Commonwealth Edison Company Dresden Generating Station 6500 North Dresden Road Morris, IL 60450 Tel 815-942-2920



July 26, 1995

TPJLTR 95-0087

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

Licensee Event Report 95-007, Docket 50-249 is being submitted pursuant to 10CFR50.73(a)(2)(i)(B) and 10CFR50.73(a)(2)(ii).

Sincerely,

Thomas P. /Joyce Site Vice President

TPJ/MM:pt.

Enclosure

cc: H. Miller, Regional Administrator, Region III NRC Resident Inspector's Office File/NRC File/Numerical



<u></u>					· · · · ·											•
NRC FORM (5-92)	1 366			•	U.S.	NUCLE	AR F	REGULATO	2 Y COP	MISSION		APPROVED BY	r onb no. (res 5/31,	3150 /95	-0104	•
•	• •	LIC	ense	B E	VENT REP	ORT	(L	ER)			ESTIMA THIS I FORWARD THE IN (MNBB WASHIND REDUCT MANAGEI	FED BURDEN PE NFORMATION CO COMMENTS RE FORMATION AND 7714), U.S. NU STON, DC 2055 ION PROJECT IENT AND BUDGE	R RESPON LLECTION GARDING RECORDS CLEAR REG 5-0001, AU (3150-0 T, WASHIN	SE 1 REQU BURDE MAN ULAT (104) GTON	TO CON EST: 1 AGEMEI DRY CO DRY CO DRY CO D THE , OF , DC 2	APLY WITH 50.0 HRS. IIMATE TO IT BRANCH MMISSION, PAPERWORK FICE OF 0503.
FACILITY	Dres	(1) den N	uclea	r P	ower Stati	on, l	Jni	t 3		· ·	DOCKET	NUMBER (2) 05000249			P 1 C	AGE (3))F 5
TITLE (4) Leak Valv	age L es	imit	Ехс	eeded Due	to Ex	ce	ssive	Leal	kage P	ast Ma	lin Steam 1	Line Dr	ain	Gat	e
EVEN	T DATE	(5)	Î – – – – – – – – – – – – – – – – – – –		LER MUNRER (6)			REPO	T DAT	F (7)	r	OTHER FACTI	ITIES IN		D (8)	
MONTH	DAY	YEAR	YEAR		SEQUENTIAL NUMBER	REVIS	I ON ER	MÓNTH	DAY	YEAR	FACILIT None	Y NAME		DOCI	CET NU	MBER
06	30	95	95		007	00		07	30	95	FACILIT	YNAME		DOCI	CET NU	MBER
OPERAT	TING	·	THIS	REPO	RT IS SUBMITTE	d pursi	IANT	TO THE	REQUI	REMENTS	OF 10 CF	R§: (Check	one or mo	re) ((11)	
NODE	(9)	N	20	.220	1(b)			20.2203	(a)(3)(i)		50.73(a)(2)([[])		73.71	(b)
POLE	ER		20	.2203	3(a)(1)			20.2203	(a)(3)(ii)		50.73(a)(2)(iv)		73.71	(c)
LEVEL	(10)	000	20	.2203	3(a)(2)(i)			20,2203	(a)(4)		50.73(a)(2)(/)		OTHER	
			20	.2203	3(a)(2)(ii)			50.36(c)(1)			50.73(a)(2)(v	vii)	(Sp	ecify	in
			20	.2203	3(a)(2)(iii)			50.36(c)(2)			50.73(a)(2)(v	viii)(A)	Abst	tract	below
			20	.2203	3(a)(2)(iv)		X	50.73(a)(2)(i)		50.73(a)(2)(v	viii)(B)	NRC Form 3664)		
			20	.2203	3(a)(2)(v)		X	50.73(a)(2)(ii)		50.73(a)(2)()	()			
						LICENS	EE C	CONTACT I	OR TH	IS LER	(12)	· · · · · · · · · · · · · · · · · · ·				
NAME			-									TELEPHONE NUR	BER (Inc	lude	Area	Code)
	м. м	cGive	rn, L	oca	l Leak Rat	e Tea	st	Coordi	nato	or Ext.	2526	(81	5) 942-	-292	20	
	·		α	MPLE	TE ONE LINE FO	R EACH	8	PONENT I	AILUR	E DESCR	IBED IN '	THIS REPORT (1	3)	· · ·		······
CAUSE	SYST	EM C	OMPONEN	т	MANUFACTURER	REPOR TO N	TABL PRDS	LE S		CAUSE	SYSTEM	COMPONENT	MANUFAC	TURE	R RI	PORTABLE
х	SB		ISV		A391	Ye	8									
x	CE		ISV		A391	Ye	8									
			SUPPLE	<u>CENTA</u>	L REPORT EXPEC	TED (1	4)				E	XPECTED	MONTH	•	DAY	YEAR
X YES (1f y	/es, co	mplete	EXPECTE	D SU	BMISSION DATE)	•			0		SU D/	EMISSION ATE (15)	10		31	95

