

DCPP UNIT 1 ISI/IST PROGRAM PLAN
CHANGE DESCRIPTION
REVISION 7
ADDENDA 1

COPYHOLDERS:

Addenda 1 to Revision 7 of the DCP Unit 1 Inservice Inspection and Testing Program Plan is issued as a controlled document in accordance with PG&E procedure AP E-4S7. All changed pages should be removed from the Program Plan binder and replaced with Addenda 1 to Revision 7.

The following technical changes are incorporated in Addenda 1 to Revision 7 and are identified by revision bars.

INSERVICE INSPECTION (ISI)

<u>CHANGE</u>	<u>DESCRIPTION</u>	<u>JUSTIFICATION</u>
Pumps Table 1.5 Page 3 of 5	Include Item B10.20 In Its Entirety	Inadvertent Omission From Rev. 6 to Rev. 7
Section 3.5 Tables 5.1, 5.2, and 5.3 Page 1 of 1	Changed Rounded Years To Actual Fractions 3, 7, 10 Yrs to 3 1/3, 6 2/3, 10 Yrs	These Inspection Periods Are Inconsistent With The Other Specified Periods In The Program Plan
Test Summary Table 5.3 Page 2 of 4	Changed IWD-5223 Test(a) To Required Test(b). This Is An Atmospheric Tank	This Test Is Conducted With The Surge Tank Filled To Normal Level
Table 5.3 Page 3 of 4	Test #15: Sheet #33 and 36 instead of 25 and 33. Test #16: Sheets 24, 25, 33, and 34 instead of 24 25 and 34	Typographical Correction Of Sheets #'s.
Table 5.3 Page 4 of 4	Include Test 23 In Its Entirety	Inadvertent Omission From Rev. 6 to Rev. 7
Test Summary Table 5.4, Pages 2 Thru 9 of 9. Test Summary Table 5.2, Pages 9, 10, 11, 12, 13 of 13.	Clarify Basis, Alternate Testing and Test Schedule for Request For Relief #8. Revise Alternate Test Schedule For Request For Relief #9	NRC Request For Additional Information In Telephone Call

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PDR ADOCK 05000275
Q PDR



TEN YEAR EXAMINATION PROGRAM ASME SECTION XI SYSTEMS-CLASS 1		REV. 7 ADDENDA 1		MAJOR ITEM: <u>PUMPS (B-K-1)(B-K-2)</u> TABLE: <u>1.5</u> PAGE <u>3A</u> of <u>5</u>				
CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	<u>Pumps - Cont'd</u> Reactor Coolant Pumps							Exam'n Area meets or exceeds req'ts of IWB-2500-15 (Typical Design)
B-K-1	<u>Support Members</u>							
	Integrally Welded Attachments (To Pressure Bound.)							
B10.20	Welded Attachments Pump 1-2	WELDS #1, #2, #3 [1.5-1]	PT	3	1 Lug 100% 1 Lug 100% 1 Lug 100%	One Two Three	33 66 100	Welded attachment required on one pump. Category B-K-1 Footnote 1 Ref. B-J which specifies 1 loop.
B-K-2	<u>Support Components</u>							
B11.20	Support Components Pump 1-1	Support Components	VT-3	(¹)		One	25	(¹) B11.20 Items include all pump support members (support lugs, bolts, & column, lateral sup- port members)
	Support Components Pump 1-2		VT-3	(¹)		Two	50	
	Support Components Pump 1-3	Support Components	VT-3	(¹)		Three	75	
	Support Components Pump 1-4	Support Components	VT-3	(¹)		Three	100	



DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS

TABLE 5.1, 5.2, & 5.3
REV. 7

ADDENDA 1

SYSTEM PRESSURE
TEST SUMMARY FOOTNOTES
SECTION 3.5A
PAGE 1 OF 1

FOOTNOTES:

- (1) Identifies the drawing sheet number of the ASME Code classification drawings, PG&E drawing 102028, Revision 21.
- (2) Identifies the applicable ASME B&PV Code Section XI pressure test requirement, as established by the 1977 Edition - Summer 1978 Addenda.
- (3) INS/FUNCT is the test pressure developed under the operating condition associated with normal system operation or a system/component functional test.
LLRT is the local leak rate test per 10CFR50 App J.
- (4) I is one test per each inspection interval (10 YR)
P is one test per each inspection period (40 months; 3 1/3, 6 2/3, and 10 years)
R is one test per each refueling outage
- (5) P_0 is the nominal system operating pressure.

P_{sv} is the safety or relief valve setting pressure.

P_g is the design pressure of vapor or gas space above liquid level for which over pressure protection is provided by relief valves.

