ATTACHMENT "B"

(c) Corrective Action: Valve malfunctions disclosed by any Class C test shall be corrected and reported in the subsequent Class A test report.

Leaks which exceed the acceptance criteria of (b) shall be repaired and retested until the criteria are met. Repairs of lesser leaks are optional.

(d) Test Frequency: At least two Class C tests at approximately equally spaced intervals shall be performed during the interval between any scheduled Class A test.

5.2.1.4 Permissible Periods for Testing: The performance of Class A tests shall be limited to periods when the plant facility is nonoperational and secured in the shutdown condition under administrative control and safety procedures.

5.2.1.5 Report of Test Results: Class A tests shall be the subject of a summary technical report, which includes a schematic arrangement of the leakage measurement system, the instrumentation employed, the test procedure, test results in graphical form, and the analysis and interpretation of results. Summaries of Class B and C tests performed during the interval preceding the scheduled Class A test are to be included in the same report.

5.2.2 The reactor building isolation system will be tested for proper operation prior to every cold startup, but this test will not be required more often than at 30-day intervals.

5.2.3 The exterior surfaces of the LACBWR ventilation stack and the smoke stack of the conventional steam power generating station, Genoa 3, adjacent to the LACBWR plant shall be inspected for structural integrity at an interval no longer than 5 years following the initial construction inspection, and at subsequent intervals not longer than 5 years apart.

5.2.4 The reactor vessel shall be hydrostatically tested at 1400 psig after any of its gasketed joints have been opened and resealed. All hydrostatic tests shall be performed with the vessel at a temperature no lower than that specified in Sec. 4.2.2.4.

5.2.5 The forced circulation system controls and automatically-operated valves shall be tested for proper operation annually.

5.2.6 The shutdown condenser system control valves shall be tested at least quarterly to demonstrate their operability. The integrated system shall be tested for proper operation annually. In addition, the condenser tube bundle shall be pressurized to greater than 1250 psig and tested for leakage annually.

5.2.7 The high-pressure core spray system controls and remotely-operated valves shall be tested during cold shutdowns, but not more often than every 3 months, to demonstrate their operability. The integrated system shall be tested for proper operation annually.

5.2.8 The Alternate Core Spray System controls and remotely-operated valves shall be tested during cold shutdowns, but not more often than every 3 months, to demonstrate their operability. The integrated system shall be tested for proper operation annually, with the supply line to the reactor vessel isolated and the coolant flow directed through the system and back to the river. In addition, an annual test shall be performed to demonstrate that the check valves in the system are not stuck in a closed position.

5.2.9 The boron-injection system controls and the remotely-operated valves shall be tested for proper operation during cold shutdowns, but not more often than every 3 months.

(Next number is 5.2.12)

5.2.12 Each control rod scram time shall be measured prior to cold start-ups and the total scram time shall be demonstrated to be within the limit specified in Sec. 4.2.5.1. These scram time tests will not be required more often that at 30-day intervals, but at least semi-annually, unless the reactor vessel head has been removed or unless maintenance work has been performed on the control rod drives.

5.2.13 Each control rod drive mechanism shall be exercised by moving each partially or fully withdrawn control rod at least one-half inch in any one direction:

a. At least once per 7 days during the initial 31 days of Cycle 5 operation, and

b. At least once per 31 days thereafter.

5.2.14 Proper operation of both control solenoids for each of the hydraulic scram valves will be determined annually by visual observation of solenoid arm position following control rod scram.

5.2.15 Instrumentation shall be checked, tested and calibrated as indicated in the following chart.

ATTACHMENT "C"

