REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8802290276 DOC. DATE: 88/02/26 NOTARIZED: NO DOCKET #
FACIL: 50-275 Diablo Canyon Nuclear Power Plant, Unit 1, Pacific Ga 05000275
AUTH. NAME AUTHOR AFFILIATION
SHIFFER, J. D. Pacific Gas & Electric Co.
RECIP. NAME RECIPIENT AFFILIATION
Document Control Branch (Document Control Desk)

SUBJECT: Forwards description of Class 1,2 & 3 components scheduled for inservice insp during second refueling outage, including relief requests. Ack of receipt of matl requested.

DISTRIBUTION CODE: A001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 33
TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD5 LA	1	0	PD5 PD	5	5
	ROOD, H	1	1			
INTERNAL:	ACRS	6	6	ARM/DAF/LFMB	1	0
	NRR/DEST/ADS7E4	1	1	NRR/DEST/CEB8H7	1	1
	NRR/DEST/MTB 9H	1	1	NRR/DEST/RSB 8E	1	1
	NRR/DOEA/TSB11F	1	1	NRR/PMAS/ILRB12	1	1
	OGC 15-B-18	1	0	REG FILE 01	1	1
	RES/DE/EIB	1	1			
EXTERNAL:	LPDR	2	2	NRC PDR	1	1
	NSIC	1	1			

TOTAL NUMBER OF COPIES REQUIRED: LTTR 27 ENCL 24

PACIFIC GAS AND ELECTRIC COMPANY

PG&E — 77 BEALE STREET • SAN FRANCISCO, CALIFORNIA 94106 • (415) 972-7000 • TWX 910-372-6587

JAMES D. SHIFFER
VICE PRESIDENT
NUCLEAR POWER GENERATION

February 26, 1988

PG&E Letter No.: DCL-88-042

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Re: Docket No. 50-275, OL-DPR-80
Diablo Canyon Unit 1
Second Refueling Outage ISI Schedule

Gentlemen:

Enclosed is a description of Class 1, 2, and 3 components scheduled for Inservice Inspection (ISI) during the second refueling outage of Diablo Canyon Unit 1, including Relief Requests.

Kindly acknowledge receipt of this material on the enclosed copy of this letter and return it in the enclosed addressed envelope.

Sincerely,

Enclosure

cc: G. D. Horn, State of California Division of Industrial Safety
J. B. Martin
M. M. Mendonca
P. P. Narbut
B. Norton
H. Rood
C. Tahnk, Regional Manager, Hartford Steam Boiler
B. H. Vogler
CPUC
Diablo Distribution

1922S/0054K/JHA/0469

A001
1/1

ENCLOSURE

Diablo Canyon Power Plant Unit 1
Second Refueling Outage Inservice Inspection (ISI)
Examination Schedule

(First ISI Period)

Table of Contents

Table	Item
1.1	Reactor Vessel
1.2	Pressurizer
1.3	Steam Generators
1.4	Piping Welds/Supports
1.5	Pumps
1.6	Valves
2.1	Pressure Vessels
2.2	Piping Welds/Supports
2.3	Pumps
5.1	System Pressure Tests
Augmented	RCP Flywheels
1.4 and 2.2 Supplemental	Piping Supports
General	NDE Relief Requests

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
PAGE 1 of 3

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	Reactor Vessel	* [1.1-1] Serial No. C.E. 66104 Dwg. Ref. CE232-442-6		Exam area meets or exceeds reqts. of Fig. IWB2500-1 & Fig. IWB2500-2	
B-A	Pressure Retaining Welds	DC663201-38			
B1.20	Head Welds				
B1.22	- Meridional Welds -				
		Weld No.'s		As Accessible	Relief No.002
	Closure Head @Stud				
	#5-6	1-446A	UT	38" 100%*	T = 7.0"
	#14-15	1-446B	UT	38" 100%*	*As Accessible below CRD vent Shroud.
B1.30	Shell To Flange Weld	Weld No.	UT	As Accessible	Relief No. 003
		7-442 (From Flange)		182" 34%	T = 10.75" 0° Exam. From Flange Face
B1.40	Head To Flange Weld	Weld No.	UT	As Accessible	Relief No.003
		6-446A		182" 34%	T = 7.0"