NOTE 1: Piping pressurized during normal reactor operation and does not require test per IWC-5221. Normal reactor operation includes systems in operation during startup, operation, and Cooldown to shutdown conditions. (IWC-1220 footnote [2])



DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 2

TABLE 5.2
REV. 7

ADDENDA 1

SYSTEM PRESSURE
TEST SUMMARY
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COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	CONTAINMENT PENETRATION	REMARKS (5)
(X) From footnote page 1 of 1						
64. REACTOR COOLANT PUMPS CCW SUPPLY & OIL COOLER RETURN CONTAINMENT PENETRATIONS, SPEC K2	29	IWC-5222 (a)	165	I		$P_{sv} = 150$
65. REACTOR COOLANT PUMPS CCW RETURN CONTAINMENT PENETRATION, LINE K17-1357-6	29	IWC-5222 (a)	3106	I		$P_{sv} = 2485;$
66. EXCESS LETDOWN HEAT EXCHANGER, SHELL SIDE	31	IWC-5222 (a)	165	I		$P_{sv} = 150$
67. EXCESS LETDOWN HEAT EXCHANGER, SHELL SIDE	31	IWC-5222 (a)	165	I		$P_{sv} = 150$
68. STEAM GEN. N ₂ SUPPLY HDR.	6	IWC-5221 (a)	INS/FUNCT	P	52	LINE 1863. TESTED AT NORMAL OPERATING PRESSURE.
69. LINES 4681, 4682, 4683, 4684, 4685, 4686	9	EXEMPT	NONE	NONE	59,80	NA-1130 (c). CAP SEALED.
70. PZR. QUENCH TK. GAS ANALYZER	10	IWC-5221 (a)	LLRT@50PSI*	P	76	LINE 1163, *REQUEST FOR RELIEF #8
71. PZR RELIEF TK N ₂ SUPPLY	10	IWC-5222 (a)	INS/FUNCT@NOP*	I	52	LINE 1161, *REQUEST FOR RELIEF #8



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COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No.(1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	CONTAINMENT PENETRATION	REMARKS (5)
72. PRI WTR SUP TO PZR RELIEF TK	10	IWC-5222 (a)	INS/FUNCT@NOP*	I	52	LINE 3000. *REQUEST FOR RELIEF #8
73. RV'S DISCHARGE TO P.R.T.: CHG. PPS. SUCT. RV DISCH RHR HT EXCHR. 1 OUT. RV RHR HT EXCHR 2 OUT RV S.I. PPS. SUCT. RV OUT. CNT. SPRAY. PPS. DISCH. RV OUT. P.R.T. S.I. PP. 1-2 DISCH. LINE RV SIS RV OUTLET HDR TO P.R.T. SIS RV OUTLET HDR TO P.R.T. SIS PP. 1-1 DISCH LINE RV SIS PPS. RECIRC. DISCH. LINE RV	10	IWC-5221 (a)	LLRT@50PSI*	P	71	*REQUEST FOR RELIEF #8 LINE 1459 LINE 2003 LINE 2004 LINE 2061 LINE 2518 LINE 2572 LINE 2998 LINE 2999 LINE 3851 LINE 3852
74. PZR DEADWEIGHT PRESS. GEN	10	NONE	NONE	NONE	76	LINE 478. ABANDONED IN PLACE
75. TANKS N ₂ SUPPLY HDR.	17	IWC-5222 (a)	INS/FUNCT@NOP*	I	51	LINE 531. *REQUEST FOR RELIEF #8.
76. ACCUMS. SAMPLES HDR.	22	IWC-5221 (a)	INS/FUNCT@NOP*	I*	59	LINE 1679. *REQUEST FOR RELIEF #8.
77. LINES 636, 2514, 2515, 637 4529, 4525	23	EXEMPT	NONE	NONE	76,59,78 52,80,59	NA-1130 (c). (NOTE PENETRATION RECEIVES LLRT)



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COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No.(1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	CONTAINMENT PENETRATION	REMARKS (5)
78. FUEL TRANS TUBE TO REFUEL CANAL	24,42	IWC-5221 (a)	(<50) R FOR R #9	P	64	LINE 1336. REQUEST FOR RELIEF #9 O-RING SEAL TEST @ FLANGE
79. AUX STEAM CONT PENETR	40	IWC-5221 (a)	LLRT@50PSI*	P	70	LINE 3935. *REQUEST FOR RELIEF #8
80. FIREWATER SUPPLY BEFORE CONT.	41	IWC-5222 (a)	INS/FUNCT@NOP*	I	79	LINE 986. *REQUEST FOR RELIEF #8
81. CONT. STR. SUMPS PPS. DISCH.	42	IWC-5221 (a)	LLRT@50PSI*	P	49	LINE 749. *REQUEST FOR RELIEF #8
82. REFUELING CANAL WATER INLET	42	IWC-5221 (a)	INS/FUNCT@NOP*	I*	46	LINE 3001. *REQUEST FOR RELIEF #8
83. REFUELING CANAL WATER RETURN	42	IWC-5221 (a)	LLRT@50PSI*	P	47	LINE 2993. *REQUEST FOR RELIEF #8
84. REACT. COOL. DRN. TK. N ₂ SUPPLY	42	IWC-5222 (a)	INS/FUNCT@NOP*	I	52	LINE 527. *REQUEST FOR RELIEF #8
85. POST LOCA SAMPLE & R & CAVITY SUMP	42	IWC-5221 (a)	LLRT@50PSI*	P	82	LINE 4663. *REQUEST FOR RELIEF #8.
86. REACT. COOL. DRN. TK. VENT	42	IWC-5222 (a)	LLRT@50PSI*	P*	51	LINE 525. *REQUEST FOR RELIEF #8
87. REACT. COOL. DRN. TK. GAS ANAL.	42	IWC-5221 (a)	LLRT@50PSI*	P	51	LINE 526. *REQUEST FOR RELIEF #8