INSERVICE INSPECTION PROGRAM - LACBWR CLASS I COMPONENTS

ITEM NUMBER	EXAMINATION CATEGORY		COMPONENTS AND PARTS TO BE EXAMINED	METHOD	EXTENT AND FREQUENCY OF EXAMINATION	NOTES/REMARKS
REACTOR VESSEL AND CLOSURE HEAD						
B1.1	B-A	(1)	Longitudinal and circumferential shell welds.	Volumetric	100%/10 Yrs.	
			Meridional and circumferential head welds.		100%/10 Yrs.	Non Exist
			Vessel-to-flange and head-to-flange circumferential welds		100%/10 Yrs.	
B1.2	B-B	(1)				
B1.4	B-D	(1)	Primary nozzle-to-vessel welds and nozzle inside radiused section.	Volumetric	100%/10 Yrs.	
			a. Recirculation Outlet Nozzle No. 1			
			b. Recirculation Outlet Nozzle No. 2			
			c. Recirculation Outlet Nozzle No. 3			
			d. Recirculation Outlet Nozzle No. 4			
			e. Recirculation Inlet Nozzle No. 5			
			f. Recirculation Inlet Nozzle No. 6			
			g. Recirculation Inlet Nozzle No. 7			
			h. Recirculation Inlet Nozzle No. 8			

NOTE: (1) See relief request.

INSERVICE INSPECTION PROGRAM - LACBWR CLASS I COMPONENTS

ITEM NUMBER	EXAMINATION CATEGORY		COMPONENTS AND PARTS TO BE EXAMINED	METHOD	EXTENT AND FREQUENCY OF EXAMINATION	NOTES/REMARKS
REACTOR VESSEL AND CLOSURE HEAD - (Cont'd)						
			i. Steam Nozzle N at 14°			
			j. Steam Nozzle S at 194			
			k. Emergency Cooling Nozzle in Upper Shell at 315°			
			l. Emergency Cooling Nozzle in Upper Head Access Nozzle Flange			
			m. Upper Head Access Nozzle			
			n. Blow-Down Nozzle in Lower Head			
B1.5	B-E	(1)	Vessel penetrations, including control rod drive and instrumentation penetrations	Visual	25%/10 Yrs.	
			a. Control Rod Drive Penetrations			
			b. Experimental Access Penetration 45°			
			c. Experimental Access Penetration at 165°			
			d. Experimental Access Penetration at 285°			
			e. Upper Liquid Level Penetration			
			f. Intermediate Liquid Level Penetration			
			g. Lower Liquid Level Penetration			

INSERVICE INSPECTION PROGRAM - LACBWR CLASS I COMPONENTS

ITEM NUMBER	EXAMINATION CATEGORY		COMPONENTS AND PARTS TO BE EXAMINED	METHOD	EXTENT AND FREQUENCY OF EXAMINATION	NOTES/REMARKS
			h. Primary Purification Penetration in Lower Head			
B1.6	B-F		Nozzle-to-safe end welds	Volumetric & Surface	100%/10 Yrs.	
			a. Emergency Cooling Nozzle in Upper Shell-to-Safe End			
			b. Blow-Down Nozzle in Lower Head-to-Safe End			
B1.7	B-G-1		Nuts	Surface or Volumetric & Visual	100%/10 Yrs.	
B1.8	B-G-1		Studs	Volumetric & Surface	100%/10 Yrs.	
B1.9	B-G-1		Ligaments between threaded stud holes	Volumetric	100%/10 Yrs.	
B1.10	B-G-1		Closure washers, bushings	Visual	100%/10 Yrs.	None Exist
B1.11	B-G-2		Pressure-retaining bolting	Visual	100%/10 Yrs.	
			a. Upper Head Access Nozzle Flange Studs			
			b. Upper Head Access Nozzle Flange Nuts			
B1.12	B-H	(1)	Integrally welded vessel supports	Volumetric	100%/10 Yrs.	
B1.13	B-1-1		Closure head cladding	Visual & Surface	6 Patches/10 Yrs.	
B1.14	B-1-1	(1)	Vessel Cladding	Visual	Each Refueling	
B1.15	B-N-1		Vessel interior	Visual	Each Refueling	