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

At approximately 2130, on June 30, 1995, with Unit 3 shutdown for maintenance, the performance of Dresden Technical Surveillance (DTS) 1600-01, Local Leak Rate Testing Of Primary Containment Isolation Valves, identified the Main Steam Line Drain (MSLD) gate valves 3-220-1 and 3-220-2 to be leaking more than the test equipment could measure. The safety significance of the leakage past valves 3-220-1 and 3-220-2 is being evaluated. The gate valves will be inspected, repaired or replaced and Local Leak Rate Tested (LLRT) prior to unit startup. A supplement will be submitted to report the cause(s) of the valve failures, safety significance, corrective actions taken and results of the as-left LLRT.

	• 4					
NRC FORM 366A (5-92)	U.S. NUCLEAR RE	GULATORY COMMISSION		APPROVED BY C EXPIRE	MB NO. 315 S 5/31/95	0-0104
	LICENSEE EVENT REPORT (LE TEXT CONTINUATION	ir)	ESTIMAT THIS I FORWARD THE IN (MNBB 7 WASHING REDUCTI MANAGEM	TED BURDEN PER NFORMATION COLLI COMMENTS REGA FORMATION AND F FORMATION AND F FORMATION AND F TON, DC 20555-0 ON PROJECT IENT AND BUDGET,	RESPONSE ECTION REQU REDING BURD RECORDS MAI EAR REGULAT 001, AND T (3150-0104) WASHINGTON	TO COMPLY WITH JEST: 50.0 HRS. IEN ESTIMATE TO NAGEMENT BRANCH FORY COMMISSION, 0 THE PAPERWORK 0 OFFICE OF 1, DC 20503.
	FACILITY NAME (1)	DOCKET NUMBER (2)		LER MUMBER (6))	PAGE (3)
Dunnelon Nu			YEAR	SEQUENTIAL	REVISION NUMBER	2 07 5
Dresden Nu	clear power station, Unit 3	05000249	95	007	00	2 OF 5

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

EVENT IDENTIFICATION:

Leakage Limit Exceeded Due to Excessive Leakage Past Main Steam Line Drain Gate Valves

. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 3	Event Date:	06/30/95	Event	Time:	2130
Reactor Mode: N	Mode Name:	Shutdown	Power	Level:	0&

Reactor Coolant System Pressure: 0 psig

B. DESCRIPTION OF EVENT:

During Refuel Outage D3R13 (March 1994 - November 1994), the Main Steam Line Drain (MSLD) [SB] Primary Containment Isolation Valves 3-220-1 and 3-220-2, Crane gate valves, were cut out and replaced with Anchor Darling dual disk gate valves.

On January 16, 1995, with Unit 3 exiting Maintenance Outage D3F17, the MSLD inboard gate valve 3-220-1 was given a close signal. Dual indication (both open and closed), not a full close indication, was received in the Control Room. The valve was opened and again given a close signal. This time the Control Room received a full close indication. Since the indication was erratic, this Primary Containment Isolation Valve was declared inoperable.

Technical Specification 3.7.D.1. states:

During reactor power operation conditions, all primary containment isolation valves and all instrument line flow check valves shall be operable except as specified in 3.7.D.2.

Technical Specification 3.7.D.2. states:

In the event any primary containment isolation valve becomes inoperable, reactor power may continue provided at least one valve in each line having an inoperable valve is in the mode corresponding to the isolated condition.

Therefore, the MSLD outboard gate valve 3-220-2 was taken Out-of-Service in the closed position. This stopped the clock for the Limiting Condition for Operation described in Technical Specification 3.7.D.3. which states:

If specification 3.7.D.1 and 3.7.D.2 cannot be met, an orderly shutdown shall be initiated and the reactor shall be in the cold shutdown condition within 24 hours.

