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Dresden Nuclear Power Station
R.R. #1
Morris, Illinois 60450
August 14, 1975

Mr. James G. Keppler
Regional Director
Directorate of Regulatory Operation-Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

SUBJECT: REPORT OF ABNORMAL OCCURRENCES PER SECTION 6.6.A OF THE TECHNICAL SPECIFICATIONS
UNIT-3 PRIMARY CONTAINMENT LOCAL LEAK-RATE TESTING (1975 REFUELING OUTAGE)

References: 1) Regulatory Guide 1.16 Rev. 1 Appendix A
2) Notification of Region III of U.S. Nuclear Regulatory Commission: See Table 1.
3) Drawing Numbers: See Table 1.

Report Number: See Table 1

Report Date: August 14, 1975

Occurrence Date: See Table 1

Facility: Dresden Nuclear Power Station, Morris, Illinois 60450

INTRODUCTION

During the recent refueling outage of Dresden Unit-3, the primary containment was checked for leakage by performing local leak-rate tests on the main steam isolation valves, primary containment isolation valves, double-gasketed seals, electrical penetrations, and bellow seals. A list of all tests performed and their results are given in tables 4-8. The total leakage from the drywell through testable penetrations and isolation valves was 2129.64 SCFH (100.163 SCFH excluding the feedwater check valves) for the "as found" condition. The initial leakage through the double-gasketed seals was 88.42 SCFH. The through-leakage is determined by dividing the total leak rate by two unless the leakage through individual valves or seals is known. In that case the through-leakage is considered equivalent to the minimum valve or seal leakage since they are in series. As of the date of this report, the through-leakage is 81.0 SCFH from the testable penetrations and isolation valves, and 9.71 SCFH from the double-gasketed seals. These values may change since several tests must still be completed on various double-gasketed seals and isolation valves prior to unit start-up.

Seven tests yielded leakages in excess of the Technical Specification limits. These tests are discussed in the ensuing report with the exception of the drywell bellows test line break (previously reported on April 25, 1975 in report no. 50-249/75-19).

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IDENTIFICATION OF OCCURRENCES

While performing local leak-rate tests for Unit-3 during its recent refueling outage, seven tests exhibited leakages above the maximum allowable limits. These represent abnormal degradations of primary containment integrity. The test results are given in Table 2.

CONDITIONS PRIOR TO OCCURRENCES

Unit-3 was in the 1975 refueling outage at the time of each occurrence.

DESCRIPTION OF OCCURRENCES

All of the leak rates were determined by using the pressure-decay method at 48 psig.

Report Nos. 50-249/75-20 and -21

At approximately 1500 hours on April 22, 1975, feedwater check valves 220-58A and 220-62A on the "A" line were leak-rate tested by pressurizing the section of pipe between manual valve 220-57A and the check valve. Since a waterhead was present on the reactor side of the 220-57A valve, it was assumed that all leakage was through the check valve. This assumption was verified by means of vent lines located upstream of each valve. The tests revealed a leakage through the 220-58A and 220-62A check valves of 103.5 and 323.4 SCFH respectively.

Report No. 50-249/75-22

At 1600 hours on April 22, 1975, the vent line for the drywell and torus on the pressure suppression system was tested for leakage by pressurizing the section of pipe between primary isolation valves AO 3-1601-23, -24, -60, -61, -62, and -63. A leakage of 34.75 SCFH was found.

Report No. 50-249/75-23

At 1000 hours on April 25, 1975, the torus-to-drywell vacuum breaker 3-1601-32B was leak-rate tested. The vacuum breakers have a double-gasketed type seal. The leak test simultaneously checks:

1. One (1) cover flange.
2. Two (2) shaft seals.
3. Two (2) shaft seal flanges.

A leakage of 113.6 SCFH was found.