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
	Reactor Vessel - Cont'd. [1.1-1]					
B-D	Full penetration welds of nozzles in vessels					
B3.90	Nozzle To Vessel Welds					
B3.100	Nozzle Inside Radius Section					
		Weld No's				
	Outlet Nozzle Loop 1	*1-29SPL @ 338°	UT	360°	100%	From Bore
		Inner Radius	UT			
	Outlet Nozzle Loop 2	*2-29SPL @ 22°	UT	360°	100%	From Bore
		Inner Radius	UT			
	Outlet Nozzle Loop 3	*3-29SPL @ 158°	UT	360°	100%	From Bore
		Inner Radius	UT			
	Outlet Nozzle Loop 4	*4-29SPL @ 202°	UT	360°	100%	From Bore
		Inner Radius	UT			
B5.10	Nozzle Safe Ends Welds					
	See Table 1.4					

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
PAGE 3 of 3

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
	Reactor Vessel - Cont'd. [1.1-1]					
B-G-1	Pressure Retaining Bolting (Larger Than 2" dia.)					
B6.10	Closure Head Nuts	RPV Stud Nuts No. 1(to)No. 54	MT or PT	18 Nuts	100%	OD=10.56" HT=7.94"
B6.30	Closure Studs (when Removed)	RPV Studs No. 1 (to) No. 54	PT or MT UT	18 Studs	100%	OD=6.8" L=57.7"
B6.40	Flange Ligaments (Between Stud Holes)	RPV Ligaments No. 1(to)No. 54	UT	18 Ligaments	100%	
	Stud Holes in Flange	Threads	VT-1	9 Holes		
B7.10	Marmon Clamps (Bolts, Studs, & Nuts)	Conoseal Bolts (For) In-Core Thermocouples, total of five assemblies, three bolts each	VT-1	15 bolts 15 bolts	100% 100%	Note: All clamps and bolts examined once each inspection period during a scheduled refueling outage.

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Pressurizer
TABLE: 1.2

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	Pressurizer Vessel				
B-B	Pressure Retaining Welds in Vessels other than Reactor	Serial No. W 1051 Dwg. Ref. DC663208-8-1		Exam'n area meets or exceeds req'ts of Figure IWB-2500-1 and Figure IWB-2500-2	[*] ISI Dwg Page No.'s of Figure
B2.10	Pressurizer Vessel Shell to Head Welds				
B2.11	- Circumferential -	* [1.2-1]		(Length)	
	Upper Course to Top Head	Weld No. Girth 5	UT	97" 100%	Note remarks for B2.12 T = 4.2" L = 291"
B2.12	Longitudinal Lower Course @ [Bottom Head]	Weld No. Long'l 6	UT	12"	
B3.120	Nozzle Inside Radius Section (Upper Head)		See Remarks		Visual Exam (VT-2) to be performed in lieu of Volometric exam See Relief No. 012
B-G-2	Pressure Retaining Bolting (2 in. dia. and less)				
B7.20	Upper Head	Manway Bolting (16 bolts total)	(VT-1)	5 Bolts 100%	Bolting may be examined in place, or when removed. (accessible surfaces)

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Steam Generators
TABLE: 1.3

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
	Steam Generators					
B-B	Pressure Retaining Welds in Vessels other than Reactor Steam Generators (Primary Side)					
B2.40	Tubesheet to Head Welds					
	Steam Generator 1-2 (Serial No. 1042)	Channel W 2-1	UT	12'	100%	T = 5.16" L = 36' Weld Length 36'
	Steam Generator 1-4 (Serial No. 1044)	Channel W 4-1	UT	12'	100%	
B-G-2	Pressure Retaining Bolting (2 In. Dia. and Less)	Channel Hd Manway Bolting				
B7.30	Bolts, Studs and Nuts					
	Steam Generator 1-1	No.1(to)No.16	VT-1	16 Studs	100%	Inlet
		"	VT-1	16 Studs and Nuts		Outlet

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Steam Generators
TABLE: 1.3
PAGE 2 of 2

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT			EXAM RELIEF'S & REMARKS
	Steam Generators - Cont'd.						
B-Q	Steam Generator Tubing						
B16.20	U-Tube Design Steam Generator			Total Items			
		Tube Map		Tubes*			
		Gen 1-1	ET	3,388	(*)	3%	*10CFR50 Requires Program to be based on the Plant's Approved Technical Specification (3/4.4.5) Ref: 10CFR50.55a(b)(2)(iii)
		Gen 1-2	ET	3,388	(*)	3%	
		Gen 1-3	ET	3,388	(*)	3%	
		Gen 1-4	ET	3,388	(*)	3%	