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COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	CONTAINMENT PENETRATION	REMARKS (5)
88. REACT. COOL. DRN. PPS. DISCH. HDR.	42	IWC-5221 (a)	INS/FUNCT@NOP*	P	50	LINE 3729. *REQUEST FOR RELIEF #8
89. CHPS AIR SUP. FANS 1 & 2 DISCH. EXT. AND PENETR. 83 INLET & AIR SUP.	43	IWC-5221 (a)	LLRT@50PSI*	P	83	LINE 4382, 4386, 4387, 4388, 4389. *REQUEST FOR RELIEF #8
90. CHPS EXH AIR FILT. 2 INLET	43	IWC-5221 (a)	LLRT@50PSI*	P	81	LINE 4390. *REQUEST FOR RELIEF #8
91. CHPS EXH SYS. FLOW CONT. IN.	43	IWC-5221 (a)	LLRT@50PSI*	P	57	LINE 4395. *REQUEST FOR RELIEF #8
92. CONTAINMENT VACUUM RELIEF	43	IWC-5221 (a)	LLRT@50PSI*	P	63	LINE 647. *REQUEST FOR RELIEF #8
93. CONTAINMENT PURGE OUT	43	IWC-5221 (a)	LLRT@50PSI*	P	62	LINE K2-48" (RCV-11 TO RCV-12) *REQUEST FOR RELIEF #8
94. CONTAINMENT PURGE IN	43	IWC-5221 (a)	LLRT@50PSI*	P	61	LINE K2-48" (FCV-661 TO FCV-660) *REQUEST FOR RELIEF #8
95. INCORE CHILLER WATER RTN.	43	IWC-5221 (a)	LLRT@50PSI*	P	83	LINE 3936. *REQUEST FOR RELIEF #8
96. INCORE CHILLER WATER SUPPLY	43	IWC-5221 (a)	LLRT@50PSI*	P	82	LINE 3937. *REQUEST FOR RELIEF #8
97. CONTAINMENT AIR SAMPLE INLET	44	IWC-5222 (a)	LLRT@50PSI	P*	68	LINE 3837. *REQUEST FOR RELIEF #8



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COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	CONTAINMENT PENETRATION	REMARKS (5)
98. CONTAINMENT AIR SAMPLE RETURN	44	IWC-5222 (a)	LLRT@50PSI*	P*	69	LINE 3838. *REQUEST FOR I RELIEF #8
99. POST-LOCA SAMP. CNT. AIR. RTN.	44	IWC-5221 (a)	LLRT@50PSI*	P	82	LINE 5190. *REQUEST I FOR RELIEF #8
100. POST-LOCA SAMP. CNT. AIR. SUP.	44	IWC-5221 (a)	LLRT@50PSI*	P	82	LINE S-3/8" (FCV-698 I TO FCV-699) *REQUEST FOR RELIEF #8
101. HYD. MON. CEL. 82 CNT. AIR SUP.	44	IWC-5221 (a)	LLRT@50PSI*	P	52	LINE 4633. *REQUEST FOR I RELIEF #8
102. HYD. MON. CEL. 82 CNT. AIR RTN.	44	IWC-5221 (a)	LLRT@50PSI*	P	52	LINE 4634. *REQUEST FOR I RELIEF #8
103. HYD. MON. CEL. 83 CNT. AIR SUP.	44	IWC-5221 (a)	LLRT@50PSI*	P	78	LINE 4635. *REQUEST FOR I RELIEF #8
104. HYD. MON. CEL. 83 CNT. AIR RTN.	44	IWC-5221 (a)	LLRT@50PSI*	P	78	LINE 4636. *REQUEST FOR I RELIEF #8
105. SERVICE AIR PENETR. HDR.	45	IWC-5221 (a)	LLRT@50PSI*	P	56	LINE 3941. *REQUEST FOR I RELIEF #8
106. INSIDE CNT. INSTR. AIR SUP. HDR.	45	IWC-5222 (a)	INS/FUNCT@NOP*	I	54	LINE 3242. *REQUEST FOR I RELIEF #8
107. CNT. INST. AIR SUP. FCV-584 BP	45	IWC-5222 (a)	INS/FUNCT@NOP*	I	54	LINE 4353. *REQUEST FOR I RELIEF #8



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ASME SECTION XI SYSTEMS - CLASS 3