Report No. 50-249/75-29

At 1600 hours on May 29, 1975, feedwater check valves 220-58B and 220-62B on the "B" feedwater line were leak-rate tested. The tests were identical to those performed on the "A" feedwater check valves. The tests revealed a leak rate through check valves 220-58B and -62B of 1926 and 9273 SCFH respectively.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE (Design and Component Failure)

Report Nos. 50-249/75-20, -21, and -29

The failure of four feedwater check valves can be traced to the same problem. They were found leaking between the valve seat and valve body; the "O" ring used between the seat and body no longer gave a good seal. This "O" ring fits

TABLE I

Report Number	Region III Telephone	Notification Telegram	Drawing Number	Occurrence Date	Report Date
50-249/75-19	Mr. P. Johnson 4-17-75 1445h	Mr. J. Keppler 4-17-75 1545h	M-95	4-16-75	4-25-75
50-249/75-20	Mr. H. Dance 4-23-75 1500h	Mr. J. Keppler 4-23-75 1540h	M-347	4-22-75	8-14-75
50-249/75-21	Mr. H. Dance 4-23-75 1500h	Mr. J. Keppler 4-23-75 1540h	M-347	4-22-75	8-14-75
50-249/75-22	Mr. H. Dance 4-23-75 1500h	Mr. J. Keppler 4-23-75 1540h	M-356	4-22-75	8-14-75
50-249/75-23	Mr. Tambling 4-25-75 1550h	Mr. J. Keppler 4-25-75 1600h	M-356	4-25-75	8-14-75
50-249/75-29	Mr. P. Johnson 5-30-75 1445h	Mr. J. Keppler 6-2-75 0955h	M-347	5-29-75	8-14-75

into a groove cut in the valve seat. When the seat is bolted to the body, the "O" ring is compressed to form a seal. If the check valve closes during a reactor scram precipitated by the shutdown of the reactor feed pumps, a pressure differential of almost 1000 psi will exist across the valve. This pressure will tend to compress the "O" ring further. However, when this pressure differential has been removed, the valve seat will return to its original position while the "O" ring remains in its compressed state. Subsequently, a gap will appear between the valve body and the "O" ring. Apparently the "O" ring is relatively inelastic, "rebounding" only part of the distance it is compressed.

Report No. 50-249/75-22

Valves AO-3-1601-23 & -61 leaked through the valve shaft packing, apparently caused by settling of the packing.

Report No. 50-249/75-23

About 97% of the leakage was through the right shaft seal of drywell-to-torus vacuum breaker 3-1601-32B. The apparent cause of the failure was a failed packing and a flange "O" ring band on the right-hand side.

ANALYSIS OF OCCURRENCE

None of the leak-rate test failures jeopardized the health and safety of plant personnel or the public. Any leakage past the feedwater check valves would have been contained within the feedwater piping. The secondary containment, including the standby gas treatment system, was available to contain any leakage into the reactor building atmosphere.

Report Nos. 50-249/75-20, -21 and -29.

Although the feedwater check valves had large leak rates at 48 psig, they were still functional and would have sealed under a high differential pressure. In the event of an accident such as a pipe break, a high differential pressure would exist across the valve, forcing the valve seat to seal against the valve body.

Report Nos. 50-249/75-22 and -23

The leakages through the valve shaft of valve 3-1601-23 and the right shaft seal of vacuum breaker 3-1601-32B were contained within the secondary containment structure. Their combined leakage was below 150 SCFH, well within the capability of the standby gas treatment system.

CORRECTIVE ACTION

The failed valves and the vacuum breaker were repaired. The leak-rate tests performed after repairs had been completed showed the leakages to be well within Technical Specification limits. Table 3 gives the leakages before and after repairs:

TABLE 2

LEAK-RATE TESTS EXHIBITING EXCESSIVE LEAKAGES

Report	Penetration	Volume Tested	Test Type	System Affected	Leakage Found SCFH@48psig	Max Leakage Allowable SCFH@48psig
50-249/75-19	X-105D	Bellows Seal	Bellows Seal	Main Steam	380	29.381
50-249/75-20	X-107A	Pipe Between valves 3-220-57A & 3-220-58A	Primary Isolation Valve	Feedwater	103.5	29.381
50-249/75-21	X-107A	Pipe Between valves 3-220-57A & 3-220-62A	Primary Isolation Valve	Feedwater	323.4	29.381
50-249/75-22	X-125 and X-318	Pipe Between Valves 3-1601-23, -24, -60, -61, & -63	Primary Isolation Valve	Pressure Suppression	34.8	29.381
50-249/75-23	X-301F	Valve Flanges on 3-1601-32B	Double-Gasketed Seals	Pressure Suppression	113.6	58.763
50-249/75-29	X-107B	Pipe Between Valves 3-220-57B & 3-220-58B	Primary Isolation Valve	Feedwater	1926	29.381
	X-107B	Pipe Between Valves 3-220-57B & 3-220-62B	Primary Isolation Valve	Feedwater	9273	29.381

Table 3

Valves or Seals Tested	Initial Leakage (SCFH)	Leakage After Repairs (SCFH)
Bellows Seal X-105 D	264.5	0.0
Feedwater check valve 3-200-58A	103.5	1.54
Feedwater check valve 3-220-62A	323.4	1.04
Feedwater check valve 3-220-58B	1926	3.40
Feedwater check valve 3-220-62B	9273	0.997
Pressure Suppression valves 3-1601-23, -24, -60, -61, -62, and -63	34.75	23.72
Torus Vacuum Breaker 3-1601-32B	113.6	0.0

Report Nos. 50-249/75-20, -21, and -29

The check valves were cleaned and new "O" rings and upper seal rings were installed. To prevent a recurrence of this nature, the valve seat groove which receives the "O" ring was remachined from a depth of 0.165 inches to 0.190 inches. Deepening the groove allows metal-to-metal contact between the valve seat and body. After the valve seat has been installed in the valve body, the metal-to-metal contact will prevent any further compression of the "O" ring, allowing the seal to remain intact even after the valve has experienced a high differential pressure.

Report No. 50-249/75-22

The valves' packing bolts were tightened, significantly decreasing the leakage.

Report No. 50-249/75-23

The stuffing box and flange "O" ring band on the right-hand side of the vacuum breaker were replaced.

FAILURE DATA

Report Nos. 50-249/75-20, -21, and -29

Feedwater check valve leakage has been a recurring problem for both units 2 and 3. All four check valves have leaked excessively each time Unit-3 has entered a refueling outage. During the unit's first outage in the spring of 1973, the feedwater check valves leaked past the metal seal ring between the valve seat and body. The metal seal ring was then replaced by a "silastic" silicone rubber. When the feedwater check valves failed leak-rate testing during the 1974 refueling outage, the silicone rubber "O" rings (which had dissociated) were replaced with the carbon-flouride compound rings presently in use. Unit-2 has had similar "O" ring problems.

Report No. 5-0249/75-23

This is the first time any seal or flange failures have occurred on torus-to-drywell vacuum breakers for unit-3. Unit-2 vacuum breakers did not experience any flange failures until November 1974. There were five failures attributed to packing leaks at that time.

Report No. 50-249/75-22

Only two previous failures have occurred on the torus vent line for units 2 and 3. In November, 1974, butterfly valves 3-1601-23 and 3-1601-24 experienced leakage across the valve seat, apparently resulting from improper assembly of the valve operator.

Butterfly valve failures have mainly occurred on drywell and torus inerting and purge lines.

Sincerely,

B.B. Stephenson
Superintendent

RBS:ELS:jea

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TABLE 4

LOCAL LEAK RATE TESTS PERFORMED DURING THE UNIT 3 REFUELING OUTAGE OF 1975

TYPE OF PENETRATION: Main Steam Isolation Valves

TEST NUMBER	PENETRATION NUMBER	Piping Between Valves VOLUME BEING TESTED	INITIAL LEAK RATE SCFH	INITIAL THRU LEAKAGE SCFH	FINAL LEAK RATE SCFH	FINAL THRU LEAKAGE SCFH
	X-105A	203-1A* & 203-2A	0	0		
	"	203-1A & 203-2A	0	-		
	X-105B	203-1B* & 203-2B	0	0		
	"	203-1B & 203-2B	2.694	-		
	X-105C	203-1C* & 203-2C	0	0		
	"	203-1C & 203-2C	0.658	-		
	X-105D	203-1D* & 203-2D	0	0		
	"	203-1D & 203-2D	0	-		
		TOTAL THRU LEAKAGE FOR PAGE		0		0

