NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Waterford Steam Electric Station Unit 3	0 5 0 0 0 3 8 2	1 OF 0 6

TITLE (4)
Missed Valve Stroke Test Surveillance Due to Inadequate Administrative Controls

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
									N/A	0 5 0 0 0
1 0	2 1	8 7	8 7	— 0 3 1	— 0 1	0 9	3 0	8 8	N/A	0 5 0 0 0

OPERATING MODE (9)	1
POWER LEVEL (10)	1 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

	20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)
	20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)
	20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		
	20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)		
	20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
D.A. Schultz, STA Supervisor	AREA CODE 5 0 4 — 4 6 4 - 3 3 5 3

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
	YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO			

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

At 0800 hours on October 21, 1987, Waterford Steam Electric Station Unit 3 was operating at 100% power when Operations personnel discovered that Containment Atmosphere Purge (CAP) Isolation Valves 103 and 205 had exceeded their required stroke-time surveillance periodicity by 22 hours and 47 days respectively. Both valves share a common power supply with CAP-104, and were deenergized when CAP-104 was placed out-of-service on June 23, 1987. When the routine surveillance was performed on July 28, 1987, CAP-103 and CAP-205 were not stroked, but the surveillance was tracked as complete. CAP-103 and CAP-205 were therefore not retested when CAP-104 was returned to service on September 3, 1987. Thus, the plant operated in a condition prohibited by TS 4.0.5 from September 3, 1987, to October 20, 1987.

The root cause of this event was inadequate administrative controls. Procedures have been revised to adequately account for rescheduling out-of-service components for TS surveillance completion when they are returned to service. Since CAP-103 and CAP-205 satisfactorily passed stroke tests and no work had been performed on either valve since the previous test, there is a high level of confidence that the valves would have performed their safety functions if necessary. There was, therefore, no safety significance to this event.

IE22

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Waterford Steam Electric Station Unit 3	0 5 0 0 0 3 8 2	8 7	— 0 3 1	— 0 1	0 2 OF 0 6

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

On May 6, 1987, procedure OP-903-032, "Quarterly Inservice Inspection (ISI) Valve Tests", was performed on Containment Atmosphere Purge (CAP) valves 103, 104 and 205 (EIIS Identifier VA-ISV). This surveillance, a quarterly timed stroke test, is required by the ASME Boiler and Pressure Vessel Code (BPVC), Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components, Subsection IWV, per Technical Specification (TS) 4.0.5. The Louisiana Power and Light (LP&L) Pump and Valve Inservice Test Plan (PVITP) describes the inservice testing plan for valves at the Waterford 3 Steam Electric Station (W3SES) subject to the requirements of subsection IWV of the ASME BPVC, Section XI. The LP&L PVITP describes CAP-103 and CAP-205 as class 2 category A and B butterfly valves, respectively, requiring quarterly stroke time testing. TS 4.0.5 specifies quarterly testing as once per 92 days.

On June 23, 1987, CAP-104 was declared inoperable and deenergized on Clearance Number 87-857. CAP-104 had failed to open using its control switch (EIIS Identifier JM-HIS). There were no faults in CAP-103 and CAP-205, but since the power supply for CAP-104, Power Distribution Panel (PDP) (EIIS Identifier ED-PL) 360-A Circuit 26, is shared with CAP-103 and CAP-205, all three valves were deenergized. An Equipment Out-of-Service (EOS) checklist was written for CAP-104. Condition Identification Work Authorization (CIWA) 33478 required CAP-104 to be stroked as a retest per OP-903-032, "Quarterly ISI Valve Tests", once corrective maintenance was complete. Performance of this retest satisfies the requirement of TS 4.6.3.1. No maintenance was performed on CAP-103 or CAP-205, so they were not listed as requiring retest on the EOS checklist.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Waterford Steam Electric Station Unit 3	0 5 0 0 0 3 8 2	8 7	— 0 3 1	— 0 1	0 3 OF 0 6

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

On July 28, 1987, the quarterly stroke-time surveillance for CAP valves per OP-903-032 Section 8.19 was scheduled. Since this surveillance had been fully completed on May 6, 1987, it was due on August 6, 1987, and would become overdue on August 29, 1987. The surveillance was completed with the exception of CAP valves 103, 104, and 205, which were out-of-service. This was noted in the remarks column of the task completion section on the Task Card; however, the surveillance was entered as fully complete on the Station Information Management System (SIMS) (EIIS Identifier CPU). SIMS is a computer system used for scheduling and tracking of TS surveillances. In this case, completion of the TS surveillance was entered in SIMS for the partial performance since it was thought there was adequate documentation to track completion of the required surveillance prior to returning the valves to service. This was not the case for the stroke time test per OP-903-032 required for CAP-103 or CAP-205. The EOS checklist, written on June 23, 1987, did not list OP-903-032 as a retest since the surveillance was current at the time the EOS was written, and CIWA 33478 did not specify performance of OP-903-032 for CAP valves 103 and 205 since no maintenance was to be performed on these valves. It was not possible to repair CAP-104 for several months since it is not accessible with the plant at power, and the surveillance on CAP-103 and 205 expired during this period.