TABLE 5.3
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SYSTEM PRESSURE
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COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No.(1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	REMARKS (5)
					(X) From footnote page 1 of 1
7. COMPONENT COOLING WATER PUMPS	25	IWD-5223 (a)	165	I	$P_{sv} = 150$
		IWD-5221/5222	INS/FUNCT	P	
8. COMPONENT COOLING WATER HEAT EXCHANGERS (SHELL SIDE)	25	IWD-5223 (a)	165	I	$P_{sv} = 150$
		IWD-5221/5222	INS/FUNCT	P	
9. COMPONENT COOLING WATER SURGE TANK	25	IWD-5223 (b)	TANK FILLED	I	TEST CONDUCTED WITH SURGE TANK FILLED TO NORMAL LEVEL
		IWD-5221/5222	INS/FUNCT	P	
10. COMPONENT COOLING WATER SUCTION & DISCHARGE PIPING, HEADERS A, B & C, SUPPLY & RETURN PIPING FROM COM- PONENTS WITH THE EXCEPTION OF ITEM NUMBER 11	25,32	IWD-5223 (a)	165	I	$P_{sv} = 150$
		IWD-5221/5222	INS/FUNCT	P	
11. REACTOR COOLANT PUMP THERMAL BARRIER CCW RETURN & SUPPLY FROM CHECK VALVES, SPEC K17	29	IWD-5223 (a)	3106	I	$P_{sv} = 2485$
		IWD-5221/5222	INS/FUNCT	P	
12. CONDENSATE STORAGE TANK AND UNISOLABLE PIPING	33	IWD-5223 (b)	TANK FILLED	I	
		IWD-5221/5222	INS/FUNCT	P	



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COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
					(X) From footnote page 1 of 1
13. FIRE WATER TRANSFER TANK	33	IWD-5223 (b)	TANK FILLED	I	
		IWD-5221/5222	INS/FUNCT	P	
14. MAKEUP WATER TRANSFER PUMPS AND SUCTION PIPING	33,36	IWD-5223 (b)	TANK FILLED	I	REQUEST FOR RELIEF #1; NO SAFETY VALVE IN SYSTEM - TESTED AT NORMAL OPERATING CONDITIONS; CONDENSATE STORAGE TANK
		IWD-5221/5222	INS/FUNCT	P	
15. MU WATER TRANSFER PUMPS DISCHARGE PIPING	33,36	IWD-5223 (a)	INS/FUNCT	I	NO SAFETY VALVE IN SYSTEM - TESTED AT NORMAL OPERATING CONDITIONS
		IWD-5221/5222	INS/FUNCT	P	
16. CCW AND SPENT FUEL PIT SYSTEM PRIMARY WATER MAKEUP PIPING	24,25 33,34	IWD-5223 (a)	INS/FUNCT	I	NO SAFETY VALVE IN SYSTEM - TESTED AT NORMAL OPERATING CONDITIONS
		IWD-5221/5222	INS/FUNCT	P	
17. AUXILIARY SALTWATER PUMP SUPPLY TO CCW HEAT EXCHANGERS	35	IWD-5223 (a)	INS/FUNCT	I	REQUEST FOR RELIEF #4; TESTED AT MAX PUMP DISCH PRESSURE
		IWD-5221/5222	INS/FUNCT	P	REQUEST FOR RELIEF #4
18. COMPONENT COOLING WATER HEAT EXCHANGERS TUBE SIDE	35	IWD-5223 (a)	INS/FUNCT	I	TESTED AT MAX PUMP DISCH PRESSURE
		IWD-5221/5222	INS/FUNCT	P	
19. CCW HEAT EXCHANGERS SALTWATER OUTLET PIPING	35	IWD-5223 (c)	NONE REQ'D	-	OPEN-ENDED DISCHARGE TO OCEAN
		IWD-5221/5222	INS/FUNCT	P	REQUEST FOR RELIEF #4



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TABLE 5.3
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ADDENDA 1 SYSTEM PRESSURE
 TEST SUMMARY
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COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No.(1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	REMARKS (5)
					(X) From footnote page 1 of 1
20. DIESEL ENGINE JACKET WATER COOLING SYSTEM	37	IWD-5223 (a)	7.5	I	P _{sv} = 6
		IWD-5221/5222	INS/FUNCT	P	
21. SPENT FUEL POOL PUMPS AND SUCTION PIPING	24	IWD-5223 (a)	POOL FILLED	I	REQUEST FOR RELIEF #1; NO SAFETY VALVE IN SYSTEM - TESTED AT NORMAL OPERATING CONDITIONS; SPENT FUEL POOL
		IWD-5221/5222	INS/FUNCT	P	
22. SPENT FUEL POOL PUMPS DISCHARGE PIPING THROUGH SFP HEAT EXCHR. TO SPENT FUEL POOL	24	IWD-5223 (a)	INS/FUNCT	I	NO SAFETY VALVE IN SYSTEM - TESTED AT NORMAL OPERATING CONDITIONS.
		IWD-5221/5222	INS/FUNCT	P	
23. RAW WATER STORAGE RESERVOIR TO AUXILIARY FEEDWATER PUMPS SUCTION	3,36 37,38 39	IWD-5223(b)&(c)	INS/FUNCT	I	NO SAFETY VALVE IN SYSTEM - TESTED AT NORMAL OPERATING CONDITIONS. (RAW WATER STORAGE RESERVOIR)
		IWD-5221/5222	INS/FUNCT	P	