*Indicates waterhead present on one side of valve

TABLE 5

LOCAL LEAK RATE TESTS PERFORMED DURING THE UNIT 3 REFUELING OUTAGE OF 1975

TYPE OF PENETRATION: Primary System Isolation Valves

TEST NUMBER	PENETRATION NUMBER	Piping Between Valves VOLUME BEING TESTED		INITIAL LEAK RATE SCFH	INITIAL THRU LEAKAGE SCFH	FINAL LEAK RATE SCFH	FINAL THRU LEAKAGE SCFH
	X-101	Personnel Air Lock	Drywell Entry	0	0		
		9207A & End of Line	CAM	1.06	1.06		
		9207B & End of Line	"	6.29	-		
		9208A & End of Line	"	14.79	0		
		9208B & End of Line	"	7.14	7.14		
	X-106	220-1* & 220-2	Steam Drain	2.33	2.33		
	"	220-1 & 220-2	"	16.68	-		
	X-107A	220-57A* & 220-58A	Feedwater Inlet	103.48	103.48	1.54	-
	"	220-57A* & 220-62A	" "	323.36	-	1.04	1.04
	X-107B	220-57B* & 220-58B	" "	1926	1926	3.40	-
	"	220-57B* & 220-62B	" "	9273	-	0.997	0.997
	X-109	1301-1* & 1301-2	Iso. Cond. Stm Supply	0	0		
	"	1301-1 & 1301-2	" " " "	0	-		
	X-109A	1301-3 & 1301-4*	Iso. Cond Condensate Rtn	0	0		
	X-109B	301-95 & 301-99	CRD Return	0	0		
	"	301-93 & 301-99	" "	NA	-		
	X-111A & X-111B	1001-1A*, -1B*, -2A, -2B, & -2C	Shutdown Cooling	0	0		
	X-113	1201-1*, -2, & -3	Cleanup	2.41	1.21		
	X-116A	1501-22A, -24A*, & 1001-5A	LPCI Inlet	0	0		
	"	1501-25A & 1501-24A*	" "	5.40	-		

TOTAL THRU LEAKAGE FOR PAGE 2041.22

*Indicates waterhead present on one side of valve

TABLE 5 (Continued)

LOCAL LEAK RATE TESTS PERFORMED DURING THE UNIT 3 REFUELING OUTAGE OF 1975

TYPE OF PENETRATION: Primary System Isolation Valves

TEST NUMBER	PENETRATION NUMBER	Piping Between Valves VOLUME BEING TESTED	INITIAL LEAK RATE SCFH	INITIAL THRU LEAKAGE SCFH	FINAL LEAK RATE SCFH	FINAL THR LEAKAGE SCFH
	X-116B	1501-22B, -26B*, & 1001-5B LPCI Inlet	12.39	12.39		
	"	1501-25B & 1501-26B* " "	24.06	-		
	X-117'	2001-105 & 2001-106 DW Flr. Drn Sump Disch	2.28	1.14		
	X-118	2001-5 & 2001-6 DW Equip Drn Sump Disch	2.31	1.16		
	X-121	4722 & check-valve Instrument Air	0.816	0.41		
	X-122	220-44* & 220-45 Primary Sample	2.70	1.35		
	X-125 & X-318	1601-23, -24, -60, -61, -62, & -63 Dopwell & Torus Vent	34.75	34.75	23.72	11.86
	X-126 & X-304	1601-21, -22, -55, -56 & 9502-500 N2 Inerting & Purge	8.27	4.14		
	" "	1601-57, -58, & -59 N2 Makeup	0.190	0.10		
	X-129	2301-4* & 2301-5 HPCI Steam Supply	1.25	-		
	"	2301-4 & 2301-5 " " "	0	0		
	X-138	1101-1 & 1101-15 Standby Liquid Control	NA	NA		
	"	1101-1 & 1101-16 " " "	NA	NA		
	X-139D	4720 & 4721 Instrument Air	0	0		
	X-145	1501-27A' & 1501-28A LPCI Containment Spray	0.276	0.276		0.2[illegible]6
	"	1501-27A & 1501-28A " " "	28.643	-	7.53	-
	X-147	205-2-4 & Spray Nozzle Reactor Head Cooling	0.100	-		
	"	205-2-7 & Blind Flange " " "	0.0778	0.0778		
	X-149B	1402-24A & 1402-25A Core Spray	0	0		
	X-149A	1402-24B & 1402-25B " "	0	0		
		TOTAL THRU LEAKAGE FOR PAGE		55.79		32.?0

