MULTIPLE VESSELS: PERCENTAGE COMBINED
	75-SD Cooling Heat Exchanger 2	Shell to Flange	SN-S18344	Vol	1	0 0 50%	One Two Three	- - 100	
120	<u>HEAD CIRCUMFEREN- TIAL WELDS</u>	None	-	-	-	-	-	-	
130	<u>TUBESHEET-TO-SHELL WELD</u> 74-SD Cooling Heat Exchanger 1	Butt Weld	SN-S18343	Vol	1	0 50% 0	One Two Three	- 50 50	
	75-SD Cooling Heat Exchanger 2	Butt Weld	SN-S18344	Vol	1	0 0 50%	One Two Three	- - 100	



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-2
PAGE 1 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
C200	<u>EXAM CATEGORY C-B: PRESSURE RETAINING NOZZLE WELDS IN VESSELS</u>								
210	<u>NOZZLES IN VESSELS ≤ 1/2 IN NOMINAL THICKNESS</u>	None	-	-	-	-	-	-	
220	<u>NOZZLES WITHOUT REINFORCING PLATE IN VESSELS > 1/2 IN. NOMINAL THICKNESS</u>								INSIDE RADIUS ON PIPING ONLY GREATER THAN 12" DIAMETER.
221 & 222	<u>NOZZLE-TO-SHELL (OR HEAD) WELDS AND NOZZLE INSIDE RADIUS SECTION</u>								REQUEST FOR RELIEF //2
	41-Steam Generator 1	Nozzle to Vessel Welds	SN-79273-1	S,Vol	7	1 0 2	One Two Three	29 - 100	MULTIPLE VESSELS: PERCENTAGE COMBINED
	42-Steam Generator 2	Nozzle to Vessel Welds	SN-79273-2	S,Vol	7	1 2 1	One Two Three	- 57 -	
	74-SD Cooling Heat Exchanger 1	Nozzle to Shell Welds	SN-S18343	S,Vol	2	0 1 0	One Two Three	- 50 -	MULTIPLE VESSELS PERCENTAGE COMBINED
	75-SD Cooling Heat Exchanger 2	Nozzle to Shell Welds	SN-S18344	S,Vol	2	0 0 1	One Two Three	- - 100	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

TABLE 2-2
PAGE 2 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
230	<u>NOZZLES WITH REIN- FORCING PLATE IN VESSELS > 1/2 IN. NOMINAL THICKNESS</u>								
231 & 232	<u>REINFORCING PLATE WELDS TO NOZZLE AND VESSEL</u>	None	-	-	-	-	-	-	
	<u>NOZZLE-TO-SHELL (OR HEAD) WELDS</u>								
	<u>INSIDE OF VESSEL ACCESSIBLE</u>	None	-	-	-	-	-	-	1
	<u>INSIDE OF VESSEL INACCESSIBLE</u>	None	-	-	-	-	-	-	1



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-3
PAGE 1 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
C300	<u>EXAM CATEGORY C-C; INTEGRAL ATTACHMENTS FOR VESSELS, PIPING PUMPS AND VALVES</u>								
310	<u>PRESSURE VESSELS INTEGRALLY WELDED ATTACHMENTS</u>								
	41-Steam Generator 1	2-Snubber Lugs	SH-79273-1	S	2	1 0 0	One Two Three	50 - -	MULTIPLE VESSELS: PERCENTAGE COMBINED
	42-Steam Generator 1	2-Snubber Lugs	SH-79273-2	S	2	0 1 0	One Two Three	- 100 -	
	68-Regenerative Heat Exchanger	2-Supports	SH-79313	S	2	0 1 1	One Two Three	- 50 100	SINGLE VESSEL
320	<u>PIPING INTEGRALLY WELDED ATTACHMENTS</u>								
	43-Main Steam SG-1 90° Inside Cont	Attachments	SG-36	S	6	1 1 4	One Two Three	16 33 100	
	44-Main Steam SG-1 270° Inside Cont	Attachments	SG-33	S	5	0 3 2	One Two Three	- 60 100	
	45-Main Steam SG-2 270° Inside Cont	Attachments	SG-42	S	5	3 1 1	One Two Three	60 80 100	
	46-Main Steam SG-2 90° Inside Cont	Attachments	SG-45	S	5	0 2 3	One Two Three	- 40 100	
	51-Atmospheric Dump SG-1	Attachments	SG-59 SG-70	S	2	1 1 0	One Two Three	50 100 100	





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-3
PAGE 2 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
320	<u>CONTINUED</u>								
	52-Atmospheric Dump SG-2	Attachments	SG-84 SG-103	S	2	0 0 2	One Two Three	- - 100	
	53-Steam to Aux Feedwater System	Attachments	SG-81 SG-83	S	2	2 0 0	One Two Three	100 100 100	
	54-Feedwater SG-1 Inside Cont.	Attachments	SG-002	S	1	0 0 1	One Two Three	- - 100	
	55-Feedwater SG-2 Inside Cont.	Attachments	SG-005	S	2	1 0 1	One Two Three	50 50 100	
	62-Aux. Feedwater S/G-1	Attachments	AF-018	S	1	0 1 0	One Two Three	- 100 -	
	64-Blowdown SG-1 Inside Cont.	Attachments	SG-39	S	4	2 1 1	One Two Three	50 75 100	
	65-Blowdown SG-2 Inside Cont.	Attachments	SG-48	S	7	2 3 2	One Two Three	29 71 100	
	70-LPSI Pump Suction Loop 1	Attachments	SI-241 SI-369 SI-239 SI-2	S	4	2 2 0	One Two Three	50 100 100	
	71-LPSI Pump Suction Loop 2	Attachments	SI-194	S	2	1 0 1	One Two Three	50 50 100	
	72-LPSI Pump Discharge Loop 1	Attachments	SI-87 SI-78	S	2	1 0 1	One Two Three	50 50 100	
	74-SD Cooling Hx Outlet Loop 1	Attachments	SI-70 SI-87 SI-90	S	8	2 4 2	One Two Three	25 75 100	