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Piping (S.E.) Welds (B-F)
TABLE: 1.4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
B-F	Pressure Retaining Dissimilar Metal Welds	Reactor Vessel Piping "Pup" is 316 stainless welded directly to RPV clad buttering. "Pup" to pipe is not considered a bi-metalic weld joint.		Volumetric exam scheduled coincident with vessel nozzle exam. Per Section XI.		Welds are those nozzle referenced in cat'y B-F, B5.10 Table 1-1 Pg 4 of 9.
B5.50	Piping-Safe End Welds Reactor Vessel					Relief No. 008 applies to this Table in its entirety
		Weld No.'s & Line No.'s				[ ] ISI Dwg. Page No.'s ( ) Construction Dwg.Page No.'s
	Outlet Nozzle Loop 1 (7-30) [1.4-1]	WIB-RC-1-1SE *1-29SPL	UT	360°	100%	
	Outlet Nozzle Loop 2 (7-31) [1.4-2]	WIB-RC-2-1SE *2-29SPL	UT	360°	100%	
	Outlet Nozzle Loop 3 (7-31A) [1.4-3]	WIB-RC-3-1SE *3-29SPL	PT UT	360°	100%	
	Outlet Nozzle Loop 4 (7-30A) [1.4-4]	WIB-RC-4-1SE *4-29SPL	UT	360°	100%	
	Pressurizer					
	Pzr RV-8010A, Inlet (7-27) [1.4-21]	WIB-313SE S6-729-6SPI	PT UT	21"	360°	(Pzr = Pressurizer (Upper Head)

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Piping (S.E.) Welds (B-F)
TABLE: 1.4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
		NOTE: Stainless steel piping is welded directly to Nozzle but treated as "safe ends"		Exam area meets or exceeds req'ts of Fig. IWB-2500-8		
B5.50	Piping-Safe Ends-cont'd Steam Generator	Line No. & Flange No.				
	Steam Generator 1-1 Reactor Coolant Out (7-30) [1.4-1]	WIB-RC-1-5SE *1-29SPL	PT UT	92"	360°	Inlet
	Reactor Coolant Pp Suct Loop 1 (7-30) [1.4-1]	WIB-RC-1-6SE *5-31SPL	UT	98"	360°	Outlet

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Piping Bolting (B-G)
TABLE: 1.4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
B-G-2	Pressure Retaining Bolting (2 in. dia. & Less)					
B7.50	Bolts, Studs, and Nuts					
	2 Inch Diameter Pipe	Line No. & Flange No.				Flange Between Welds Number below
	Loop 1 Cold Leg RTD Conn (7-220) [1.4-60]	S6-1140-2SPL	VT-1	8 Studs 16 Nuts	100%	WIB-37/WIB-38
	1.5 Inch Diameter Pipe					
	Boron Inj Tk Out Loop 1 C.L.(9-212) [1.4-64]	S6-1991-1.5 1-FE-924	VT-1	4 Studs 8 Nuts	100%	

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Piping Welds (B-J)
TABLE: 1.4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd Pressure Retaining Welds in Piping				
B9.10	Nominal Pipe size 4 in. and Greater			Exam'n area meets or exceeds req'ts of Figure IWB-2500-8	
	B-J Items are identified by System Under Applicable Code Item*				
B9.11	Circumferential Welds (Including Intersecting Longitudinal Welds)				
B9.12	Longitudinal Welds				
	Longitudinal welds are scheduled together with the intersecting circumferential welds. See B9.11 items.				
		Line No. & ISI Dwg No.			
B9.12	31 Inch Nom. Diameter Reactor Coolant Pp Suct Loop 1 (7-30)	*5-31SPL [1.4-1]	UT	1 Weld 360°	WIB-RC-1-12 and one foot of upper and lower seam
	Reactor Coolant Pp Suct Loop 2 (7-31)	*6-31SPL [1.4-2]	PT & UT	1 Weld 360°	WIB-RC-2-14 and one foot of upper and lower seams

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	Piping - Cont'd				
B9.10 B9.11	4 In. & greater 27.5 inch Nom. Diameter	Line No. & ISI Dwg. No.			
	Reactor Coolant Pump Disch Loop 1 (7-30)	*9-27.5SPL [1.4-1]	PT & UT	1 Weld 360°	WIB-RC-1-13 T=2.215
	14 Inch Nom. Diameter				
	Hot Leg Recirc Before V-8702 (7-4)	S6-109-14SPL [1.4-6]	PT & UT	1 Weld 360°	WIB-238
	10 Inch Nom. Diameter				
	Accumulator Injection Loop 2 (9-21)	S6-254-10SPL [1.4-9]	PT & UT	1 Weld 360°	WIB-151
	Accumulator Injection Loop 4 (9-18)	S6-256-10SPL [1.4-11]	PT & UT	1 Weld 360°	WIB-276
	6 Inch Nom. Diameter				
	Safety Inj. Loop 1 Hot Leg (10-17)	S6-235-6SPL+ [1.4-13]	PT & UT	1 Weld 360°	WIB-1
	Safety Inj Loop 3 Hot Leg (9-33)	S-237-6 SPL+ [1.4-15]	PT & UT	1 Weld 360°	WIB-173
	RHR Pp 1-1 Inj Cold Leg 2(9-37,208)	S6-3845-6SPL [1.4-18]	PT & UT	1 Weld 360°	WIB-171
	RHR Pp 1-2 Inj Cold Leg 4 (9-42)	S6-3847-6SPL [1.4-20]	PT & UT	1 Weld 360°	WIB-280