INSERVICE INSPECTION PROGRAM - LACBWR CLASS I COMPONENTS

ITEM NUMBER	EXAMINATION CATEGORY	COMPONENTS AND PARTS TO BE EXAMINED	METHOD	EXTENT AND FREQUENCY OF EXAMINATION	NOTES/REMARKS
B1.16	B-N-2	Interior attachments and core support structures	Visual	100%/10 Yrs.	
B1.17	B-N-3	Core-support structures	Visual	NA	PWR's Only
B1.18	B-O	Control rod drive housings	Volumetric	100%/10 Yrs.	None Exist
B1.19	B-P	Exempted components	Visual (IWA-5000)	100%/10 Yrs.	
HEAT EXCHANGERS					
B3.1	B-B	Longitudinal and circumferential welds, including tube sheet-to-head or shell welds on the primary side. a. Decay Heat Channel Head-to-Tube Sheet Weld	Volumetric	5%/10 Yrs.	
B3.2	B-D	Nozzle-to-head welds and nozzle inside radiused section on the primary side a. Inlet Decay Heat Nozzle-to-Channel Head b. Outlet Decay Heat Nozzle-to-Channel Head	Volumetric	100%/10 Yrs.	
B3.3	B-F	Nozzle-to-safe end welds	Volumetric & Surface	100%/10 Yrs.	
B3.5	B-G-1	Pressure-retaining bolts and studs	Volumetric & Surface	100%/10 Yrs.	None Exist
B3.6	B-G-1	Pressure-retaining bolting	Visual	100%/10 Yrs.	None Exist

INSERVICE INSPECTION PROGRAM - LACBWR CLASS I COMPONENTS

ITEM NUMBER	EXAMINATION CATEGORY		COMPONENTS AND PARTS TO BE EXAMINED	METHOD	EXTENT & FREQUENCY OF EXAMINATION	NOTES/REMARKS
B3.7	B-H		Integrally welded vessel supports	Volumetric	100%/10 Yrs.	None Exist
B3.8	B-1-2		Vessel Cladding	Visual	1 Patch/10 Yrs.	
			a. Decay Heat Cooler			
B3.9	B-P		Exempted components	Visual	100%/10 Yrs.	
B3.10	B-G-2		Pressure-retaining bolting	Visual	100%/10 Yrs.	
			a. Decay Heat Cooler Head Studs, 56-03-001			
			b. Decay Heat Cooler Head Nuts, 56-03-001			
			c. Primary Purification Regnerative Cooler Head Studs			
			d. Primary Purification Regenerative Cooler Head Bolts			
B3.11	B-Q		Steam generator tubing	Volumetric	3%/10 Yrs.	None Exist
PIPING PRESSURE BOUNDARY						
B4.1	B-F	(1)	Safe-end to piping welds and safe-end in branch piping welds	Volumetric & Surface	100%/10 Yrs.	
			a. 2-Inch Purification Branch			
			b. 2-Inch Boss on Loop Isolation Valves			
			c. 8-Inch Decay Heat Suction			

INSERVICE INSPECTION PROGRAM - LACBWR CLASS I COMPONENTS

ITEM NUMBER	EXAMINATION CATEGORY		COMPONENTS AND PARTS TO BE EXAMINED	METHOD	EXTENT AND FREQUENCY OF EXAMINATION	NOTES/REMARKS
			d. 6-Inch Decay Heat Discharge			
			e. Decay Heat Cooler Inlet and Outlet			
			f. 8-Inch Steam Lines			
			g. 10-Inch Steam Lines			
			h. 6-Inch Alternate Core Spray Line			
			i. 4-Inch Alternate Core Spray Line			
			j. 2½-Inch Boron Inject Line			
B4.2	B-G-1		Pressure-retaining bolts and studs in place	Volumetric		None Exist
B4.3	B-G-1		Pressure-retaining bolts and studs when removed	Volumetric & Surface		None Exist
B4.4	B-G-1		Pressure-retaining bolting	Visual		None Exist
B4.5	B-J	(1)	Circumferential and longitudinal pipe welds	Volumetric	25%/10 Years	
B4.6	B-J		Branch pipe connection welds exceeding 6 inches in diameter	Volumetric	25%/10 Years	
B4.7	B-J		Branch pipe connection welds 6 inches in diameter and smaller	Surface	25%/10 Years	
B4.8	B-J		Socket welds	Surface	25%/10 Years	
B4.9	B-K-1	(1)	Integrally welded supports	Surface	25%/10 Years	