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-3
PAGE 3 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
320	<u>CONTINUED</u>								
	75-SD Cooling Hx Outlet Loop 2	Attachments	SI-72	S	3	1 0 2	One Two Three	33 33 100	
	76-LPSI Header 1A	Attachments	SI-70 SI-202	S	3	2 0 1	One Two Three	67 67 100	
	79-LPSI Header 2B	Attachments	SI-174	S	1	0 1 0	One Two Three	- 100 100	
	80-Containment Spray Pump Suction Loop 1	Attachments	SI-9	S	1	1 0 0	One Two Three	100 100 100	
	82-Containment Spray Discharge Loop 1	Attachments	SI-79	S	2	0 1 1	One Two Three	- 50 100	
	83-Containment Spray Discharge Loop 2	Attachments	SI-119	S	1	0 0 1	One Two Three	- - 100	
	84-Containment Sump Suction Loop 1	Attachment	SI-7	S	1	0 1 0	One Two Three	- 100 100	
	85-Containment Sump Suction Loop 2	Attachment	SI-30	S	1	0 0 1	One Two Three	- - 100	
330	<u>PUMPS INTEGRALLY WELDED ATTACHMENTS</u>								
	72-LPSI Pump Loop 1	Attachment Lugs	SN 0876-40	S	3	2 1 0	One Two Three	66 100 100	
	73-LPSI Pump Loop 2	Attachment Lugs	SN 0876-41	S	3	0 1 2	One Two Three	- 33 100	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

TABLE 2-3
PAGE 4 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
330	<u>Continued</u> 80-Containment Spray Pump Loop 1	Attachment Lugs	SN 0876-42	S	3	2 1 0	One Two Three	66 100 100	
	81-Containment Spray Pump Loop 2	Attachment Lugs	SN 0876-43	S	3	0 1 2	One Two Three	- 33 100	
340	<u>VALVES INTEGRALLY WELDED AT TACHMENTS</u>	None	-	-	-	-	-	-	



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-4
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
C400	<u>EXAM CATEGORY C-D: PRESSURE RETAINING BOLTING EXCEEDING 2 IN. IN DIAMETER</u>								
410	<u>PRESSURE VESSELS BOLTS AND STUDS</u>	None	-	-	-	-	-	-	
420	<u>PIPING BOLTS AND STUDS</u>	None	-	-	-	-	-	-	
430	<u>PUMPS BOLTS AND STUDS</u>	None	-	-	-	-	-	-	
440	<u>VALVES BOLTS AND STUDS</u>								
	47-Main Steam SG-1 270° MSSS	Bonnet Bolts	UV-170	Vol	20	20	One	(25)	ITEM C440 COMBINED FOR PER- CENTAGE
	48-Main Steam SG-1 90° MSSS	Bonnet Bolts	UV-180	Vol	20	20	One	(25)	
	49-Main Steam SG-2 270° MSSS	Bonnet Bolts	UV-171	Vol	20	20	Three	(100)	
	50-Main Steam SG-2 90° MSSS	Bonnet Bolts	UV-181	Vol	20	20	Three	(100)	
	56-Feedwater SG-1 MSSS	Bonnet Bolts	UV-132 UV-174	Vol Vol	20 20	20 20	Two Two	(50) (50)	
	57-Feedwater SG-2 MSSS	Bonnet Bolts	UV-137 UV-177	Vol Vol	20 20	20 20	Three Three	(100) (100)	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

TABLE 2-5
PAGE 1 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
C500	EXAMINATION CATEGORY C-F, PRESSURE RE- TAINING WELDS IN PIPING								RHR, CHR, & ECCS SYSTEMS ARE SCHED- ULED PER 10CFR50 REQUIRE- MENTS AND ARE IDEN- TIFIED IN TABLE 2-CFR
510	PIPING WELDS $\leq 1/2$ IN. OR LESS NOMINAL WALL THICKNESS								
511 & 512	CIRCUMFERENTIAL AND *LONGITUDINAL WELDS								
	53-Steam to Aux. Feedwater	Butt Welds	SG-81-6" SG-83-6"	S S	14 15	** **	- -	- -	*2.5T MIN. FROM EACH SCHEDULED CIRC. WELD INTERSEC- TION WILL BE EXAMINED
	58-Aux. and Down- comer Feedwater SG-1 Inside Cont	Butt Welds	SG-8-6" SG-8-8"	S*** S	3 23	1 2 0	One Two Three	4 12 12	**REQUIRE- MENTS IDENTIFIED IN TABLE 2-AHE
	59-Aux. and Down- comer Feedwater SG-2 Inside Cont	Butt Welds	SG-11-6" SG-11-8"	S*** S	3 24	0 3 3	One Two Three	- 11 22	***AN AUGMENTED VOL EXAM- INATION WILL BE PERFORMED EACH PERIOD (SEE IEB 79-13 AND SER 83-07)





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

TABLE 2-5
PAGE 2 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
520	<u>PIPING WELDS ></u> <u>1/2 IN. NOMINAL</u> <u>WALL THICKNESS</u> <u>CIRCUMFERENTIAL AND</u> <u>*LONGITUDINAL WELDS</u>								
521		43-Main Steam SG-1	Butt Welds	SG-36-28"	S, Vol	18	3	17	*2.5T MIN. FROM EACH SCHEDULED CIRC. WELD INTERSEC- TION WILL BE EXAMINED
522		90° Inside Cont.					0	17	
							2	28	
		44-Main Steam SG-1	Butt Welds	SG-33-28"	S, Vol	20	3	15	
		270° Inside Cont.					1	20	
							2	30	
		45-Main Steam SG-2	Butt Welds	SG-42-28"	S, Vol	18	0	-	
		270° Inside Cont.					2	11	
							3	28	
		46-Main Steam SG-2	Butt Welds	SG-45-28"	S, Vol	20	2	10	
		90° Inside Cont.					2	20	
							1	25	
		47-Main Steam SG-1	Butt Welds	SG-206-28"	S, Vol	5	*	-	*REQUIRE- MENTS IDENTIFIED IN TABLE 2-AHE
		270° MSSS		SG-206-12"	S, Vol	2	*	-	
				SG-206-6"	S, Vol	5	*	-	
		48-Main Steam SG-1	Butt Welds	SG-207-28"	S, Vol	5	*	-	
		90° MSSS		SG-207-12"	S, Vol	2	*	-	
				SG-207-6"	S, Vol	5	*	-	
		49-Main Steam SG-2	Butt Welds	SG-208-28"	S, Vol	5	*	-	
		270° MSSS		SG-208-12"	S, Vol	2	*	-	
				SG-208-6"	S, Vol	5	*	-	
		50-Main Steam SG-2	Butt Welds	SG-209-28"	S, Vol	5	*	-	
		90° MSSS		SG-209-12"	S, Vol	2	*	-	
				SG-209-6"	S, Vol	5	*	-	
		51-Atmosphere Dump	Butt Welds	SG-59-12"	S, Vol	11	*	-	
		SG-1		SG-70-12"	S, Vol	13	*	-	
		52-Atmosphere Dump	Butt Welds	SG-84-12"	S, Vol	13	*	-	
		SG-2		SG-103-12"	S, Vol	11	*	-	





