NRC FOF (7-77)	IM 366 U. S. NUCLEAR REGULATORY COMMISSION
•	
611	
CON'T	9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58
	REPORT L 6 0 5 0 - 0 2 1 3 7 0 1 2 6 8 3 8 0 3 2 9 8 3 9 SOURCE 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80
02	EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10) While performing Appendix J, Type B and C leak rate testing, the total maximum allow-
03	able leak rate of .6 La in Technical Specifications, Section 4.4., was exceeded.
04	The tests were performed between January 20, 1983 and March 12, 1983. Most of the
05	L leakage was attributed to penetrations 13, 23A, 38 and 60. See attached table for
06	summary. The plant was already in cold shutdown. There was no effect on the health
0 7	and safety of the public.
08	لــــــــــــــــــــــــــــــــــــ
09	CODE CODE SUBCODE COMPONENT CODE SUBCODE SUBCO
7 8	9 10 11 12 13 18 19 20 SEQUENTIAL OCCURRENCE REPORT REVISION LER/RO EVENT YEAR REPORT NO. CODE TYPE NO. 10 01 01 01 01 01 01 01 01 01 01 01 01 0
	ACTION FUTURE EFFECT SHUTDOWN ATTACHMENT NPRD-4 PRIME COMP. COMPONENT
	TAKEN ACTION ON PLANT METHOD HOURS (22) SUBMITTED FORM SUB. SUPPLIER MANUFACTURER $X = \begin{bmatrix} X \\ 33 \end{bmatrix} = \begin{bmatrix} X \\ 34 \end{bmatrix} = \begin{bmatrix} Z \\ 35 \end{bmatrix} = \begin{bmatrix} Z \\ 36 \end{bmatrix} = \begin{bmatrix} 0 \\ 37 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \end{bmatrix} = \begin{bmatrix} 0 \\ 40 \end{bmatrix} = \begin{bmatrix} Y \\ 41 \end{bmatrix} = \begin{bmatrix} 0 \\ 41 \end{bmatrix} = \begin{bmatrix} 0 \\ 42 \end{bmatrix} = \begin{bmatrix} X \\ 42 \end{bmatrix} = \begin{bmatrix} Z \\ 42 \end{bmatrix} = \begin{bmatrix} 2 \\ 42$
-	CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)
10	The cause of failure and corrective action taken is included in the attached
11	summary.
12	L
13	L
14 7 8	9 80
15	FACILITY STATUS % POWER OTHER STATUS 30 METHOD OF DISCOVERY DISCOVERY DESCRIPTION 32 H 28 0 0 0 29 N/A B 31 Routine Test/Inspection 32
	9 ACTIVITY CONTENT TELEASE AMOUNT OF ACTIVITY 35 L L N/A LOCATION OF RELEASE 36 LOCATION OF RELEASE 36
7 8	9 10 11 44 45 80 PERSONNEL EXPOSURES NUMBER _ TYPE DESCRIPTION (39)
1 7 8	9 11 12 13 PERSONNEL INJURIES 80
18	NUMBER 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
19	LOSS OF OR DAMAGE TO FACILITY (3) TYPE DESCRIPTION N/A
7 8	9 10 PUBLICITY (45) 80 ISSUED DESCRIPTION (45) NRC USE ONLY
20	
	NAME OF PREPARER M. E. Turner PHONE: (203) 267-2556

ATTACHMENT

REFUELING OUTAGE - 1983

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SUMMARY OF APPENDIX J: TYPE B AND C