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Piping Welds (B-J)
TABLE: 1.4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
B9.10 B9.11	Piping - Cont'd 6 Inch Nom. Diameter (Cont'd)	Line No. & ISI Dwg. No.				
	Pressurizer Inlet RV-8010B (7-28)	S6-728-6SPL+ [1.4-22]	PT & UT	1 Weld	360°	WIB-329
	Pressurizer Power R.V. (7-25)	S6-730-6SPL [1.4-24]	PT & UT	1 Weld	360°	WIB-347
	4 Inch Nom. Diameter					
	Loop 1 Spray Line (7-6,7,8).	S6-13-4SPL [1.4-25] [1.4-26] [1.4-27]	PT & UT	1 Weld	360°	WIB-64
	Loop 2 Spray Line (7-5,6)	S6-14-4SPL [1.4-25] [1.4-28]	PT & UT	1 Weld	360°	WIB-433
	Pressurizer Spray Line (7-9)	S6-15-4SPL [1.4-29]	PT & UT	1 Weld	360°	WIB-400
B9.20 B9.21	Less Than 4 In. Dia.			Exam'n area meets or exceeds req'ts Figure IWB-2500-8		
	3 Inch Nom Diameter					
	Loop 1 RTD Manifold Ret Hdr (7-23)	S6-1141-3SPL [1.4-30]	PT	1 Weld	360°	WIB-26
	Loop 3 Hot Leg RTD Conn (7-21)	S6-3495-3SPL [1.4-32]	PT	1 Weld	360°	WIB-205

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Piping Welds (B-F)
TABLE: 1.4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
B9.20	Piping - Cont'd					
B9.21	3 Inch Nom Diameter (Cont'd)	Line No. & ISI Dwg. No.				
	Loop 4 Hot Leg RTD Conn (7-22)	S6-3496-3SPL [1.4-33]	PT	1 Weld	360°	WIB-262
	Boron Inj Cold Leg Hdr (9-35)	S6-1016-3SPL	PT	1 Weld	360°	WIB-302
	Letdown Line Loop 2 (7-14,15)	S6-24-3SPL [1.4-37] [1.4-38]	PT	1 Weld	360°	WIB-118
	Pressurizer Pwr RV* PCV474 (7-25)	S6-1171-3SPL [1.4-24]	PT	1 Weld	360°	WIB-356
B9.30	Branch Pipe Connection Welds					
B9.31	Nominal Pipe Size Greater Than 2 in.					
	4 Inch Nom. Diameter					
	Loop 1 Spray Line (7-6,7,8) [1.4-1] [1.4-27]	S6-13-4SPL WIB-RC-1-15	PT UT	1 Branch	360°	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
	Piping - Cont'd					
B9.40	Socket Welds 2 Inch Nom. Diameter Letdown Line Loop 2 (7-14,15)	Line No. & ISI Dwg. No. S6-24-3SPL [1.4-38]	PT	1 Socket	360°	WIB-124 Reducing 3 Inch Line to 2 inch sockets for LCV-459 (Valve)
	Charging Line Aux Spray (8-350,354)	S6-51-2SPL [1.4-40]	PT	2 Sockets	360°	WIB-369 WIB-416
	Reac Cool Pp 1 Seal Wtr In (8-736)	S6-54-2 and S6-54-1.5 [1.4-42]	PT	1 Socket	360°	WIB-1020
	Reac Cool Pp 2 Seal Wtr In (8-713)	S6-55-2 and S6-55-1.5 [1.4-43]	PT	1 Socket	360°	WIB-981
	Reac Cool Pp 3 Seal Wtr In (8-376)	S6-56-2 and S6-56-1.5 [1.4-44]	PT	1 Socket	360°	WIB-991
	Reac Cool Pp 4 Seal Wtr In (8-741)	S6-57-2 and S6-57-1.5 [1.4-45]	PT	1 Socket	360°	WIB-1003
	Loop 1 Cold Leg Drain RCDT (7-218)	S6-958-2SPL+ [1.4-46]	PT	1 Socket	360°	WIB-22
	Loop 4 Cold Leg Drain RCDT (7-215)	S6-961-2SPL+ [1.4-49]	PT	1 Socket	360°	WIB-338
	SI Pps Cold Leg Loop 4 Recirc (9-216)	S6-3858-2SPL [1.4-55]	PT	1 Socket	360°	WIB-464