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-5
PAGE 3 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
521 522	<u>CONTINUED</u>								
	54-Feedwater SG-1 Inside Cont.	Butt Welds	SG-2-24" SG-2-16" SG-2-14" SG-13-16" SG-13-14"	S, Vol S, Vol S, Vol S, Vol S, Vol	30 4 10 4 11	5 5 6 	One Two Three	8 17 27	
	55-Feedwater SG-2 Inside Cont.	Butt Welds	SG-5-24" SG-5-16" SG-5-14" SG-14-16" SG-14-14"	S, Vol S, Vol S, Vol S, Vol S, Vol	30 3 10 3 10	5 5 5 	One Two Three	9 18 27	
	56-Feedwater SG-1 MSSS	Butt Welds	SG-201-24" SG-202-24"	S, Vol S, Vol	2 2	* *	-	-	
	57-Feedwater SG-2 MSSS	Butt Welds	SG-204-24" SG-205-24"	S, Vol S, Vol	2 2	* *	-	-	*REQUIRE- MENTS IDENTIFIED IN TABLE 2-AHE
	58-Aux. and Down- comer Feedwater SG-1 Inside Cont	Butt Welds	SG-8-6" AF-4-6"	S, Vol S, Vol	1 14**	3 0 2	One Two Three	20 20 33	**INCLUDES 1 DISSIMI- LAR WELD
	59-Aux. and Down- comer Feedwater SG-2 Inside Cont	Butt Welds	SG-11-6" AF-6-6"	S, Vol S, Vol	1 12**	2 2 1	One Two Three	15 31 38	
	60-Downcomer Feed- water SG-1 MSSS	Butt Welds	SG-200-8"	S, Vol	6	*	-	-	
	61-Downcomer Feed- water SG-2 MSSS	Butt Welds	SG-203-8"	S, Vol	6	*	-	-	
	62-Aux. Feedwater SG-1 MSSS	Butt Welds	AF-4-6" AF-18-6"	S, Vol S, Vol	7 13	1 2 3	One Two Three	5 15 30	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

2-5

TABLE 4 OF 4
PAGE

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
521 522	<u>CONTINUED</u>								
	63-Aux. Feedwater SG-2 MSSS	Butt Welds	AF-6-6" AF-16-6"	S, Vol S, Vol	13 3	1 2 2	One Two Three	6 19 31	
	64-Blowdown SG-1 Inside Cont	Butt Welds	SG-39-6" SG-53-6"	S, Vol S, Vol	37 14	2 4 4	One Two Three	4 12 20	
	65-Blowdown SG-2 Inside Cont	Butt Welds	SG-48-6" SG-52-6"	S, Vol S, Vol	34 14	4 3 4	One Two Three	8 15 23	
	66-Blowdown SG-1 MSSS	Butt Welds	SG-39-6"	S, Vol	2	*	-	-	*REQUIRE- MENTS IDENTIFIED IN TABLE 2-AHE
	67-Blowdown SG-2 MSSS	Butt Welds	SG-48-6"	S, Vol	2	*	-	-	
530 531 532	<u>PIPE BRANCH CONNEC- TIONS > 4 IN. NOMINAL PIPE SIZE CIRCUMFERENTIAL AND **LONGITUDINAL WELDS</u>								
	47-Main Steam SG-1 270° MSSS	Sweepolets	SG-206-28	S	7	*	-	-	**2.5T MIN. FROM EACH SCHED- ULED BRANCH WELD INTER- SECTION WILL BE EXAMINED
	48-Main Steam SG-1 90° MSSS	Sweepolets	SG-207-28	S	8	*	-	-	
	49-Main Steam SG-2 270° MSSS	Sweepolets	SG-208-28	S	8	*	-	-	*REQUIRE- MENTS IDENTIFIED IN TABLE 2-AHE
	50-Main Steam SG-2 90° MSSS	Sweepolets	SG-209-28	S	7	*	-	-	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

TABLE 2-6
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
C600	<u>EXAM CATEGORY C-G: PRESSURE RETAINING WELDS IN PUMPS AND VALVES</u>								
610	<u>PUMPS PUMP CASING WELDS</u>	None	-	-	-	-	-	-	
620	<u>VALVES VALVE BODY WELDS</u>								
	Dresser, 6" x 10", Pressure Safety Main Steam Valves	Zone 47 Zone 48 Zone 49	SG-206-28" SG-207-28" SG-208-28"	S S S	5 5 5	Examine the weld in 1 valve	*	100	*BY THE END OF THE INTER- VAL.
		Zone 50	SG-209-28"	S	5				
	Borg Warner, 16" Gate Valves LPSI Pump Suction	Zone 70 Zone 71	SI-241-16" SI-194-16"	S S	1 1	Examine the weld in 1 valve	*	100	
	Borg Warner, 6" Gate Valves SD Cooling Iix Outlet	Zone 74 Zone 75	SI-131-6" SI-131-6"	S S	1 1	Examine the weld in 1 valve	*	100	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

TABLE 2-7
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
C700	<u>EXAM CATEGORY C-H:</u> <u>ALL PRESSURE</u> <u>RETAINING COMPO-</u> <u>NENTS</u>								
	<u>SYSTEM FUNCTIONAL</u> <u>TESTS</u>								
710	Pressure Vessels	Pressure	-	VT-2		Entire Pres-	*	100	*EACH
730	Piping	Retain ing				sure retain-			INSPECTION
750	Pumps	Boundary				ing boundary			PERIOD
770	Valves					IWA-5000 IWC-5000			
	<u>SYSTEM HYDRO-TESTS</u>								
720	Pressure Vessels	Pressure	-	VT-2		Entire Pres-	**	100	**EACH
740	Piping	Retaining				sure retain-			INSPECTION
760	Pumps	Boundary				ing boundary			INTERVAL
780	Valves					IWA-5000 IWC-5000			