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REQUEST FOR RELIEF FROM CODE REQUIREMENTS
REV. 7

ADDENDA 1 SYSTEM PRESSURE
TABLE 5.4A TEST SUMMARY
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NO.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	SUM. ITEM NO.	BASIS FOR REQUESTING RELIEF	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
1	CENTRIFUGAL TYPE PUMPS - VARIOUS	2	19 24 53	PUMP MECHANICAL SEALS WILL NOT PERMIT HYDRO PRESSURES ABOVE SUCTION PIPING TEST PRESSURE.	ESTABLISH HYDRO BOUNDARY IN ACCORDANCE WITH 1980 ASME SECTION XI IWA-5224 (d).	TESTING TO BE SPECIFIED UNDER TEST FREQUENCY IN THE SUMMARY.
		3	4 14			
2	DELETED					
3	DELETED					
4	EMBEDDED AUXILIARY SALTWATER PIPING	3	17 19	THE MAJORITY OF ASW PIPING IS UNDERGROUND AND NOT ACCESSIBLE FOR INSPECTION AND/OR TESTING. PRESERVICE TESTING WAS NOT REQUIRED BY CONSTRUCTION CODE.	VISUAL LEAK TEST OF EXPOSED PORTIONS OF SYSTEM DURING SYSTEM PRESSURE TESTS AS SPECIFIED IN THE SUMMARY PERIODIC PUMP TESTING WILL VERIFY UNIMPAIRED FLOW THROUGH THE INACCESSIBLE PORTIONS OF THE SYSTEM.	EACH INSPECTION INTERVAL TESTING TO BE AS SPECIFIED IN THE PUMP INSERVICE TESTING PROGRAM.
5	CLASS 2 SAFETY INJECTION, RESIDUAL HEAT REMOVAL, RCP SEAL INJECTION, CHARGING AND BORON INJ PIPING	2	15 23 26 34 38 39 49 50 52	SOME OF THE PIPING IS NOT ISOLABLE FROM THE CLASS 1 PIPING.	THE UNISOLABLE PORTIONS WILL BE TESTED AT TEST PRESSURES DETERMINED BY THE CLASS 1 REQUIREMENTS.	TESTING TO BE AS SPECIFIED UNDER TEST FREQUENCY IN THE SUMMARY.



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REQUEST FOR RELIEF FROM CODE REQUIREMENTS
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ADDENDA 1
TABLE 5.4A

SYSTEM PRESSURE

TEST SUMMARY

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NO.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	SUM. ITEM NO.	BASIS FOR REQUESTING RELIEF	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
6.	RCP SEAL RETURN PIPING FROM 8141A,B,C,D, TO THE RCP SEALS	2	12	PIPING IS NOT ISOLABLE FROM THE RCP SEALS AND CANNOT BE INCLUDED IN THE HYDROSTATIC PRESSURE TEST BOUNDARY. THE PIPING IS PRESSURIZED DURING NORMAL REACTOR OPERATION AND ANY LEAKAGE WOULD BE DETECTED DURING OPERATION.	NONE	NONE
7.	RHR PUMP SUCTION FROM CONTAINMENT SUMPS	2	41	PIPING IS OPEN ENDED TO THE CONTAINMENT AND CAN NOT BE ISOLATED TO PERFORM PRESSURE TESTS.	NONE	NONE
8.	NON-SAFETY RELATED SYSTEMS CONTAINMENT PENETRATIONS EXCEPT REFUELING FUEL TRANSFER TUBE.	2	VARIOUS	SEE PAGES 3 THRU 9 OF OF THIS TABLE.		
9.	FUEL TRANSFER TUBE TO REFUEL CANAL	2	78	NON-SAFETY RELATED SYSTEM, AS ABOVE. LINE IS INACCESSIBLE, ENCASED IN CONCRETE.	TEST OF INTEGRITY OF O-RING SEAL AT FLANGE	EVERY 3 1/3 YEARS



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TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
REQUEST FOR RELIEF #8
REV. 7

ADDENDA 1 SYSTEM PRESSURE
TABLE 5.4A TEST SUMMARY
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A comparison of the requirements of visual examination VT-2 versus the requirements of 10 CFR APP. J local leak rate testing follows.

VISUAL EXAMINATION, VT-2

IWA-2212 Visual Examination General Requirements

- (a) The VT-2 visual examination shall be conducted to locate evidence of leakage from pressure retaining components, or abnormal leakage from components with or without leakage collection systems as required during the conduct of system pressure or functional test.
- (b) The VT-2 visual examination shall be conducted in accordance with IWA-5241 and IWA-5242 (see below).

NOTE: IWA-5241 and IWA-5242 clearly connotes liquid testing although a pneumatic test may be substituted by IWA-5211(e).

IWA-5241 Noninsulated Components

- (a) The visual examination, VT-2, shall be conducted by examining the accessible external exposed surfaces of pressure retaining components for evidence of leakage.
- (b) For components whose external surfaces are inaccessible for direct visual examination, VT-2, only the examination of surrounding area, including floor areas or equipment surfaces located underneath the components, for evidence of leakage shall be required.

IWA-5242 Insulated Components

- (a) The visual examination, VT-2, may be conducted without the removal of insulation by examining the accessible and exposed surfaces and joints of the insulation. Essentially vertical surfaces of insulation need only be examined at the lowest elevation where leakage may be detectable. Essentially horizontal surfaces of insulation shall be examined at each insulation joint.
- (b) For components whose external insulation surfaces are inaccessible for direct examination, only the examination of surrounding area, including floor areas or equipment surfaces located underneath the components, for evidence of leakage, or other areas to which such leakage may be channeled, shall be required.
- (c) Discoloration or residue on surfaces examined shall be given particular attention to detect evidence of boric acid accumulations from borated reactor coolant leakage.