INSERVICE INSPECTION PROGRAM - LACBWR CLASS I COMPONENTS

ITEM NUMBER	EXAMINATION CATEGORY	COMPONENTS AND PARTS TO BE EXAMINED	METHOD	EXTENT AND FREQUENCY OF EXAMINATION	NOTES/REMARKS
B4.10	B-K-2	Support components	Visual	100%/10 Yrs.	
B4.11	B-P	Exempted components	Visual	100%/10 Yrs.	
B4.12	B-G-2	Pressure-retaining bolting	Visual	100%/10 Yrs.	
		A. Purification filter cover			
PUMP PRESSURE BOUNDARY					
B5.2	B-G-1	Pressure-retaining bolts and studs when removed	Volumetric & Surface	100%/10 Yrs.	
		A. Forced Circulation Pumps Casing			
B5.3	B-G-[illegible]	Pressure-retaining bolting	Visual	100%/10 Yrs.	
B5.4	B-K-1	Integrally welded supports	Volumetric	25%/10 Yrs.	None Exist
B5.5	B-K-2	Support components	Visual	100%/10 Yrs.	
B5.6	B-L-1	Pump casing welds	Volumetric	100%/10 Yrs.	None Exist
B5.7	B-L-2	Pump casings	Visual	100%/10 Yrs.	
B5.8	B-P	Exempted components	Visual	100%/10 Yrs.	
B5.9	B-G-2	Pressure-retaining bolting	Visual	100%/10 Yrs.	
		A. Forced Circulation Pump Seal Cover			

INSERVICE INSPECTION PROGRAM - LACBWR CLASS I COMPONENTS

ITEM NUMBER	EXAMINATION CATEGORY	COMPONENTS AND PARTS TO BE EXAMINED	METHOD	EXTENT AND FREQUENCY OF EXAMINATION	NOTES/REMARKS
VALVE PRESSURE BOUNDARY					
B6.2	B-G-1	Pressure-retraining bolts and studs when removed	Volumetric & Surface	100%/10 Yrs.	
		a. Forced Circulation Rotoport Upper Head			
B6.3	B-G-1	Pressure-retaining bolting	Visual	100%/10 Yrs.	None Exist
B6.4	B-K-1	Integrally welded supports	Volumetric	25%/10 Yrs.	None Exist
B6.5	B-K-2	Support components	Visual	100%/10 Yrs.	None Exist
B6.6	B-M-1	Valve-body welds	Volumetric	100%/10 Yrs.	None Exist
B6.7	B-M-2	Valve Bodies	Visual	As Applicable (1 of a type)	(2)
B6.8	B-P	Exempted components	Visual	100%/10 Yrs.	
B6.9	B-G-2	Pressure-retaining bolting	Visual	100%/10 Yrs.	
		a. Forced Circulation Rotoport Lower Head			
		b. Main Steam Relief valves in Mounting Flange			
		c. Decay Heat Pump Check Valve			
		d. Main Steam Rotoport Valve - Head			
		e. Feedwater Check Valve			

NOTES: (2) See Letter, Madgett to Keppler, LAC-2786, dated October 8, 1974.

RELIEF FOR CLASS I COMPONENTS REQUIRING ISI TO ASME XI

ITEM NO.	EXAMINATION CATEGORY TABLE IWB-2500	IDENTIFICATION OF WELD OR COMPONENT	INSPECTION REQUIRED BY IWB-2600	BASIS FOR REQUESTING RELIEF
		REACTOR VESSEL LONGITUDINAL WELDS AND CIRCUMFERENTIAL WELDS IN CORE REGION		
B1.1	B-A	LONGITUDINAL JOINT #12	VOLUMETRIC	A CONCRETE SHIELD WALL AROUND THE VESSEL IN THIS AREA PREVENTS ACCESS TO THE WELDS.
		CIRCUMFERENTIAL JOINT #13 LONGITUDINAL JOINT #14 CIRCUMFERENTIAL JOINT #15 LONGITUDINAL JOINT #16 CIRCUMFEPENTIAL JOINT #17 LONGITUDINAL JOINT #18		
		REACTOR VESSEL LONGITUDINAL AND CIRCUMFERENTIAL WELDS NOT IN THE CORE REGION		
B1.2	B-B	LONGITUDINAL JOINT #6	VOLUMETRIC	A CONCRETE BLOCK SHIELD WALL AROUND THE VESSEL IN THIS AREA PREVENTS ACCESS TO THE WELDS.
		CIRCUMFERENTIAL JOINT #7 LONGITUDINAL JOINT #8 CIRCUMFERENTIAL JOINT #9 LONGITUDINAL JOINT #10 CIRCUMFERENTIAL JOINT #11 CIRCUMFERENTIAL JOINT #19 LONGITUDINAL JOINT #20 CIRCUMFERENTIAL JOINT #21		