**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-IWF
PAGE 1 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
* F110 F120 F130 F140 F210 F220 F230 F240 F310 F320 F330 F340 F350	EXAM CATEGORY F-A: <u>PLATE AND SHELL TYPE SUPPORTS</u> and EXAM CATEGORY F-B: <u>LINEAR TYPE SUPPORTS</u> and EXAM CATEGORY F-C: <u>COMPONENT STANDARD SUPPORTS</u>			**					REQUEST FOR RELIEF #1 & 3 * INCLUDES EXAM ITEMS IDENTI- FIED, AS APPLI- CABLE. **NDE METHOD - INCLUDES VT-4 EXAMS, WHERE AP- PLICABLE.
	41-Steam Generator 1	2-Snubbers	SN-79273-1	VT-3	2	2 0 0	One Two Three	100 100 100	
	42-Steam Generator 2	2-Snubbers	SN-79273-2	VT-3	2	0 2 0	One Two Three	- 100 100	
	43-Main Steam SG-1 90°F Inside Cont	Supports	SG-36	VT-3	9	3 2 4	One Two Three	33 55 100	
	44-Main Steam SG-1 270° Inside Cont	Supports	SG-33	VT-3	10	2 5 3	One Two Three	20 70 100	
	45-Main Steam SG-2 270° Inside Cont	Supports	SG-42	VT-3	9	3 3 3	One Two Three	33 67 100	
	46-Main Steam SG-2 90° Inside Cont.	Supports	SG-45	VT-3	10	2 5 3	One Two Three	20 70 100	
	47-Main Steam SG-1 270° MSSS	Supports	SG-206	VT-3	1	1 0 0	One Two Three	100 100 100	
	48-Main Steam SG-1 90° MSSS	Supports	SG-207	VT-3	1	0 1 0	One Two Three	- 100 100	
	49-Main Steam SG-2 270° MSSS	Supports	SG-208	VT-3	1	0 0 1	One Two Three	- - 100	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

TABLE 2-IWF
 PAGE 2 OF 4

ASME ITEM NO.	ZONE-COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
F110 F120 F130 F140 F210	<u>CONTINUED</u> 50-Main Steam SG-2 90° MSSS	Supports	SG-209	VT-3	1	0 0 1	One Two Three	- - 100	
F220 F230 F240	51-Atmosphere Dump SG-1	Supports	SG-59 SG-70	VT-3	2	1 1 0	One Two Three	50 100 100	
F310 F320 F330	52-Atmosphere Dump SG-2	Supports	SG-84 SG-103	VT-3	2	0 0 2	One Two Three	- - 100	
F340 F350	53-Steam to Aux. Feedwater System	Supports	SG-81 SG-83	VT-3	8	4 2 2	One Two Three	50 75 100	
	54-Feedwater SG-1 Inside Cont	Supports	SG-2 SG-13	VT-3	19	6 6 7	One Two Three	31 63 100	
	55-Feedwater SG-2 Inside Cont	Supports	SG-5 SG-14	VT-3	18	7 7 4	One Two Three	38 78 100	
	56-Feedwater SG-1 MSSS	Supports	SG-202	VT-3	1	0 1 0	One Two Three	- 100 100	
	57-Feedwater SG-2 MSSS	Supports	SG-205	VT-3	1	0 0 1	One Two Three	- - 100	
	58-Aux. and Down- comer Feedwater SG-1 Inside Cont	Supports	SG-8 AF-4	VT-3	22	7 7 8	One Two Three	32 64 100	
	59-Aux. and Down- comer Feedwater SG-2 Inside Cont	Supports	SG-11 AF-6	VT-3	22	6 6 10	One Two Three	27 54 100	
	60-Downcomer Feed- water SG-1 MSSS	Supports	SG-200	VT-3	3	1 0 2	One Two Three	33 33 100	
	61-Downcomer Feed- water SG-2 MSSS	Supports	SG-203	VT-3	3	0 2 1	One Two Three	- 66 100	



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-1WF
PAGE 3 OF 4

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
F110 F120 F130 F140 F210 F220 F230 F240 F310 F320 F330 F340 F350	<u>CONTINUED</u>								
	62-Aux. Feedwater SG-1 MSSS	Supports	AF-4 AF-18	VT-3	4	1 1 2	One Two Three	25 50 100	
	63-Aux. Feedwater SG-3 MSSS	Supports	AF-6 AF-16	VT-3	5	2 2 1	One Two Three	40 80 100	
	64-Blowdown SG-1 Inside Cont.	Supports	SG-39 SG-53	VT-3	37	12 13 12	One Two Three	32 67 100	
	65-Blowdown SG-2 Inside Cont.	Supports	SG-48 SG-52	VT-3	37	12 12 13	One Two Three	32 65 100	
	68-Regenerative Heat Exchanger	Supports	SN-79313	VT-3	2	0 1 1	One Two Three	- 50 100	
	70-LPSI Pump Suction Loop 1	Supports	SI-241 SI-369 SI-239 SI-2 SI-67	VT-3	32	9 9 14	One Two Three	28 36 100	
	71-LPSI Pump Suction Loop 2	Supports	SI-194 SI-368 SI-173 SI-38 SI-34 SI-308	VT-3	33	9 9 15	One Two Three	27 56 100	
	72-LPSI Pump Discharge Loop 1	Supports	SI-87 SI-78	VT-3	10*	4 4 2	One Two Three	40 80 100	*INCLUDES 3 PUMP SUPPORTS
	73-LPSI Pump Discharge Loop 2	Supports	SI-129 SI-123 SI-119	VT-3	15*	2 6 7	One Two Three	17 58 100	
	74-SD Cooling Hx Outlet Loop 1	Supports	SI-70 SI-89 SI-90 SI-87	VT-3	26	8 8 10	One Two Three	31 62 100	





ASME CLASS 2

2-IWF

TABLE _____
PAGE 11 OF 11

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
F110	<u>CONTINUED</u>								
F120									
F130									
F140	75-SD Cooling Hx	Supports	SI-72	VT-3	30	8	One	27	
F210	Outlet Loop 2		SI-134			9	Two	57	
F220			SI-135			13	Three	100	
F230			SI-129						
F240									
F310	76-LPSI Header 1A	Supports	SI-70	VT-3	21	6	One	29	
F320			SI-202			7	Two	62	
F330						8	Three	100	
F340									
F350	77-LPSI Header 1B	Supports	SI-71	VT-3	28	9	One	32	
			SI-220			9	Two	64	
						10	Three	100	
	78-LPSI Header 2A	Supports	SI-72	VT-3	15	4	One	27	
			SI-155			5	Two	60	
						6	Three	100	
	79-LPSI Header 2B	Supports	SI-73	VT-3	13	3	One	23	
			SI-174			5	Two	62	
						5	Three	100	
	80-Containment	Supports	SI-9	VT-3	*4	4	One	100	*INCLUDES 3 PUMP SUPPORTS
	Spray Pump					0	Two	100	
	Suction Loop 1					0	Three	100	
	81-Containment	Supports	SI-34	VT-3	*7	0	One	-	
	Spray Pump		SI-33			3	Two	43	
	Suction Loop 2					4	Three	100	
	82-Containment	Supports	SI-79	VT-3	21	8	One	38	
	Spray Discharge		SI-82			5	Two	62	
	Loop 1		SI-89			8	Three	100	
	83-Containment	Supports	SI-119	VT-3	21	6	One	29	
	Spray Discharge		SI-134			7	Two	62	
	Loop 2		SI-147			8	Three	100	
	84-Containment	Supports	SI-7	VT-3	1	0	One	-	
	Sump Suction					1	Two	100	
	Loop 1					0	Three	100	
	85-Containment	Supports	SI-30	VT-3	1	0	One	-	
	Sump Suction					0	Two	-	
	Loop 2					1	Three	100	