NOTE: There is no requirement to remove insulation and a safety caution is invoked against removing insulation.



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TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
REQUEST FOR RELIEF #8
REV. 7

ADDENDA 1 SYSTEM PRESSURE
TABLE 5.4A TEST SUMMARY
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IOCFR50 APP. LOCAL LEAK RATE TESTING (TYPE C)

Type "C" test methods are similar to those described in ASME Section XI IWV-3424, except that the method, pressure, Acceptance Criteria, and schedule is specified and is in more detail.

IWV-3424 Seat Leakage Measurement

Valve seat leakage may be determined by one of the following:

- (a) Draining the line, closing the valve, bringing one side to test pressure, and measuring leakage through a downstream tell-tale connection, or
- (b) By measuring the feed rate required to maintain pressure between two valves or between two seats of a gate valve, provided the total apparent leak rate is charged to the valve or gate valve seat being tested, and that the conditions required by IWV-3423 (valve pressure test direction and exceptions) are satisfied.

DISCUSSION

LLRT is an instrumented test measuring leakage (ΔP) throughout the entire test boundary, including the penetration valves and the pipe segment inside the penetration itself. The VT-2 examination only checks the accessible outside surface of the pipe (or floors underneath) for evidence of leakage that is visually apparent.

NOTE: Although the ILRT examination demonstrates the collective integrity of the entire containment structure credit is not requested for these type "A" test which are performed at least three times each ten year interval.



DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
REQUEST FOR RELIEF #8
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ADDENDA 1 SYSTEM PRESSURE
TABLE 5.4A TEST SUMMARY
PAGE 5 of 9

JUSTIFICATION

The lines on pages 7 through 9 are classified as ASME code class 2 solely because they penetrate containment and constitute part of the containment pressure boundary. They have no other safety related function. These lines can be considered in three categories:

1. Those that operate at 50 psi or less (See Pages 7 and 8). The scheduled Appendix J local leak rate tests (LLRT) at 50 psi, which are conducted at least once every 3 1/3 years, fully demonstrate all aspects of the components safety related containment integrity function. PG&E requests to substitute the LLRT for the VT-2 examination in these cases. If excessive leakage is discovered during the LLRT additional testing will be performed as necessary to identify the location of the leakage. This testing may be visual examination following application of leak detection fluid (snoop), extension of the test boundary to eliminate boundary valve leakage, use of ultrasonic leak detection equipment to detect valve seat leakage or other means. Appropriate repairs in accordance with ASME Section XI requirements will be made, and the LLRT will be reperformed until successful test results are obtained.
2. Those that are not normally in service, but may see operating pressures greater than 50 psi (See Page 9) during the occasions they are in use. These lines would nominally be required to have a system functional test at normal operating pressure once each 3 1/3 years. The concern is that since these lines can see pressures greater than 50 psi, a leak may develop at this higher pressure which would subsequently degrade the containment integrity function. For lines 1679, 3001 and 3729, which also receive the Appendix J LLRT tests at least once every 3 1/3 years, PG&E believes that a VT-2 examination during a system functional test once each 10 years adequately demonstrates system integrity at the higher operating pressure, while maintaining the plant's ALARA goals. PG&E therefore requests that the time period of the system functional test for these lines be increased from 3 1/3 to 10 years. The remainder of lines in this category (3935, 749, 2993, 4663, 3941) should be tested with the Appendix J LLRT each 3 1/3 years. The specific reasons for which PG&E requests to substitute LLRT for periodic system functional tests follow:

Line 3935: This line is isolated during all operating modes, and has never been in operation. Any existing leaks would be identified by LLRT and the line's integrity would not be challenged by system pressure until the next test.

Line 749: This line is seldom operated, and when in service normally sees only 27 psi, although the design maximum is 63 psi. The LLRT at 50 psi guarantees line integrity at nearly double its normal pressure.

Line 2993: This line operates only in mode 6, and its normal pressure is only 7 psi, although the design maximum is 54 psi. The LLRT at 50 psi guarantees its integrity at over seven times its normal pressure.

Line 4663: This system normally operates at less than 50 psi, although the design maximum is 80 psi. Again the LLRT assures line integrity; and the code examination would be based on the lower normal operating pressure.



DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
REQUEST FOR RELIEF #8
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ADDENDA 1 SYSTEM PRESSURE
TABLE 5.4A TEST SUMMARY
PAGE 6 of 9

Line 3941: This line is not in service in modes 1-4 and has strict administrative controls for its use. Containment integrity is not applicable when operating in modes 5-6.

A pressure test using water could cause the following problems:

- 1.) Potential plant trip due to moisture in instrument air lines if any leaks by or does not get removed.
- 2.) Put water into the supply air to safety related equipment thereby damaging components.
- 3.) Get into the service air line and cause corrosion.

The LLRT is as effective for this system as the VT-2 examination, considering the limitations to VT-2 and normally isolated condition of the line.

3. Those that are normally in service at a pressure greater than 50 psi (See Page 9). These lines would nominally be required to have a hydrostatic test at 1.1 times the relief valve setpoint for that portion of the system, once each 10 years. Since all of the lines in this category are supply lines into containment, failure of these systems could result in;
 - a. leakage of the process fluid/gas into containment due to the greater system pressure than containment maximum pressure.
 - b. leakage of the process fluid outside containment, again due to the greater system pressure.