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT		EXAM RELIEF'S & REMARKS
B9.40	Piping - Cont'd Socket Welds 2 Inch Nom. Diameter	Line No. & ISI Dwg. No.				
	Loop 2 Hot Leg RTD Conn Hdr (7-224)	S6-1145-2SPL [1.4-57]	PT	1 Socket	360°	WIB-119
	Loop 4 Hot Leg RTD Conn Hdr (7-230)	S6-1157-2SPL [1.4-59]	PT	1 Socket	360°	WIB-317
	Loop 2 Cold Leg RTD Conn (7-222)	S6-1146-2SPL [1.4-61]	PT	1 Socket	360°	WIB-147
	Loop 4 Cold Leg RTD Conn (7-234)	S6-1159-2SPL [1.4-63]	PT	1 Socket	360°	WIB-364
	1.5 In. Nom. Diameter					
	Boron Inj Tk Out Loop 1 Cold Leg (9-212,240,231)	S6-1991-1.5SPL+ [1.4-64] [1.4-65]	PT	1 Socket	360°	WIB-64
	Boron Inj Tk Out Loop 2 Cold Leg (9-210,241,228)	S6-1992-1.5SPL+ [1.4-67] [1.4-68]	PT	3 Sockets	360°	WIB-217 WIB-220 WIB-225
	Boron Inj Tk Out Loop 3 Cold Leg (9-209,239)	S6-1993-1.5SPL+ [1.4-70] [1.4-71]	PT	2 Sockets	360°	WIB-306 WIB-309
	Boron Inj Tk Out Loop 4 Cold Leg (9-212,240)	S6-1994-1.5SPL [1.4-64] [1.4-65]	PT	2 Sockets	360°	WIB-112 WIB-109

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Pipe Supports (B-K-1)
TABLE: 1.4
PAGE 10 of 10

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
B-K-1	Supports Members				
B10.10	Piping - Integrally Welded Attachments				
	14 Inch Nom. Diameter	Line No. & ISI Dwg. No.			
	Loop 4 Hot Leg Before V-8701 (10-11)	S6-1665-14SPL [1.4-7]	PT	B-K-1	56N-5V/Param't
	3 Inch Nom. Diameter				
	Loop 1 Cold Leg RTD Conn (7-23)	S6-3798-3SPL [1.4-30]	PT	B-K-1	46-9V/X412A-D

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Pumps (B-G-1)
TABLE: 1.5
PAGE 1 of 1

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	PUMPS REACTOR COOLANT PUMPS	Dwg. REF. DC663207-34 *[1.5-1]		Exam'n area meets or exceeds req'ts of Fig.IWB-2500-12	[*] ISI Dwg. Page No.
B-G-1	Pressure Retaining Bolting Larger than 2" dia.				
B6.180	Bolts and Studs, In Place, Pump 1-2	Pump Flange Bolts No. 1 Thru No. 24	UT	8 Bolts 100%	
B-G-2	Pressure Retaining Bolting (2" Dia. and Less)	Seal House Bolting		Accessible Surfaces	
B7.60	Bolts, Studs, & Nuts Pump 1-2	Bolts No. 1 Thru No. 12 [1.5-1]	VT-1	4 Bolts 100%	
B7.60	Bolts, Studs, & Nuts Pump 1-3	Bolts No. 1 Thru No. 12 [1.5-1]	VT-1	4 Bolts 100%	
B-K-2	Support Components				
B11.20	Support Components Pump 1-1	Support Components	VT-3		B11.20 Items include all pump support members (support lugs, bolts, & column, lateral; support members)

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Valves (B-G-2)
TABLE: 1.6

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	Valves				
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less)				
B7.70	10 Inch Nom. Dia.	Line No. Valve No.(s)		Bonnet Bolting	Manufacturer & Style
	Accumulator Injection Loop 1 (9-16,17) [1.4-8]	S6-253-10SPL+ V-8956A	VT-1	16 Studs and Nuts 100%	Darling 10C48Z
	8-inch Nom. Dia.				
	SIS to RCS Loop 1 Hot Leg (10-16) [1.4-12]	S6-2575-8 V-8740A	VT-1	16 Studs and Nuts 100%	Darling 8C48Z
	6-inch Nom. Dia.				
	Safety Inj Loop 1 Hot Leg (10-17) [1.4-13]	S6-235-6SPL+ V-8949A	VT-1	12 Studs and Nuts 100%	Velan 6C58
	RHR Ppl-1 Inj Cold Leg 1 (9-16,17) [1.4-17]	S6-3844-6SPL+ V-8818A	VT-1	12 Studs and Nuts 100%	Velan 6C58