SECTION 6.0
ASME CLASS 3
EXAMINATION SUMMARY

INDEX

TABLE

EXAM CATEGORY

3-1	D-A,	Systems in support of reactor shutdown function
	D-B,	Systems in support of emergency core cooling, containment heat removal, atmosphere cleanup, and reactor residual heat removal
	D-C,	Systems in support of residual heat removal from spent fuel storage pool
3-IWF	F-A,	Plate and shell type supports
	F-B,	Linear type supports
	F-C,	Component standard supports



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 3

TABLE 3-1
PAGE 1 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
D120 thru D160	<u>EXAMINATION CATEGORY</u> <u>D-A, SYSTEMS IN SUP-</u> <u>PORT OF REACTOR</u> <u>SHUTDOWN FUNCTION</u>					ASME CLASS 3 SYSTEMS ARE IDENTIFIED ON THE ISI BOUNDARY DRAWINGS CONTAINED IN SECTION 10.0.			
D220 thru D260	<u>AND</u> <u>EXAMINATION CATEGORY</u> <u>D-B, SYSTEMS IN SUP-</u> <u>PORT OF EMERGENCY</u> <u>CORE COOLING, CON-</u> <u>TAINMENT HEAT RE-</u> <u>MOVAL, ATMOSPHERE</u> <u>CLEANUP, AND REAC-</u> <u>TOR RESIDUAL HEAT</u> <u>REMOVAL</u>								
D320 thru D360	<u>AND</u> <u>EXAMINATION CATEGORY</u> <u>D-C, SYSTEMS IN SUP-</u> <u>PORT OF RESIDUAL</u> <u>HEAT REMOVAL FROM</u> <u>SPENT FUEL STORAGE</u> <u>POOL</u>								REQUEST FOR RELIEF #1 & #3
	All Class 3 Systems (Except Auxiliary Feedwater)	Integrally Welded Attachments	All lines greater than 4" nominal pipe size	VT-3	All	100%	Each In- spection Interval	100%	
	Auxiliary Feedwater Systems	Integrally Welded Attachments	All lines	VT-3	All	100%	Each In- spection Interval	100%	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 3

TABLE 3-1
PAGE 2 OF 2

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
	<u>EXAMINATION CATEGORY</u> <u>D-A, SYSTEMS IN SUP-</u> <u>PORT OF REACTOR</u> <u>SHUTDOWN FUNCTION</u> <u>AND</u> <u>EXAMINATION CATEGORY</u> <u>D-B, SYSTEMS IN SUP-</u> <u>PORT OF EMERGENCY</u> <u>CORE COOLING, CON-</u> <u>TAINMENT HEAT RE-</u> <u>MOVAL, ATMOSPHERE</u> <u>CLEANUP, AND REAC-</u> <u>TOR RESIDUAL HEAT</u> <u>REMOVAL</u> <u>AND</u> <u>EXAMINATION CATEGORY</u> <u>D-C, SYSTEMS IN SUP-</u> <u>PORT OF RESIDUAL</u> <u>HEAT REMOVAL FROM</u> <u>SPENT FUEL STORAGE</u> <u>POOL</u>								
D110 D210 D310	<u>SYSTEM INSERVICE</u> <u>TESTS</u> Pressure Retaining Components	Pressure Retaining Boundary	-	VT-2	-	Entire Pres- sure Retain- ing Boundary IWA-5000 IWD-5000	*	100	*EACH INSPECTION PERIOD.
D110 D210 D310	<u>SYSTEM HYDRO-TESTS</u> Pressure Retaining Components	Pressure Retaining Boundary	-	VT-2	-	Entire Pres- sure Retain- ing Boundary IWA-5000 IWD-5000	**	100	**EACH INSPECTION INTERVAL.



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 3

TABLE 3-IWF
PAGE 1 OF 1

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
F110 F120 F130 F140 F210 F220 F230 F240 F310 F320	<u>EXAM CATEGORY F-A:</u> <u>PLATE AND SHELL</u> <u>TYPE SUPPORTS</u> <u>AND</u> <u>EXAM CATEGORY F-B:</u> <u>LINEAR TYPE SUPPORTS</u> <u>AND</u> <u>EXAM CATEGORY F-C:</u> <u>COMPONENT STANDARD</u> <u>SUPPORTS</u>			***					*INCLUDES EXAM ITEMS IDENTIFIED, AS APPLI- CABLE. **NDE METHOD INCLUDES VT-4 EXAMS, WHERE AP- PPLICABLE.
F330 F340 F350	All Class 3 Systems (Except Auxiliary Feedwater)	Support Components	All lines greater than 4" nominal pipe size	VT-3	All	100%	Each In- spection Interval	100%	REQUEST FOR RELIEF #3
	Auxiliary Feedwater Systems	Support Components	All lines	VT-3	All	100%	Each In- spection Interval	100%	



SECTION 7.0

AUGMENTED HIGH
ENERGY PIPING



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-AHE
PAGE 1 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
	<u>AUGMENTED EXAMINA- TIONS OF HIGH ENERGY PIPING</u>				(*)				(*) IDENTI- FIES THE NUMBER OF WELDS THAT ARE NOT ASME CLASS- IFIED
510	<u>PIPING WELDS ≤ 1/2 IN. NOMINAL WALL THICKNESS</u>								
511 512	<u>CIRCUMFERENTIAL AND *LONGITUDINAL WELDS</u>								**NONE
	51-Bypass UV-180	Butt Welds 4" x .337"	SG-95-4"	S, Vol	(12)	0 12 0	One Two Three	- 100 100	
	52-Bypass UV-171	Butt Welds 4" x .337"	SG-100-4"	S, Vol	(12)	0 0 12	One Two Three	- - 100	
	53-Steam to Aux Feedwater	Butt Welds 6" x .432"	SG-81-6" SG-83-6"	S, Vol S, Vol	14 15	10 9 10	One Two Three	35 68 100	
520	<u>PIPING WELDS > 1/2 IN. NOMINAL WALL THICKNESS</u>								
521 522	<u>CIRCUMFERENTIAL AND *LONGITUDINAL WELDS</u>								*100% OF ALL INTER- SECTING LONGITUD- INAL WELDS WILL BE EXAMINED.
	47-Main Steam SG-1 270° MSSS	Butt Welds	SG-206-28" SG-206-12" SG-206-6"	S, Vol S, Vol S, Vol	4(1) 2 5	12 0 0	One Two Three	100 100 100	
	48-Main Steam SG-1 90° MSSS	Butt Welds	SG-207-28" SG-207-12" SG-207-6"	S, Vol S, Vol S, Vol	4(1) 2 5	0 12 0	One Two Three	- 100 100	
	49-Main Steam SG-2 270° MSSS	Butt Welds	SG-208-28" SG-208-12" SG-208-6"	S, Vol S, Vol S, Vol	4(1) 2 5	0 0 12	One Two Three	- - 100	
	50-Main Steam SG-2 90° MSSS	Butt Welds	SG-209-28" SG-209-12" SG-209-6"	S, Vol S, Vol S, Vol	4(1) 2 5	0 0 12	One Two Three	- - 100	



**PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY**

ASME CLASS 2

TABLE 2-AHE
PAGE 2 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
521 522	<u>CONTINUED</u>								
	51-Atmospheric Dump SG-1	Butt Welds 12" x .844"	SG-59-12" SG-70-12"	S, Vol S, Vol	11 13	11 13 0	One Two Three	46 100 100	
	52-Atmospheric Dump SG-2	Butt Welds 12" x .844"	SG-84-12" SG-103-12"	S, Vol S, Vol	13 11	0 0 24	One Two Three	- - 100	
	56-Feedwater SG-1 MSSS	Butt Welds	SG-201-24" SG-202-24" SG-224-24"	S, Vol S, Vol S, Vol	2 2 (2)	4 2 0	One Two Three	67 100 100	
	57-Feedwater SG-2 MSSS	Butt Welds	SG-204-24" SG-205-24" SG-225-24"	S, Vol S, Vol S, Vol	2 2 (2)	0 0 6	One Two Three	- - 100	
	60-Downcomer Feed- water SG-1 MSSS	Butt Welds 8" x .719"	SG-200-8" SG-8-8"	S, Vol S, Vol	(8) 6	9 5 0	One Two Three	64 100 100	
	61-Downcomer Feed- water SG-2 MSSS	Butt Welds 8" x .719"	SG-203-8" SG-11-8"	S, Vol S, Vol	(8) 6	0 5 9	One Two Three	- 36 100	
	66-Blowdown SG-1 MSSS	Butt Welds	SG-39-6"	S, Vol	2(13)	9 6 0	One Two Three	60 100 100	
	67-Blowdown SG-2 MSSS	Butt Welds	SG-48-6"	S, Vol	2(10)	0 6 6	One Two Three	- 50 100	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

ASME CLASS 2

TABLE 2-AHE
PAGE 3 OF 3

ASME ITEM NO.	ZONE•COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAMINATION AMOUNT	INSPECTION PERIOD	RUNNING %	REMARKS AND RELIEF REQUESTS
530	<u>Pipe Branch Conne-</u> <u>ctions</u>								
531	<u>Circumferential and</u>								*SCHEDULED UNDER C5.21 AND C5.22
532	<u>*Longitudinal Welds</u>								
	47-Main Steam SG-1 270° MSSS	Sweepolets	SG-206-28"	S, Vol	7	7 0 0	One Two Three	100 100 100	
	48-Main Steam SG-1 90° MSSS	Sweepolets	SG-207-28"	S, Vol	8(1)	0 9 0	One Two Three	- 100 100	
	49-Main Steam SG-2 270° MSSS	Sweepolets	SG-208-28"	S, Vol	8(1)	0 0 9	One Two Three	- - 100	
	50-Main Steam SG-2 90° MSSS	Sweepolets	SG-209-28"	S, Vol	7	0 0 7	One Two Three	- - 100	

SECTION 8.0

RHR, ECCS, AND CHR PIPING



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY
 (RHR, ECCS, and CHR SYSTEMS)

ASME CLASS 2

TABLE 2-CFR
 PAGE 1 OF 5

ASME ITEM NO.	ZONE COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAM AMOUNT		INSPECTION PERIOD	(40 YR) 10 YR %	REMARKS AND RELIEF REQUESTS
						40 YR	10 YR			
C500	<u>EXAM. CATEGORY C-F*; PRESSURE RETAINING WELDS IN PIPING</u>	NOTE 2		NOTE 1				NOTE 3		
510	<u>PIPING WELDS ≤ 1/2 IN. NOMINAL WALL THICKNESS</u>									
511 512	<u>CIRCUMFERENTIAL AND **LONGITUDINAL WELDS</u> <u>('75 CATEGORY C-F)</u>									
	70 & 71 LPSI Pump Suction	Butt Welds 10" x .250" 6" x .280"	SI-369 SI-368	S, Vol S, Vol	(26) 9 17	(13) 4 9	(3) 1 1 1	One Two Three	(100) 8 15 23	*1 WELD PER LINE
		Butt Welds 16" x .312	SI-241 SI-194 SI-173	S, Vol S, Vol S, Vol	(33) 15 16 2	(16) 8 8 -	(4) 1 1 2	One Two Three	(100) 6 13 25	
		Butt Welds 10" x .250 10" x .365*	SI-239 SI-173	S, Vol S, Vol	(21) 10 11	(11) 5 6	(3) 1 1 1	One Two Three	(100) 9 18 27	*1 WELD PER LINE
		Butt Welds 12" x .250	SI-2 SI-38	S, Vol S, Vol	(14) 10 4	(7) 5 2	(2) 1 0 1	One Two Three	(100) 14 14 29	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY
 (RHR, ECCS, and CHR SYSTEMS)