Neither of these conditions would result in containment leakage to the environment. Also, since the maximum pressure required for the safety related containment integrity function is less than 50 psi, the normal system pressure effectively constitutes a hydrostatic test for these lines. Furthermore, these lines again receive the Appendix J LLRT tests at least once each 3 1/3 years. PG&E therefore, requests that the system pressure requirement for these lines be reduced from 1.1 times the relief valve setpoint to the normal operating pressure of the system.

Additionally for line 531, a pneumatic hydrostatic test at 1100 psi (RV-290 setpoint is 1000 psi) would create the potential for serious injury to examination personnel. Since the line is continuously pressurized with 900 psi nitrogen, leakage would be continuously noticeable due to loss of inventory.



DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
MAXIMUM OPERATING PRESSURE $\leq 50\text{P}$
REQUEST FOR RELIEF #8
REV. 7

ADDENDA 1
TABLE 5.4A

SYSTEM PRESSURE
TEST SUMMARY
PAGE 7 of 9

TEST NO.	SYSTEM OR COMPONENT DESCRIPTION	LINE	SIZE	FLUID	NORM PRESS	MAX PRESS	OPERAT Y/N	CODE	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
								REQ SF/HYD ¹		
70	PZR QUENCH TK GAS ANALYZER	1163	3/P	N2	20	20	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	SI PP 1-2 DISCH LINE RV	2572	1	WTR	0	3	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	CNT SPRAY PPS DISCH RV OUT PRT	2518	1	WTR	0	9	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	CHG PPS SUCT RV DISCH	1459	1	WTR	0	15	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	SIS RV OUTLET HDR TO PRT	2999	4	WTR	3	15	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	SIS RV OUTLET HDR TO PRT	2998	4	WTR	3	15	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	SI PPS SUCT RV OUT	2061	1	WTR	0	14	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	RHR HT EXCHR 2 OUT RV	2004	3	WTR	0	37	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	RHR HT EXCHR 1 OUT RV	2003	3	WTR	0	42	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	SIS PP 1-1 DISCH LINE RV	3851	1	WTR	0	12	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
73	SIS PPS RECIRC DISCH LINE RV	3852	1	WTR	0	10	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
86	REACT COOL DRN TK VENT	525	3/4	GAS	1.5	25	Y	HYD	LLRT @ 50 PSI	EA. 3 1/3 YEARS
87	REACT COOL DRN TK GAS ANAL	526	1/2	AIR	1.5	25	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
89	CHPS AIR SUP FANS 1&2 DISCH. PENE 83 IN.	4382	4	AIR	3	20	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
89	CHPS AIR SUP FANS 1&2 DISCH. PENE 83 IN.	4386	4	AIR	3	20	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
89	CHPS AIR SUP FANS 1&2 DISCH. PENE 83 IN.	4388	4	AIR	3	20	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS

¹ SF = SYSTEM FUNCTIONAL @ NOP @ 3 1/3 YRS.

HYD = HYDRO @ 1.1 X PSV @ 10 YRS.



PG&E

DIABLO CANYON POWER PLANT-UNIT 1

DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMSREQUEST FOR RELIEF FROM CODE REQUIREMENTS
MAXIMUM OPERATING PRESSURE < 50#
REQUEST FOR RELIEF #8
REV. 7ADDENDA 1 SYSTEM PRESSURE
TABLE 5.4A TEST SUMMARY
PAGE 8 of 9

TEST NO.	SYSTEM OR COMPONENT DESCRIPTION	LINE	SIZE	FLUID	NORM PRESS	MAX PRESS	OPERAT Y/N	CODE	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
								REQ SF/HYD ¹		
89	CHPS AIR SUP FANS 1&2 DISCH. PENE 83 IN.	4389	4	AIR	3	20	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
89	CHPS AIR SUP FANS 1&2 DISCH. PENE 83 IN.	4387	4	AIR	3	20	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
90	CHPS EXH AIR FILT 2 INLET	4390	4	AIR	5	20	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
91	CHPS EXH AIR FILT 2 INLET	4395	4	H ₂	0	20	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
92	CONTAINMENT VACUUM RELIEF	647	12	AIR	0	18	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
93	CONTAINMENT PURGE OUT	K2	48	AIR	< 50	< 50	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
94	CONTAINMENT PURGE IN	K2	48	AIR	< 50	< 50	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
95	INCORE CHILLER WATER RTN	3936	2	WTR	25	25	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
96	INCORE CHILLER WATER SUPPLY	3937	2	WTR	25	25	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
97	CONTAINMENT AIR SAMPLE INLET	3837	1	AIR	3	14.7	Y	HYD	LLRT @ 50 PSI	EA. 3 1/3 YEARS
98	CONTAINMENT AIR SAMPLE RETURN	3838	1	AIR	0	20	Y	HYD	LLRT @ 50 PSI	EA. 3 1/3 YEARS
99	POST-LOCA SAMP CNT AIR RTN	5190	3/8	AIR	< 50	< 50	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
100	POST-LOCA SAMP CNT AIR SUP	S.38	3/8	AIR	< 50	< 50	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
101	HYD MON CEL 82 CNT AIR SUP	4633	3/8	AIR	< 50	< 50	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
102	HYD MON CEL 82 CNT AIR SUP	4634	3/8	AIR	< 50	< 50	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
103	HYD MON CEL 83 CNT AIR SUP	4635	3/8	AIR	< 50	< 50	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
104	HYD MON CEL 83 CNT AIR RTN	4636	3/8	AIR	< 50	< 50	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS

1 SF = SYSTEM FUNCTIONAL @ NOP @ 3 1/3 YRS.

HYD = HYDRO @ 1.1 X PSV @ 10 YRS.