ITEM NO.	EXAMINATION CATEGORY TABLE IWB-2500	IDENTIFICATION OF WELD OR COMPONENT	INSPECTION REQUIRED BY IWB-2600	BASIS FOR REQUESTING RELIEF
		REACTOR VESSEL RECIRCULATION NOZZLES		
B1.4	B-D	OUTLET NOZZLES #1 AND INNER RADIUS OUTLET NOZZLE #2 AND INNER RADIUS INLET NOZZLE #5 AND INNER RADIUS INLET NOZZLE #6 AND INNER RADIUS	VOLUMETRIC	RADIATION LEVELS OF 1100 TO 1200 MR ON THE SURFACE WOULD CAUSE EXCESSIVE PERSONNEL EXPOSURES. THESE FOUR NOZZLES ARE SUBJECTED TO THE SAME THERMAL/HYDRAULIC CONDITIONS AS THE FOUR REACTOR VESSEL RECIRCULATION NOZZLES IN THE INSPECTION PROGRAM.
B1.4	B-D	BLOWDOWN NOZZLE IN LOWER HEAD AND INNER RADIUS	VOLUMETRIC	NO ACCESS DUE TO CRD NOZZLES. ALSO, THIS NOZZLE HAS BEEN CAPPED WHICH ELIMINATED THE DISSIMILAR METAL WELD.
B1.5	B-E	CONTROL ROD DRIVE PENETRATION TO REACTOR VESSEL	VISUAL (IWA-5000)	NO ACCESS BECAUSE THESE PARTIAL-PENETRATION WELDS ARE INSIDE THE REACTOR VESSEL.
B1.5	B-E	INTERMEDIATE LIQUID LEVEL PENETRATION TO REACTOR VESSEL	VISUAL (IWA-5000)	NO ACCESS BECAUSE THESE PARTIAL-PENETRATION WELDS ARE INSIDE THE REACTOR VESSEL.
B1.5	B-E	LOWER LIQUID LEVEL PENETRATION TO REACTOR VESSEL	VISUAL (IWA-5000)	NO ACCESS BECAUSE THESE PARTIAL-PENETRATION WELDS ARE INSIDE THE REACTOR VESSEL.
B1.5	B-E	PRIMARY PURIFICATION PENETRATION IN LOWER HEAD	VISUAL (IWA-5000)	NO ACCESS BECAUSE THESE PARTIAL-PENETRATION WELDS ARE INSIDE THE REACTOR VESSEL.
B4.5	B-J	INTERMEDIATE LIQUID LEVEL PENETRATION TO EXTENSION PIPE	VOLUMETRIC	NO ACCESS BECAUSE THE WELDS ARE INSIDE THE THERMAL SLEEVE WHICH PENETRATES THE BIOLOGICAL SHIELD WALL
B4.5	B-J	LOWER LIQUID LEVEL PENETRATION TO EXTENSION PIPE	VOLUMETRIC	NO ACCESS BECAUSE THE WELDS ARE INSIDE THE THERMAL SLEEVE WHICH PENETRATES THE BIOLOGICAL SHIELD WALL.