ASME CLASS 2

TABLE 2-CFR
 PAGE 2 OF 5

ASME ITEM NO.	ZONE COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAM AMOUNT		INSPECTION PERIOD	(40 YR) 10 YR %	REMARKS AND RELIEF REQUESTS
						40 YR	10 YR			
511 512	<u>CONTINUED</u>									
	70 & 71 LPSI Pump Suction (cont'd)	Butt Welds 18" x .312	SI-241	S, Vol	(50)	(25)	(7)		(100)	
			SI-194	S, Vol	24	12	2	One	8	
					26	13	3	Two	20	
							3	Three	32	
		Butt Welds 16" x .312	SI-67	S, Vol	(18)	(9)	(3)		(100)	
		14" x .312*	SI-34	S, Vol	9	5	1	One	11	
					9	4	1	Two	18	
							1	Three	27	*2 WELDS PER LYNE.
		Butt Welds 20" x .375"	SI-307	S, Vol	(20)	(10)	(3)		(100)	
			SI-308	S, Vol	10	5	1	One	10	
					10	5	1	Two	20	
							1	Three	30	
		Butt Welds 14" x .312	SI-307	S, Vol	(12)	(6)	(2)		(100)	
			SI-308	S, Vol	6	3	1	One	14	
					6	3	0	Two	14	
							1	Three	29	
	72 & 73 LPSI Pump Discharge	Butt Welds 8" x .322"	SI-87	S, Vol	(4)	(4)	(2)		(100)	
			SI-129	S, Vol	2	2	2	One	50	
					2	2	0	Two	50	
							0	Three	50	
		Butt Welds 10" x .365"	SI-87	S, Vol	(26)	(14)	(3)		(100)	
			SI-129	S, Vol	14	7	1	One	7	
					12	7	1	Two	14	
							1	Three	21	
		Butt Welds 10" x .365"	SI-78	S, Vol	(28)	(15)	(4)		(100)	
			SI-123	S, Vol	14	7	1	One	7	
					14	8	2	Two	20	
							1	Three	27	
		Butt Welds 10" x .365"	SI-79	S, Vol	(12)	(6)	(2)		(100)	
			SI-119	S, Vol	6	3	1	One	14	
					6	3	1	Two	29	
							0	Three	29	
		Butt Welds 20" x .500"	SI-78	S, Vol	(8)	(4)	(2)		(100)	
			SI-123	S, Vol	3	2	0	One	-	
					5	2	1	Two	20	
							1	Three	40	





PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY
(RHR, ECCS, and CHR SYSTEMS)

ASME CLASS 2

TABLE 2-CFR

PAGE 3 OF 5

ASME ITEM NO.	ZONE COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAM AMOUNT		INSPECTION PERIOD	(40 YR) 10 YR %	REMARKS AND RELIEF REQUESTS
						40 YR	10 YR			
511 512	<u>CONTINUED</u>									
	74 & 75 SD Cooling Hx Outlet	Butt Welds 20" x .500"	SI-70 SI-72	S, Vol S, Vol	(48) 27 21	(24) 11 11	(6) 2 2 2	One Two Three	(100) 8 17 25	
		Butt Welds 16" x .375	SI-70 SI-72	S, Vol S, Vol	(8) 4 4	(4) 2 2	(1) 1 0 0	One Two Three	(100) 25 25 25	
		Butt Welds 10" x .365	SI-89 SI-134	S, Vol S, Vol	(16) 8 8	(8) 4 4	(2) 1 0 1	One Two Three	(100) 13 13 25	
		Butt Welds 6" x .280"	SI-131 SI-131	S, Vol S, Vol	(8) 4 4	(4) 2 2	(1) 1 0 0	One Two Three	(100) 25 25 25	
		Butt Welds 14" x .375"	SI-90 SI-135	S, Vol S, Vol	(21) 10 11	(10) 5 5	(3) 1 1 1	One Two Three	(100) 10 20 30	
		Butt Welds 10" x .365"	SI-87 SI-129	S, Vol S, Vol	(38) 22 16	(19) 11 8	(5) 1 2 2	One Two Three	(100) 5 15 25	
	76, 77, 78 & 79 LPSI Headers 1A, 1B, 2A and 2B	Butt Welds 12" x .375"	SI-70 SI-71 SI-72 SI-73	S, Vol S, Vol S, Vol S, Vol	(38) 9 8 15 6	(10) 2 2 4 2	(3) 1 1 1	One Two Three	(100) 10 20 30	
	77 & 78 LPSI Headers 1B and 2A	Butt Welds 10" x .365"	SI-71 SI-172	S, Vol S, Vol	(6) 2 4	(3) 1 2	(1) 0 1 0	One Two Three	(100) - 33 33	
	80 & 81 Containment Spray Pump Suction	Butt Welds 14" x .312"	SI-67 SI-34	S, Vol S, Vol	(10) 5 5	(5) 2 3	(2) 1 1 0	One Two Three	(100) 20 40 40	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY
 (RHR, ECCS, and CHR SYSTEMS)

ASME CLASS 2

TABLE 2-CFR
 PAGE 4 OF 5

ASME ITEM NO.	ZONE COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAM AMOUNT		INSPECTION PERIOD	(40 YR) 10 YR %	REMARKS AND RELIEF REQUESTS
						40 YR	10 YR			
511 512	<u>CONTINUED</u>									
	80 & 81 Containment Spray Pump Suction	Butt Welds 18" x .312"	SI-9 SI-33	S, Vol S, Vol	(17) 9 8	(9) 5 4	(3) 1 1	One Two Three	(100) 11 22 33	
		Butt Welds 14" x .312"	SI-9 SI-33	S, Vol S, Vol	(8) 4 4	(4) 2 2	(1) 0 1	One Two Three	(100) - - 25	
	82 & 83 Containment Spray Pump Discharge	Butt Welds 10" x .365" 8" x .322" *	SI-79 SI-119	S, Vol S, Vol	(61) 31 30	(31) 16 15	(8) 3 3	One Two Three	(100) 10 19 29	*INCLUDES 1 WELD PER LINE
		Butt Welds 10" x .365"	SI-82, 89 SI-134, 147	S, Vol S, Vol	(63) 35 28	(32) 18 14	(8) 2 3 3	One Two Three	(100) 6 16 25	
		Butt Welds 8" x .322"	SI-89 SI-134	S, Vol S, Vol	(4) 2 2	(2) 1 1	(1) 0 1 0	One Two Three	(100) - 50 50	
	84 & 85 Containment Sump Suction	Butt Welds 24" x .375"	SI-7 SI-30	S, Vol S, Vol	(8) 4 4	(4) 2 2	(1) 0 0 1	One Two Three	(100) - - 25	
520 521 522	<u>PIPING WELDS OVER 1/2 IN. NOMINAL WALL THICKNESS CIRCUMFERENTIAL AND *LONGITUDINAL WELDS</u> ('75 Category C-F)									*2.5T MIN. FROM EACH SCHEDULED CIRC. WELD INTERSEC- TION WILL BE EXAMINED.
	70 & 71 LPSI Pump Suction	Butt Welds 16" x 1.592"	SI-241 SI-194	S, Vol S, Vol	(4) 2 2	(2) 1 1	(0) 0 0	One Two Three	(100) - - -	



PALO VERDE NUCLEAR GENERATING STATION
10 YEAR INTERVAL — EXAMINATION SUMMARY

(RHR, ECCS, and CHR SYSTEMS)