DIABLO CANYON POWER PLANT - UNIT 1
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
MAXIMUM OPERATING PRESSURE > 50#
REQUEST FOR RELIEF #8
REV. 7

ADDENDA 1 SYSTEM PRESSURE
TABLE 5.4A TEST SUMMARY
PAGE 9 of 9

TEST NO.	SYSTEM OR COMPONENT DESCRIPTION	LINE	SIZE	FLUID	NORM PRESS	MAX PRESS (PSV)	OPERAT Y/N	CODE REQ SF/HYD ¹	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
71	PZR RELIEF TK N2 SUPPLY	1161	3/4	N2	108	150 (150)	Y	HYD	SF @ NOP	EA. 10 YEARS
72	PRI WTR SUP TO PZR RELIEF TK	3000	3	WTR	128	140 (N/A)*	Y	HYD	SF @ NOP	EA. 10 YEARS
75	ACCUM TANKS N2 SUPPLY HDR	531	1	N2	900	1000 (1000)	Y	HYD	SF @ NOP	EA. 10 YEARS
76	ACCUM SAMPLE HDR	1679	3/8	WTR	650	650	N	SF	SF @ NOP	EA. 10 YEARS
79	AUX STEAM CONT PENETRATION	3935	2	STM	105 ⁺	110 ⁺	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
80	FIREWATER SUPPLY BEFORE CONT	986	4	WTR	151	210 (N/A)*	Y	HYD	SF @ NOP	EA. 10 YEARS
81	CONT STR SUMP PPS DISCH	749	2	WTR	27	63	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
82	REFUELING CANAL WATER INLET	3001	4	WTR	70	130	N	SF	SF @ NOP	EA. 10 YEARS
83	REFUELING CANAL WATER RETURN	2993	4	WTR	7	54	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
84	REACT COOL DRN TK N2 SUPPLY	527	3/4	N2	108	165 (N/A)*	Y	HYD	SF @ NOP	EA. 10 YEARS
85	POST LOCA SAMPLE & R & CAVITY SUMP	4663	1/4	WTR	< 50	80	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
88	REACT COOL DRN PPS DISCH HDR	3729	2.5	WTR	80	145	N	SF	SF @ NOP	EA. 3 1/3 YEARS
105	SERVICE AIR PENE HDR	3941	3	AIR	100	130	N	SF	LLRT @ 50 PSI	EA. 3 1/3 YEARS
106	INSIDE CNT INSTR AIR SUP HDR	3242	2	AIR	100	110 (110)	Y	HYD	SF @ NOP	EA. 10 YEARS
107	CNT INST AIR SUP FCV-584 BP	4353	1.5	AIR	100	110 (110)	Y	HYD	SF @ NOP	EA. 10 YEARS

¹ SF = SYSTEM FUNCTIONAL @ NOP @ 3 1/3 YRS.
HYD = HYDRO @ 1.1 X PSV @ 10 YRS.

* NO RELIEF VALVE IN SYSTEM
TEST @ 1.1 X NOP

⁺ LINE HAS NEVER BEEN IN SERVICE



PACIFIC GAS AND ELECTRIC COMPANY
 Diablo Canyon Power Plant
 ISI/NDE Department
 420.9

Change to Diablo Canyon Unit 2
 Inspection and Testing
 Program Plan

Date: 9/7/89

Diablo Canyon Unit 2 ISI and IST Program Plan Receipt Acknowledgement
 M _____

You have been issued a Controlled Copy of the Diablo Canyon ISI and IST Program Plan. Here is Addenda 1 to Revision 7 of the plan. Please revise your controlled copy as follows:

CHANGE INSTRUCTIONS

Remove the following pages from the Program Plan binder and replace with Addenda 1.

Section 3.5 Tables 5.1, 5.2, and 5.3 Page 1 of 1
 Test Summary Table 5.2 Pages 9,10,11,12, 13 of 13
 Test Summary Table 5.3 Pages 2,3, and 4 of 4
 Test Summary Table 5.4 Replace in its entirety.

For questions or assistance please phone the Document Control office, PG&E extension 691-4500, Pacific Bell phone (805) 595-4500.

After revising your copy of the Program Plan in accordance with these instructions, place the attached change description in the front of the manual behind the controlled copy numbered titled page.

Please acknowledge receipt of this revision by signing below and returning this form to:

Pacific Gas & Electric Co.
 Nuclear Regulatory Affairs
 77 Beale/333 Market/A6093
 San Francisco, CA 94106

Date: _____ Receipt of Controlled Copy _____
 Addenda 1 to Revision # 4 of the Diablo Canyon Unit 2
 ISI and IST Program Plan is hereby acknowledged.

RECIPIENT SIGNATURE