' New seat put in - valve closed ~~the~~ manually

*Indicates waterhead present on one side of valve

TABLE 5 (continued)

LOCAL LEAK RATE TESTS PERFORMED DURING THE UNIT 3 REFUELING OUTAGE OF 1975

TYPE OF PENETRATION: Primary System Isolation Valves

TEST NUMBER	PENETRATION NUMBER	Piping Between Valves VOLUME BEING TESTED	INITIAL LEAK RATE SCFH	INITIAL THRU LEAKAGE SCFH	FINAL LEAK RATE SCFH	FINAL THRU LEAKAGE SCFH
	X-150A	1501-27B & 1501-28B LPCI Containment Spray	0.124	0.06	2.16	1.03
	"	1501-27B & 1501-28B* " " "	NA	-		
	X-304	1601-20A & 1601-31A Torus to Rx Bld Vac Brk	1.39	0.70	2.81	1.405
	"	1601-20B & 1601-31B " " " " "	1.92	0.96	3.90	1.95
	X-310A	1501-20A & 1501-33A LPCI Test Flow	6.80	3.4		
	"	1402-4A, -8A, -25A, & -36A Core Spray Test	0.609	0.61		
	X-310B	1501-20B & 1501-33B LPCI Test Flow	0	0		
	"	1402-4B, -8C, -25B, & -36B Core Spray Test	0.939	0.94		
	X-311A	1501-18A & 1501-19A LPCI Torus Spray	0	0		
	X-311B	1501-18B & 1501-19B " " "	0.347	0.17		
	X-312	2301-34 & 2301-71 HPCI Condensate Drain	0.365	0.18		
	X-317	2301-45 & 2301-74 HPCI Turbine Exhaust	1.150	0.58		
	X-313A	2 manual valves East Torus Drain	0	0		
	X-313B	2 manual valves West Torus Drain	0	0		
		TOTAL THRU LEAKAGE FOR PAGE		7.6		9.30