ASME CLASS 2

2-CFR

TABLE _____
PAGE 5 OF 5

ASME ITEM NO.	ZONE COMPONENT OR SYSTEM	IDENTIFICATION	DESCRIPTION, LINE NO., OR SERIAL NO.	NDE METHOD	TOTAL ITEMS	EXAM AMOUNT		INSPECTION PERIOD	(40 YR) 10 YR %	REMARKS AND RELIEF REQUESTS
						40 YR	10 YR			
520 521 522	<u>CONTINUED</u>									
	76, 77, 78 & 79 LPSI Headers 1A, 1B, 2A and 2B	Butt Welds 12" x 1.125"	SI-70 & 202 SI-71 & 220 SI-72 & 155 SI-73 & 174	S, Vol S, Vol S, Vol S, Vol	(45) 11 12 12 10	(12) 3 3 3 3	(3) 1 1 1 1	One Two Three	(100) 8 17 25	
		Butt Welds 12" x 1.312"	SI-202 SI-220 SI-155 SI-174	S, Vol S, Vol S, Vol S, Vol	(91) 21 34 21 15	(24) 5 10 5 4	(6) 2 2 2 2	One Two Three	(100) 8 17 25	
	84 & 85 Containment Sump Suction	Butt Welds 24" x .562"	SI-307 SI-308	S, Vol S, Vol	(4) 2 2	(2) 1 1	(1) 0 1 0	One Two Three	(100) - 50 50	
530 531 532	<u>PIPE BRANCH CONNEC- TIONS, CIRCUMFERENTIAL AND *LONGITUDINAL WELDS</u>									*2.5T MIN. FROM EACH WELD INTER- SECTION WILL BE EXAMINED.
	70 & 71 LPSI Pump Suction	Sweepolets 18" x 12"	SI-241 SI-194	S S	(2) 1 1	(1) 1 0	(0) 0 0 0	One Two Three	(100) - - -	
	72 & 73 LPSI Pump Discharge	Sweepolets 20" x 10"	SI-78 SI-123	S S	(4) 2 2	(2) 1 1	(1) 1 0 0	One Two Three	(100) 50 50 50	
	74 & 75 SD Cooling Hx Outlet	Sweepolets 20" x 6" 20" x 10" 20" x 12" 20" x 14"	SI-70 SI-72	S S	(10) 5 5	(5) 2 3	(2) 1 1 1	One Two Three	(100) 20 20 40	

SECTION 9.0
REQUESTS FOR RELIEF

RELIEF REQUEST
INDEX

NUMBER

DESCRIPTION

1. Hydraulic and mechanical snubbers will be tested in accordance with PVNGS Technical Specifications.
2. Volumetric Examinations of nozzle inside radius sections will be performed only on specified nozzles.
3. Insulation will not be removed for visual examinations of welded or mechanical attachments.

RELIEF REQUEST NO. 1

COMPONENT OR ITEM	CODE CLASS	PROGRAM TABLE	CODE ITEM	EXAM CATEGORY
HYDRAULIC AND MECHANICAL SNUBBERS	1	1-IWF	N/A	N/A
	2	2-IWF	N/A	N/A
	3	3-IWF	N/A	N/A

CODE REQUIREMENT

Perform inservice functional testing of hydraulic and mechanical snubbers in accordance with IWF-5000.

BASIS

A detailed and comprehensive testing program for snubbers is contained in the PVNGS Technical Specifications ;

ALTERNATE EXAMINATION

The requirements for testing snubbers will be in accordance with the PVNGS Technical Specifications, Section 4.7.9.

SCHEDULE FOR IMPLEMENTATION

First Ten Year Inspection Interval

RELIEF REQUEST NO. 2

COMPONENT OR ITEM	CODE CLASS	PROGRAM TABLE	CODE ITEM	EXAM CATEGORY
NOZZLE INSIDE RADIUS SECTIONS				
PRESSURIZER	1	1-3	B3.120	B-D
STEAM GENERATOR	1	1-3	B3.140	B-D
STEAM GENERATOR	2	1-3	C2.22	C-B
SHUT DOWN COOLING HEAT EXCHANGERS	2	1-3	C2.22	C-B

CODE REQUIREMENT

Perform volumetric examination of the nozzle inside radius section.

BASIS

The volumetric examinations of the nozzle inside radius sections on the referenced vessels (other than those identified under Alternative Examination) will not be performed. For nozzles that do not experience a temperature gradient in a cycling environment that could possibly induce a thermal fatigue mechanism, there is no technical basis for performing these examinations. The industry has evidence that problems can arise in inner radius areas but they have all been associated with the cyclic temperature gradients, and generally in extremely high cyclic environments. In addition, the unique geometrics, large metal paths, compound angles, etc., that have been encountered while performing an ultrasonic examination of the inner radius sections have essentially prevented a code required or recommended method from being prepared and/or referenced in ASME Section XI. These examinations also require extremely large amounts of time, effort, expense, and radiation exposure.(expected to be as high as 1 to 4 man REM per nozzle).

ALTERNATE EXAMINATION

The volumetric examination will be performed to the maximum extent practical on the steam generator feedwater nozzles (Table 2.2) and on the pressurizer spray nozzle (Table 1-3).

SCHEDULE FOR IMPLEMENTATION

First Ten Year Interval

RELIEF REQUEST NO. 3

COMPONENT OR ITEM	CODE CLASS	PROGRAM TABLE	CODE ITEM	EXAM CATEGORY
SUPPORT COMPONENTS	1	1-IWF	ALL	F-A, F-B & F-C
	2	2-IWF	ITEMS	F-A, F-B & F-C
	3	3-IWF		F-A, F-B & F-C
INTEGRAL ATTACHMENTS	3	3-1		D-A, D-B & D-C

CODE REQUIREMENTS

Perform visual examinations (VT-3) of the mechanical or welded attachments to the pressure retaining component on insulated systems.

BASIS

The visual examinations of the mechanical or welded attachments will be performed to the extent practical. The insulation will not be removed to perform these examinations. It has been our experience that any loss of support capability or adequate restraint can usually be detected through the examination of uninsulated portions of the support, the accessible portions of the attachments through the insulation gaps, and or the surrounding insulation.

ALTERNATE EXAMINATIONS

The mechanical and welded attachments will be visually examined to the extent practical. The insulation will be removed from around the support attachment for further examinations whenever the mechanical connections can not be examined or whenever an abnormality is detected.

SCHEDULE FOR IMPLEMENTATION

First Ten Year Inspection Interval



SECTION 10.0

ISI BOUNDARY DRAWINGS

NOTE: See ISI Drawings for Unit 1 ISI Program
submitted 8-26-85 (Letter # ANPP-33266-EEVB/KLM).