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	Valves - Cont'd				
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs, and Nuts				
B7.70	4-inch Nom. Dia.	Line No. Valve No.(s)		Bonnet Bolting	Manufacturer & Style
	Loop 1 Spray (7-6, 7-7, 7-8) [1.4-26]	S6-13-4SPL+ V-8033C	VT-1	12 Studs and Nuts 100%	Velan 4G58
	3-inch Nom. Dia.				
	Loop 1 Hot Leg RTD Conn. (7-23) [1.4-30]	S6-3488-3SPL+ V-8073A	VT-1	12 Studs and Nuts 100%	Velan 3G58
	Charging Line Loop (8-61) [1.4-34]	S6-246-3SPL+ V-8378B	VT-1	12 Studs and Nuts 100%	Velan 3C58
	Boron Inj Cold Leg Hdrs (9-35) [1.4-36]	S6-1016-3 V-8820	VT-1	12 Studs and Nuts 100%	Velan 3C58
	Letdown Line Loop 2 (7-14, 7-5) [1.4-37] [1.4-38]	S6-24-3SPL+ V-8076	VT-1	2 Studs and Nuts 100%	Velan 3T58

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1

MAJOR ITEM: Valves (B-G-2)
TABLE: 1.6

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	Valves - Cont'd				
B-G-2	Pressure Retaining Bolting (2-inch Dia. and Less) Bolts, Studs, and Nuts				
B7.70	2-inch Nom. Dia	Line No. Valve No.(s)		Bonnet Bolting	Manufacturer & Style
	Charging Line Aux Spray (8-350,354) [1.4-40]	S6-51-2SPL+ V-8145	VT-1	6 Studs 100% and Nuts	Copes-Vulcan 2IA58RE
	Loop 1 Cold Leg Drain RCDT (7-218) [1.4-46]	S6-958-2SPL+ V-8057A V-8058A	VT-1 VT-1	2 Bolts 100% 2 Bolts 100% and Nuts	(Rockwell) Edwards 2T58 Edwards 2T58
	Loop 1 Hot Leg RTD Conn Hdr (7-221) [1.4-56]	S6-1139-2SPL+ V-8063A V-8067A	VT-1 VT-1	2 Bolts 100% 2 Bolts 100% and Nuts	(Rockwell) Edwards 2T58 Edwards 2T58
	Loop 1 Cold Leg RTD Conn (7-220) [1.4-60]	S6-1140-2SPL V-8089A V-8088A V-8075A	VT-1 VT-1 VT-1	2 Bolts 100% 2 Bolts 100% 2 Bolts 100% and Nuts	(Rockwell) Edwards 2T58 Edwards 2T58 Edwards 2T58
	1.5-Inch Nom Diameter				
	Boron Inj Tk Out Loop 1 Cold Leg (9-212) (9-240) (9-231) [1.4-64]	S6-1991-1.5 V-8810A	VT-1	2 Bolts 100% and Nuts	(Rockwell) Edwards 1.5T58

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: Pressure Vessels
TABLE: 2.1

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	Steam Generators	*[2.1-1]			
C-A	Pressure Retaining Welds	Dwg. Ref. DC-663206-37			
C1.10	Welds Shell Circumferential				
	Steam Generator 1-1 (Serial No. 1041)	Girth W1-3 Loop 1	UT	Stub Barrel 20% (to) Lower Shell (7.2')	T=3.25"/2.82" C=36' (circ.) Relief No. 007
	Boron Injection Tank	Dwg. Ref. DC-663216-454 *[2.1-2]			
C-B	Pressure Retaining Nozzle Welds				
C2.20	Nozzles in Vessels > 1/2 In. Nominal Thickness [2.2-19]	Bottom Head to Nozzle Weld Weld #N-B	PT or MT UT		@ Line 1-2032
C-D	Pressure Retaining Bolting (Larger than 2" dia.)				
C4.10	Bolts, Studs and Nuts	Manway Bolting	UT	5 Studs 100%	
C-A	Regenerative Heat Exchangers Pressure Retaining Welds in Vessels				
		GIRTH WELDS			
C1.20	Shell No. 3 Head-To-Shell Welds	Girth Weld GA (9)	PT	Head (to) Shell As Access.	T=.756"/.900" 2.5' (circ.) Relief No. 006