*Indicates waterhead present on one side of valve

TABLE 6

LOCAL LEAK RATE TESTS PERFORMED DURING THE UNIT 3 REFUELING OUTAGE OF 1975

TYPE OF PENETRATION: Double-Gasketed Seals

TEST NUMBER	PENETRATION NUMBER	VOLUME BEING TESTED	INITIAL LEAK RATE SCFH	INITIAL THRU LEAKAGE SCFH	FINAL LEAK RATE SCFH	FINAL LEAKAGE SCFH
	X-100	Equipment Hatch	0	0		
	X-102	CRD Hatch	0.361	0.1805		
	X-136A	TIP Monitor Tubes (spare)	0.0675	0.0338	0.068	0.034
	X-136B	" " "	0	0	0	0
	X-136C	" " "	0	0	0	[illegible]
	X-136D	" " "	0	0	0	0
	X-136E	" " "	0.0333	0.0167	0.033	0.017
	X-136F	" " "	0	0	0	0
	X-137	Drywell Head Manhole	1.91	0.955		
		Drywell Head Flange	6.627	3.314		
	X-301A	Torus Vacuum Breaker 1601-33A	0.922	0.461	0.0308	0.015
	X-301A	" " " 1601-33B	1.34	0.670	1.44	0.720
	X-301B	" " " 1601-33C	0.0338	0.017	1.10	0.550
	X-301B	" " " 1601-33D	18.39	9.195	1.38	0.690
	X-301C	" " " 1601-33E	0.257	0.129	0.701	[illegible]51
	X-301C	" " " 1601-33F	0.0847	0.042	1.49	0.745
	X-301D	" " " 1601-32F	1.23	0.615	0	0
	X-301D	" " " 1601-32E	1.50	1.25	0.249	0.125
	X-301E	" " " 1601-32D	9.54	4.77	1.85	0.925
	X-301E	" " " 1601-32C	0.205	0.103	0.604	0.302
		TOTAL THRU LEAKAGE FOR PAGE		21.75		

^ A ~~mount on one~~ side of valve

TABLE 6 (Continued)

LOCAL LEAK RATE TESTS PERFORMED DURING THE UNIT 3 REFUELING OUTAGE OF 1975

TYPE OF PENETRATION: Double-Gasketed Seals

TEST NUMBER	PENETRATION NUMBER	VOLUME BEING TESTED	INITIAL LEAK RATE SCFH	INITIAL THRU LEAKAGE SCFH	FINAL LEAK RATE SCFH	FINAL THRU LEAKAGE SCFH
	X-301F	Torus Vacuum Breaker 1601-32B	113.59	56.795	0	0
	X-301E	Torus Vacuum Breaker 1601-32A	6.15	3.075	0	0
	X-306A	East Torus Access Hatch	0	0	0	0
	X-306B	West " " "	0.0179	0.009	0	0
	X-313A	East Torus Construction Drain	0	0	0	0
	X-313B	West " " "	0	0	0	0
		Shear Lug Inspection Hatch #1	0.279	0.140	0.279	0.140
		" " " " #2	0.049	0.025	0.049	0.025
		" " " " #3	0.524	0.262	0.524	0.262
		" " " " #4	0.567	0.284	0.567	0.284
		" " " " #5	0.065	0.033	0.065	0.033
		" " " " #6	0	0	0	0
		" " " " #7	0.033	0.017	0.033	0.017
		" " " " #8	0.049	0.025	0.049	0.025
		TOTAL THRU LEAKAGE FOR PAGE		60.67		0.79

● Indicates waterhead present on one side of valve

TYPE C

LOCAL LEAK RATE TESTS PERFORMED DURING THE UNIT 3 REFUELING OUTAGE OF 1975

TYPE OF PENETRATION: Electrical Penetrations

TEST NUMBER	PENETRATION NUMBER	VOLUME BEING TESTED	INITIAL LEAK RATE SCFH	INITIAL THRU LEAKAGE SCFH	FINAL LEAK RATE SCFH	FINAL THRU LEAKAGE SCFH
	X-200C	Power for Valves, Control, Communications	3.29	1.645		
	X-201B	5 kV Power	0.650	0.325		
	X-202B	5 kV Power	0.673	0.337		
	X-202BB	CRD Indicators	28.10	0	0	@
	X-202D	5 kV Power	0	0		●
	X-202F	Thermocouples	0	0		
	X-202J	Neutron Monitor	0	0		
	X-202N	Neutron Monitor	2.03	1.015		
	X-202Q	Neutron Monitor	0	0		
	X-202S	CRD Indicators	6.81	3.405		
	X-202W	CRD Indicators	3.36	1.68		
	X-203B	5 kV Power	0.648	0.324		
	X-204A	High Voltage Power	3.02	1.51		
	X-204E	Neutron Monitor	0	0		
	X-204H	Neutron Monitor	6.49	3.245		●
	X-204L	Power & Ground	6.09	3.045		
	X-204M	Power for Valves & Lighting	4.05	2.025		
	X-204N	CRD Indicators	2.00	1.00		
	X-204Q	CRD Indicators	6.09	3.045		
	X-204S	Valve Power & Control	4.03	2.015		
	X-205B	CRD Indicators	0.656	0.328		
		TOTAL THRU LEAKAGE FOR PAGE		24.94		24.94