RELIEF FOR CLASS I COMPONENTS REQUIRING ISI TO ASME XI

ITEM NO.	EXAMINATION CATEGORY TABLE IWB-2500	IDENTIFICATION OF WELD OR COMPONENT	INSPECTION REQUIRED BY IWB-2600	BASIS FOR REQUESTING RELIEF
B4.5	B-E	PRIMARY PURIFICATION PENETRATION IN LOWER HEAD TO EXTENSION PIPE	VOLUMETRIC	NO ACCESS DUE TO REACTOR VESSEL SUPPORT RING.
B1.12	B-H	INTEGRALLY WELDED REACTOR VESSEL SUPPORTS	VOLUMETRIC	RELIEF REQUESTED TO USE ALTERNATE INSPECTION METHOD UTILIZING SURFACE NDE.
B1.14	B-I-1	REACTOR VESSEL CLADDING	VISUAL	NO ACCESS JUSTIFIED DUE TO HIGH RADIATION LEVELS.
		20" FORCED CIRCULATION SUCTION LOOP 1B		
B4.1	B-F	22 BC, 2" BRANCH CONNECTION	VOLUMETRIC	CONFIGURATION PRECLUDES VOLUMETRIC
		2" FORCED CIRCULATION BYPASS LOAD 1A		
B4.1	B-F	VALVE TO PIPE WELD #91A	VOLUMETRIC	CONFIGURATION PRECLUDES VOLUMETRIC
B4.1	B-F	PIPE TO VALVE WELD #90A	VOLUMETRIC	EXAMINATION. RELIEF REQUESTED TO DO SURFACE NDE INSPECTION.
		2" FORCED CIRCULATION BYPASS LOOP 1B		
B4.1	B-F	VALVE TO PIPE WELD #93A	VOLUMETRIC	CONFIGURATION PRECLUDES VOLUMETRIC
B4.1	B-F	PIPE TO VALVE WELD #92A	VOLUMETRIC	EXAMINATION. RELIEF REQUESTED TO DO SURFACE NDE INSPECTION.

RELIEF FOR CLASS I COMPONENTS REQUIRING ISI TO ASME XI

ITEM NO.	EXAMINATION CATEGORY TABLE IWB-2500	IDENTIFICATION OF WELD OR COMPONENT	INSPECTION REQUIRED BY IWB-2600	BASIS FOR REQUESTING RELIEF
		10" MAIN STEAM PIPING		
B4.5	B-J	PIPE TO PIPE, WELD #19 PIPE TO PIPE, WELD #20 PIPE TO PIPE, WELD #21 PIPE TO PIPE, WELD #22	VOLUMETRIC	NO PERSONNEL ACCESS IN THIS AREA DUE TO THE SAMLL INTERIOR OF THE PIPE CHASE CAVITY (2' SQUARE).
		MISCELLANEOUS PIPING COMPONENTS: MAIN STEAM AND SHUTDOWN CONDENSER PIPING SYSTEM HANGERS		
B4.9	B-K-1	INTEGRALLY WELDED ATTACHMENT #MS-102	VOLUMETRIC	ACCESS RESTRICTIONS DUE TO PIPE CHASE CAVITY AND RADIATION LEVELS OF 1100 TO 1500 MR/HR GENERAL AREA.
B4.9	B-K-1	REMAINING INTEGRALLY WELDED ATTACHMENTS	VOLUMETRIC	BECAUSE OF WELD CONFIGURATION, RELIEF IS REQUESTED TO USE ALTERNATE INSPECTION METHOD UTILIZING SURFACE NDE.
		FEEDWATER AND CONDENSER CONDENSATE PIPING SYSTEM HANGERS		
B4.9	B-K-1	INTEGRALLY WELDED ATTACHMENTS	VOLUMETRIC	
		ALTERNATE CORE SPRAY PIPING SYSTEM HANGERS		
B4.9	B-K-1	INTEGRALLY WELDED ATTACHMENTS	VOLUMETRIC	

RELIEF FOR CLASS I COMPONENTS REQUIRING ISI TO ASME XI

ITEM NO.	EXAMINATION CATEGORY TABLE IWB-2500	IDENTIFICATION OF WELD OR COMPONENT	INSPECTION REQUIRED BY IWB-2600	BASIS FOR REQUESTING RELIEF
		DECAY HEAT SUCTION AND DISCHARGE PIPING SYSTEM HANGERS		
B4.9	B-K-1	INTEGRALLY WELDED ATTACHMENTS	VOLUMETRIC	BECAUSE OF WELD CONFIGURATION, RELIEF IS REQUESTED TO USE ALTERNATE INSPECTION METHOD UTILIZING SURFACE NDE.
		FORCED CIRCULATION SUCTION AND DISCHARGE HEADER PIPING HANGERS		
B4.9	B-K-1	INTEGRALLY WELDED ATTACHMENTS	VOLUMETRIC	
		FORCED CIRCULATION SUCTION AND DISCHARGE AND PIPING SYSTEM HANGERS		
B4.9	B-K-1	INTEGRALLY WELDED ATTACHMENT	VOLUMETRIC	