When Dresden Unit 3 shutdown for maintenance, the Motor Operated Valve (MOV) team began investigating the valve's position discrepancy. Limits were found to be engaged and the valve appeared to be closed. The torque switch setting was then increased in order to increase margin between the minimum required thrust and thrust developed at the torque switch setting. At approximately 2100, on

NRC FORM 366A (5-92)	U.S. NUCLEAR	APPROVED BY ONB NO. 3150-0104 EXPIRES 5/31/95				
	LICENSEE EVENT REPORT () TEXT CONTINUATION	LER)	ESTIMAT THIS I FORWARD THE IN (MNBB T WASHING REDUCT MANAGE	TED BURDEN PER NFORMATION COLL COMMENTS REGA FORMATION AND 7714), U.S. NUCL GTON, DC 20555- ION PROJECT MENT AND BUDGET,	RESPONSE ECTION REQU RDING BURD RECORDS MAI EAR REGULAT 0001, AND T (3150-0104) WASHINGTON	TO COMPLY WITI JEST: 50.0 HRS JEN ESTIMATE TO NAGEMENT BRANC (ORY COMMISSION 0 THE PAPERWORI 0, OFFICE 0 1, DC 20503.
	FACILITY NAME (1)	DOCKET. NUMBER (2)		LER NUMBER (6	>	PAGE (3)
Duesdes Nu	alaam Deven Station Nait 2	05000240	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 07 5
Dresden Nu	clear power Station, Unit 3	05000249	95	007	00	5 OF 5

June 14, 1995, the performance of Dresden Technical Surveillance (DTS) 1600-01, Local Leak Rate Testing Of Primary Containment Isolation Valves, identified the MSLD gate valves 3-220-1 and 3-220-2 to be leaking more than the test equipment could measure. Checking of the vent path revealed that the MSLD outboard gate valve 3-220-2 was leaking greatly. The Unit Supervisor was notified of the event and a Performance Improvement Form (PIF) was written. The ComEd Reportability Manual states:

In general, for the purpose of evaluating the reportability of situations found during surveillance tests, it should be assumed that the situation occurred at the time of discovery, unless there is firm evidence to believe otherwise.

On May 29, 1995, the High Pressure Coolant Injection (HPCI) System [SJ] check valve 3-2301-45 had leaked great enough to cause the cumulative Type B and C leakage to exceed the Technical Specification leakage limit of 0.60 L (488.452 standard cubic feet per hour). This failure was reported in LER/Docket 95-011/0500249. Reporting of the MSLD test volume LLRT failure was to be included in the supplement to that LER.

On June 16, 1995, the MSLD test volume was pressurized and the outboard gate valve 3-220-2 was manually opened and then closed while the vent path was monitored. The leakage past the 3-220-2 was still unmeasurable. Valve disassembly revealed valve internal damage, a bent valve stem and valve internals missing. The Unit Supervisor was notified and a PIF (2492009506300) was written. An inspection of the piping with a boroscope did not locate the missing valve parts. Due to the internal damage suffered by the valve, the valve was cut out. To verify primary containment integrity, a plug was installed in the MSLD piping in order to Local Leak Rate Test the inboard gate valve 3-220-1.

At approximately 2130, on June 30, 1995, the performance of Dresden Technical Surveillance (DTS) 1600-01, Local Leak Rate Testing Of Primary Containment Isolation Valves, identified the Main Steam Line Drain (MSLD) gate valve 3-220-1 to be leaking more than the test equipment could measure.

The Unit Supervisor was notified of the event, and an ENS phone notification was then made at 0400 Eastern Standard Time on Saturday July 1, 1995 to report a condition that was outside of the design basis of the plant and a PIF was written to report a condition prohibited by the plant's Technical Specifications.

The MSLD test volume was again pressurized and the inboard gate value 3-220-1 was manually opened and then closed while the leakage rate was monitored. The value was left in the position where leakage was at its lowest rate, 17 scfh (standard cubic feet per hour).

Due to the two MSLD valve failures coupled with knowledge of recent problems with this type of valve at other stations, Engineering determined that Local Leak Rate Testing of the other Anchor Darling dual disk gate valves was warranted. Other Crane gate valves which were replaced with Anchor Darling dual disk gate valves during Refuel Outage D3R13 are the Reactor Water Cleanup (RWCU) System [CE] suction valves 3-1201-1, 3-1201-1A and 3-1201-2 and the Reactor Head