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: Piping-Circum. Welds (C-F)
TABLE: 2.2 (C5.10)
PAGE 1 of 4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
C-F	PIPING Pressure Retaining Welds in Piping				Reliefs No. 005 and No. 008 apply to this Table in its entirety
C5.20 C5.21	Piping Welds >½"Wall Single Stream System	Butt Welds Category C-G			
	RC PPS Barrier CCW Ret Hdr (Penetration)	K17-1357.6 [2-2-36]	MT & UT	1 Weld 360°	WIC-1357A
C5.20 C5.21	Piping Welds >½" thick Multiple Stream Systems				
	Steam Gen Steam Outlet 1-1 (500136)	K15-228-28V [2.2-21] Lead 1	PT/MT & UT	1 Weld 360°	WICG-9-1
	RHR Pp Inj Cold Leg Pp 1-1 (9-38) (9-39) (9-40)	S6-508-8III [2.2-30] [2.2-31] [2.2-32]	PT & UT	1 Weld 360°	WIC-289

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: Piping-Circum. Welds (C-F)
TABLE: 2.2

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
C-F	PIPING _ Cont'd Pressure Retaining Welds In Piping			Exam'n area meets or exceeds req'ts of Fig. IWC2520-7	
C5.10	Piping Welds 1/2" or Less Nominal Wall Thickness				
C5.11	Circumferential Welds Single Stream Systems	Butt Welds			
	Loop 4 Hot Leg To RHR Pps (10-10) (10-11)	S1-927-14III [2.2-1] [2.2-2]	PT	1 Weld 360°	WIC-307
	RHR Injection To Hot Leg 1 & 2 (10-16) (10-15) (10-14) (10-19)	S1-985-12IIIP [2.2-4] [2.2-5] [2.2-6] [2.2-7]	PT	1 Weld 360°	WIC-99
	Cent Charg Pps Suct Header (8-20)	S2-1456-8 [2.2-8]	PT	1 Weld 360°	WIC-315
	RHR Exchs Bypass Cross-Tie (10-2)	S1-1663-8III [2.2-9]	PT	2 Welds 360°	WIC-160 WIC-164
	RHR Exchs Outlet Cross-Tie Hx 1-2 (10-19)	S1-1669-8 [2.2-7]	PT	1 Weld 360°	WIC-89

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	PIPING - Cont'd				
C-F	Pressure Retaining Welds In Piping (Cont'd)				
C5.10	Piping Welds ≤ ½" Thick				
C5.11	Circumferential Welds Multiple Stream Systems Category C-F	Butt Welds			
	Residual Ht Rem Ppl-1 Disch (10-2)	S1-112-8III [2.2-9]	PT	1 Weld 360°	WIC-156
C5.11	Single Streams Category C-G				
	RHR To SIS Ppl-2 (and) Cont Spr (10-5)	S1-735-8IIIP [2.2-16]	PT	1 Weld 360°	WIC-71
	X-Tie Chg Pp & SI Pp Suction (9-3)	S2-4296-6 [2.2-20]	PT	1 Weld 360°	WIC-378
	RHR Sup To Spray Hdrs 1 & 3 (9-2)	S1-279-8III [2.2-3]	PT	1 Weld 360°	WIC-22
AUG'T'D	Containment Spray Pump 1-1 Discharge Before V-9001 A	S2-264-8	UT*	1 Weld 360°	*Required by NRC letter of October 26, 1986 - 7.5% representative sample
C5.12	Longitudinal Welds <1/2" W.T. Single Stream Systems Category C-F	Long'l Welds			
	Residual Ht Rem Ppl-2 Suction (10-8)	S1-111-14III [2.2-12]	PT	2 Welds 100%	WIC-197.5A WIC-197.5B

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: Piping - Support (C-C)
TABLE: 2.2
PAGE 4 of 4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
C-C C3.40	Piping - Integrally Welded Support Attachments				
	(C-F) Single Stream (Cont'd)	Line No. & ISI Dwg. No			
	Cent Charg Pps Disch Hdr (8-1)	S6-1454-6 [2.2-10]	PT	C-C	4-49SL/X817A-H
	(C-G) Multiple Stream				
	Steam Gen Steam Outlet 1-1 (500136)	K15-228-28V [2.2-21] Lead 1	PT or MT	C-C	1020-1V/LUGS
	RHR Sup to Spray Hdrs 1 & 3 (09-2)	S1-279-8IIIP [2.2-3]	PT	C-C	57S-70V/Param't
	Safety Inj Pump Suction Pump 1-1 (09-5)	S2-1982-6 [2.2-18]	PT	C-C	98-14R/LUGS