LEAK RATE TEST RESULTS

PENETRATION		AS FOUND	CUNDITION	AFTER MAINTENANCE		
NUMBER	DESCRIPTION 1	bm air/24	hr @ 40 psig	1bm air/24 hr	. @ 40	psig
3	Safety Injection	3.9		NA		
4	Pressurizer Relief Tank Vent	.3		NA		
6	Hydrogen Sampling Lines			NA		
7	Reactor Coolant Pump Seal Water R	et .2		NA		
9	Hydrogen Sampling Lines	2		NA		
10	Reactor Coolant Letdown	.2		NA		
11	Liquid Sample Lines	3		2	(Note	1)
124	Valvo Stom Loakoffe	21		NΔ	(more	-,
128	Noutron Chield Tank Comple	2.1		NA		
120	Containmont Sump Pump Discharge	260	(Noto 20)	06	(Note	25)
1//79	Vapor Cool Hood Took Droin/	200	(NOLE 2a)	50	(Note	3)
14/70	Vapor Seal nead lank Drain/	15		•1	(NOLE	5)
15.16	Pressurizer Keller lank Drain	70.1		NA		
17,18	Steam Generator Blowdown	/3.1		NA		
20	Pressurizer Relief Tank Nitrogen Supply	1.2	(Note 4)	NA		
22	Space Heating Condensate Return	1.2		NA		
23A	Containment Leak Detection:					
	Open Bulb System	>.61	La	.3	(Note	5)
23B	Containment Leak Detection:					
	Closed Bulb System	.1		NA		
23C	Dead Weight Tester	.0		NA		
23D	Air Monitor Purge	.6		NA		
24	Safety Injection Recirculation	.4		NA		
28	Component Cooling Water to Reacto	r .6		NA		
20	Coolant Pump Oil Coolers					
29	Component Cooling Water From	1		NΔ		
	Reactor Coolant Pump Oil Coolers	••		1171		
30	Containment Space Heating Supply	1		NA		
30	Pofueling Cowity Purification	.1		IN/A NIA		
33	Component Cooling Water from Pere	tor 0		IVA NA		
34	Conforment Cooling water from Reac	101 .9		INA		
20	Coolant Pump Inermal Bartler			0	(Naka	0
30	Component Cooling water to Reacto	r >.0.	La	0	(Note	0)
	Coolant Pump Inermal Barrier					
39	Containment Purge Air: Exhaust	0		NA		
40	Containment Purge Air: Supply	0		NA		
41	Loop Drain Header	1.7		3.0	(Note	7)
50	Fuel Transfer Tube	0		NA		
60	Component Cooling Water to Neutro Shield Tank Cooler	n >.6	La	0	(Note	8)
61	Component Cooling Water from Neut Shield Tank Cooler	ron 0		NA		
62	Service Air to Containment	0		NA		
63	Neutron Shield Tank Fill Line	0		NA		

PENETRATION NUMBER DESCRIPTION		AS FOUND CONDITION 1bm air/24 hr @ 40 psig		AFTER MAINTENANCE 1bm air/24 hr @ 40 psig	
64	Air Monitor Sample from Cont.	11.7		NA	
65	Air Monitor Sample to Cont.	0		NA	
66	Component Cooling Water to Drain Cooler	0		NA	
67	Component Cooling Water from Drai Cooler	in .1		NA	
68	Primary Water to Containment	0			
69	Loop Fill	1.5		NA	
70	Instrument Air Supply to Cont.	.1		NA	
71	Primary Vent Header	1.6	(Note 4)	NA	
80	Auxiliary Containment Spray From Fire System	0		NA	
81	Steam Generator Auxiliary Feedwat Supply	er .8		NA	
Α	Personnel Hatch	.2		NA	
В	Electrical	14.7		NA	
С	Equipment Hatch	4.6		NA	
D	Dome Vent Flange (Top)	.1		NA	
E	Dome Vent Flange (Side)	.1		NA	

SUMMARY

Total Leak Rate - As Found: >.6La

Total Leak Rate - After Maintenance: 220.1 1bm of air/day @ 40 psig

-2-

ATTACHMENT

NOTES

- Note 1: Maintenance repacked the Pressurizer Steam Space Sample and Pressurizer Liquid Space Sample Trip Valves. Subsequent retest of valve leak rate was acceptable.
- Note 2a: Reverse direction tested in accordance with relief in Technical Specifications, Amendment 49.
 - <u>2b</u>. It was subsequently determined that both valves were testable in the accident direction. The results of this test was a leak rate of 96 Lbm of air/day @ 40 psig. This leak rate is acceptable.
- <u>Note 3</u>: Procedure leak rate limit exceeded. The isolation valves were disassembled and inspected. The valve seats and disks were found to be in good shape. Further investigation revealed a hole in the internal body of the redundant isolation valve. This valve is a 2 inch Masonielan Globe Valve, Model 38-20721. The valve was replaced. The retest of the penetration was acceptable.
- Note 4: New valves installed during the test period. The as found condition is not applicable.
- <u>Note 5</u>: While performing penetration leak rate testing, these valves could not reach test pressure. The isolation valves are two, ¹/₂ inch solenoid operated trip valves. The evaluation concluded that dirt and scale prevented full closure. The valve internals were cleaned. The retest was satisfactory.
- Note 6: The isolation valve is a 3 inch lift check valve. Dirt was cleaned from the valve internals. The retest was satisfactory. The evaluation concluded that dirt and scale prevented full closure of the valve (See Note 9).
- Note 7: Retest was conducted after the body to bonnet gasket was replaced. No leak rate limits were exceeded.
- Note 8: This penetration is tested by the liquid collection method. Gross leakage was indicated past the valve. The isolation valve is a 1½ inch angle check valve with spring assist. Dirt was cleaned from the valve internals. The retest was satisfactory. The evaluation concluded that dirt prevented valve closure (see Note 9).
- <u>Note 9</u>: It is felt that the presence of foreign particles in the componnet cooling system contributed to the failure of the valves in Penetrations 60 and 38. Post chemistry sampling indicated that the concentration of solids was on the order of 30 ppm. A filter system is being installed in the component cooling water system to reduce the amount of foreign particles in that system.