NRC FORM 366A (5-92)	U.S. NUCLEAR RE	APPROVED BY ONB NO. 3150-0104 EXPIRES 5/31/95				
	LICENSEE EVENT REPORT (LE TEXT CONTINUATION	ER)	ESTIMAT THIS I FORWARD THE IN (MNBB 7 WASHING REDUCT MANAGEI	TED BURDEN PER NFORMATION COLLE COMMENTS REGAL IFORMATION AND R 7714), U.S. NUCLE GTON, DC 20555-0 ION PROJECT (MENT AND BUDGET,	RESPONSE ECTION REQU RDING BURD RECORDS MAI EAR REGULAT 001, AND T (3150-0104) WASHINGTON	TO COMPLY WITH JEST: 50.0 HRS. EN ESTIMATE TO NAGEMENT BRANCH FOR COMMISSION, O THE PAPERWORK O THE PAPERWORK O TO 20503.
	FACILITY NAME (1)	DOCKET NUMBER (2)		LER NUMBER (6))	PAGE (3)
		05000240	YÈAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nu	clear Power Station, Unit 3	05000249	95	007	00	4 UF 5

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Spray System [BO] valve 3-205-24. These systems were taken Out-of-Service in order to be given an LLRT. The LLRT on the RWCU valves yielded a leakage which was too great to be measured by the test equipment. Trouble shooting determined that the excessive leakage was past the inboard valve 3-1201-1 and its bypass valve 3-1201-1A and the 3-1201-2 valve was leaking 5 scfh. The LLRT of the Reactor Head Spray System gate valve 3-205-24 yielded a leakage of 1 scfh.

C. CAUSE OF EVENT:

This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B) which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

This LER is also submitted pursuant to 10 CFR 50.73(a)(2)(ii) which requires reporting any event or condition that resulted in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded.

The root cause of the valve failures and corrective actions to prevent future recurrence will be thoroughly reviewed prior to startup. The results of this review will be reported in a supplement to this report.

D. SAFETY ANALYSIS:

Work on the 3-220-1 is still in progress, therefore, the safety significance of the leakage through the Main Steam Line Drain is still being evaluated. The safety significance of the leakage past the RWCU valves is minimal due to 5 scfh leakage out of containment. The results will be included in a supplement to this report.

E. CORRECTIVE ACTIONS:

Nuclear Tracking System (NTS) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX).

The MLSD gate values 3-220-1 and 3-220-2 and the RWCU gate values 3-1201-1 and 3-1201-1A will be inspected, repaired or replaced and Local Leak Rate Tested prior to startup. (NTS $\frac{2}{249}-180-95-00701$)

An LER supplement will be submitted to report the cause for the valve failures, safety significance, corrective actions taken and the results of the as-left LLRT. (NTS #249-180-95-00702)

The root cause of the valve failures and corrective actions to prevent recurrence will be resolved prior to startup. (NTS $\frac{4}{249}-180-95-00703$)

PREVIOUS OCCURRENCES:

LER/Docket Numbers Title

None associated with Anchor Darling dual disk gate valves.

F.

NRC FORM 366A (5-92)	A U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY ONB NO. 3150-0104 EXPIRES 5/31/95				
	LICENSEE EVENT REPORT (LE TEXT CONTINUATION	IR)	ESTIMAT THIS I FORWARD THE IN (MNBB 7 WASHING REDUCTI MANAGEN	TED BURDEN PER NFORMATION COLLE COMMENTS REGA FORMATION AND F 7714), U.S. NUCLI GTON, DC 20555-0 ION PROJECT TENT AND BUDGET,	RESPONSE ECTION REQU RDING BURD RECORDS MAI EAR REGULAT 001, AND T (3150-0104) WASHINGTON	TO COMPLY WITH JEST: 50.0 HRS. EN ESTIMATE TO NAGEMENT BRANCH ORY COMMISSION, O THE PAPERWORK , OFFICE OF , DC 20503.		
	FACILITY NAME (1)	DOCKET NUMBER (2)		LER NUMBER (6))	PAGE (3)		
D	clear Power Station, Unit 3	05000249	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	E OF E		
Dresden Nu			95	007	00	5 UF 5		

COMPONENT FAILURE DATA:

G.

L:\8360\8301\249\180\95\007

Manufacturer	Nomenclature	Model Number	Mfg. Part Number
Anchor Darling Valve Co.	MSLD 3-220-1 3-220-2	סס	N/A
	RWCU 3-1201-1 3-1201-1A		

An industry - wide data base search revealed 148 corrective maintenance entries for the Anchor Darling Model DD dual disk gate valve. Five failures were attributed to internal valve damage or misalignment of valve internals.

07/27/95:1422