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 2

MAJOR ITEM: Pump (SI Pumps)(Cent.Chg.)
TABLE: 2.3
PAGE 1 of 1

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	SI PUMPS				
C-E	Support Members				
C3.80	Support Components	Support Base			
	SI Pump 1-1	Base 1-1	VT-3	Exposed Areas	The SI pumps are resting on concrete foundations
C-C	Support Members				
C3.70	Integrally Welded Support Attachments (To Pressure Boundary)	Welded Attach't			
	Cent'l Pp 1-1	Weld C&D	PT or MT	2 Attach'ts 100%	
C-E	Support Members				
C3.80	Support Components	Support Base			
	Cent'l Pp 1-1	Base 1-1	VT-3	Exposed Areas	The Cent'l Chg. Pps Are Resting On Concrete Foundations

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS - CLASS 1, 2 AND 3

MAJOR ITEM: System Pressure Tests
TABLE: 5.1
PAGE 1 of 1

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	System Leakage Test				
B15.10 Through B15.70	CLASS 1 Pressure Retaining Boundary		VT-2	Boundary Openings and Closings	Normal Operating Pressure
	System Functional Test				
C7.10 Through C7.40	CLASS 2 Pressure Retaining Boundary		VT-2	Systems Not Required to Operate During Normal Plant Operations	Normal Operating Pressure Relief No's 001, 002, 005, 006, 007, 008, 009
IWD 5200	System Functional Test				
	CLASS 3 Pressure Retaining Boundary		VT-2	Systems Not Required to Operate During Normal Plant Operations	Normal Operating Pressure Relief No's 001, 002, 004
	System Inservice Test				
	CLASS 3 Pressure Retaining Boundary		VT-2	Systems Required to Operate During Normal Plant Operations	Normal Operating Pressure Relief No. 001

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
NRC AUGMENTED EXAMS (REG. GUIDE 1.14)

MAJOR ITEM: RCP Flywheels
TABLE: Augmented
PAGE 1 of 1

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	RCP Flywheels				
Reg. Guide 1.14	Reactor Coolant Pump 1-1	Flywheel	MT UT	Complete Exam of Entire Top Surface and Volume	
	Reactor Coolant Pump 1-2	Flywheel	UT	Keyway Area Exam	
	Reactor Coolant Pump 1-3	Flywheel	UT	Keyway Area Exam	
	Reactor Coolant Pump 1-4	Flywheel	UT	Keyway Area Exam	

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1 AND 2

MAJOR ITEM: Piping Supports
TABLE: 1.4 and 2.2 Supplemental
PAGE 1 of 1

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
	Pipe Supports				
B-K-2	Component Supports	All CLASS 1 Systems	VT 3/4	*Approx. one-sixth of B-K-2 Supports	
C-E	Component Supports	All CLASS 2 Systems	VT 3/4	*Approx. one-sixth of C-E Supports	
D-A, D-B D-C	Component Supports	All CLASS 3 Systems	VT 3/4	*Approx. one-half of D-A, D-B and D-C Supports	

* All Section XI Seismic Limiters receive examination each refueling outage, and are not included in totals used in the selection of remaining supports for inspection.

FIRST PERIOD SECOND REFUELING OUTAGE SUBMITTAL
ASME SECTION XI SYSTEMS-CLASS 1 AND 2

MAJOR ITEM: Relief Requests
TABLE: General
PAGE 1 of 1

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	EXAMINATION AMOUNT & EXTENT	EXAM RELIEF'S & REMARKS
Relief Requests					
Relief Requests 002, 003, 005, 007, 008, and 012 apply to examinations as listed in the tables. In addition, Relief Requests 002, 006, 009, and 010 apply as described below.					
B1.21	Closure Head Circumferential Weld	Weld No. 6-446B	UT	Weld is not accessible for examination	Relief No. 002
C1.10	Seal Injection Filter 1-1	Girth Weld W-A Shell to Flange	UT	Relief from examination due to limited access and excessive radiation levels	Relief No. 006
	Seal Injection Filter 1-2	Girth Weld W-B Head to Shell	UT		Relief No. 006
C4.30	Bolts, Studs & Nuts SI Pump 1-1 or SI Pump 1-2	Casing Bolts	UT	Scheduling dependent on maintenance schedule due to design	Relief No. 009
C6.10	Cent'l Pump 1-1 or Pump 1-2	Machined Weld Drive End of Pump Casing	PT	Scheduling dependent on maintenance schedule due to design	Relief No. 010