@ Indicates waterhead present on one side of valve

TABLE 8

LOCAL LEAK RATE TESTS PERFORMED DURING THE UNIT 3 REFUELING OUTAGE OF 1975

TYPE OF PENETRATION: DRYWELL BELLOW SEALS

TEST NUMBER	PENETRATION NUMBER	VOLUME BEING TESTED	Test station	INITIAL LEAK RATE SCFH	INITIAL THRU LEAKAGE SCFH	FINAL LEAK RATE SCFH	FINAL THRU LEAKAGE SCFH
	X-105A	Primary Steam Line A	1	0	0		
	X-105B	" " " B	1	0	0		
	X-105C	" " " C	1	0	0		
	X-105D	" " " D	1	264.5	0	0	0
	X-106	Primary Steam Drain	1	0	0		
	X-107A	Reactor Feedwater Inlet	1	0.093	0.0		
	X-107B	" " "	1	0	0.0465		
	X-108	Isolation Condenser Steam Supply	3	0	0		
	X-109A	Isolation Condenser Condensate Return	2	0	0		
	X-109B	CRD Return	2	0	0		
	X-111A	Shutdown Heat Exhanger Supply	1	0	0		
	X-111B	" " " "	1	0	0		
	X-113	Cleanup Supply	3	0	0		
	X-114A	LPCI Pump Discharge	1	0	0		
	X-114B	" " "	1	0	0		
	X-123	Closed Cooling Water Inlet	1	0	0		
	X-124	" " " Outlet	1	0	0		
	X-125	Vent from Drywell	3	0	0		
	X-126	Vent to Drywell	1	0	0		
		TOTAL THRU LEAKAGE FOR PAGE			0.0465		0.0465

● Indicates waterhead present on one side of valve

TABLE 8 (continued)

LOCAL LEAK RATE TESTS PERFORMED DURING THE UNIT 3 REFUELING OUTAGE OF 1975

TYPE OF PENETRATION: Drywell Bellow Seals

TEST NUMBER	PENETRATION NUMBER	VOLUME BEING TESTED	INITIAL LEAK RATE SCFH	INITIAL THRU LEAKAGE SCFH	FINAL LEAK RATE SCFH	FINAL THR LEAKAGE SCFH
	X-12A	HPCI steam Supply 1	0	0		
	X-13B*	Standby Liquid Control 1	0.093	0.0465		
	X-14J	Reactor Vessel Head Spray 3	0	0		
	X-14JA	Core Spray Inlet 2	0	0		
	X-14JB	" " 2	0	0		
		TOTAL THRU LEAKAGE FOR PAGE		0.0465		0.0465

*Indicates waterhead present on one side of valve

RECORD OF FOIA PROCESSING TIME

INSTRUCTIONS: Complete this form to establish the time associated with the processing of this FOIA request. Record the time in man-hours, rounded to the nearest 15 minutes, for all actions taken. Include the number of pages reproduced.

Your clerical overhead factor will be added by the FOIA/PA Branch.

Negative results time will be reported to this office by telephone.

RETURN FORM TO: Director, Division of Rules and Records, Room MNBB-4210.

Form Date _____

Name of Requester EDWARD GOGOL

FOIA Request Number FOIA-83-384

DIRECT TIME FOR SEARCH [1]

ORGANIZATION	Clerical	Professional	ALL OTHER ACTIVITY [2]
NRR			2 hrs.

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ORGANIZATION	NUMBER OF PAGES REPRODUCED
NRR	~~25~~ 17

COMPUTER SEARCH

K Smith 7/15/83

Report actual machine time and applicable cost rate for machine used.

1/ Includes only the time actually spent in searching for or locating documents.

2/ Includes the time spent reviewing documents for exempt information, conferring with the staff, reproduction, etc.