On September 3, 1987, Maintenance technicians performing work per CIWA 33478 freed CAP-104 and tightened the mechanical stops. The EOS checklist was cleared on CAP valves 103, 104, and 205, and the valves were declared operable at 2150 hours on September 3, 1987. The stroke time surveillance per OP-903-032 was satisfactorily performed on CAP-104 at this time. CAP-103 was tested satisfactorily at 2012 hours on September 4, 1987. CAP-205 was tested at 1802 hours on October 20, 1987, when the next quarterly stroke time surveillance was due.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Waterford Steam Electric Station Unit 3	0 5 0 0 0 3 8 2	8 7	— 0 3 1	— 0 1	0 4 OF 0 6

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

At 0800 hours on October 21, 1987, W3SES was operating at 100% power when the Shift Technical Advisor (STA) discovered that CAP-205 had exceeded its TS 4.0.5 stroke time surveillance periodicity. Further review of documentation revealed that CAP-103 had not been tested prior to returning the valve to service. Thus, the plant operated in a condition prohibited by TS 4.0.5 from September 3, 1987, until October 20, 1987.

TS 3.6.3 states that containment isolation valves specified in Table 3.6-2 shall be operable with isolation times shown in Table 3.6-2. The plant was in mode three (Hot Standby) when the CAP valves were declared operable, and CAP-103 was satisfactorily retested within the 36 hour time limit of TS 3.6.3 Action 'd'. TS 3.6.3 is not applicable to CAP-205 since this valve does not perform a containment isolation function and thus does not appear in Table 3.6-2. TS Limiting Condition for Operation (LCO) 3.6.3 was therefore always satisfied during this event.

TS 3.6.1.7 states that each CAP supply and exhaust isolation valve shall be operable and may be open at no greater than the 52 degree open position allowed by the mechanical stop for less than 90 hours per 365 days in modes one through four. Action Requirement 'a' of this TS addresses exceeding the 90 hour time limit and was not applicable to this situation since this time limit was not exceeded. Similarly, a leakrate surveillance was current for each CAP valve, so action 'b' was not applicable. This TS is not applicable to CAP-205 since CAP-205 does not perform a containment isolation function. TS LCO 3.6.1.7 was therefore always satisfied during this event.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Waterford Steam Electric Station Unit 3	0 5 0 0 0 3 8 2	8 7	— 0 3 1	— 0 1	0 5 OF 0 6

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

The root cause of this event was inadequate administrative controls. Procedures did not provide adequate tracking of partial completion of TS surveillances due to a portion of a system being out of service. Procedures OP-100-010, "Equipment Out of Service", and UNT-7-004, "Technical Specification Surveillance Control", have been revised to require an EOS entry be written when a TS surveillance is partially completed due to out-of-service components. The EOS checklist will document the TS Surveillance as a retest when these components are returned to service. A review of other ISI data discovered no similar problems.

In April 1987, Licensee Event Report (LER) 87-010 reported a missed stroke time surveillance on the Pressurizer Surge Line Sample Header Inside Containment Isolation Valve (EIIS Identifier AB-PZR-ISV), PSL-203, due to a failure by Operations and Maintenance personnel to perform the required surveillance listed as a retest on a CIWA. The EOS procedure was not referenced and instructions in the Refuel One Outage Manual for placing the CIWA in the Outage Retest File were not followed. Corrective actions included revising procedures to enhance recording of Maintenance turnover items and providing a second check for equipment out-of-service applicability. There have been no recurrences of this type of event.

In June 1987, LER 87-014 reported that a surveillance of Fire Hydrant Hose Houses (EIIS identifier KF-HYD) was completed four days later than the TS would allow. The root cause in this event was that the automated scheduling system did not adjust due dates for surveillances completed early. This problem was solved when SIMS, which effectively handles planning and scheduling requirements for TS surveillances, was implemented. Although there have been no recurrences of this type, this was not effective in tracking partial completion of TS surveillances. The procedure changes described above are expected to effectively preclude a recurrence of this type of event.

Although CAP-205 is a class 2 valve, it does not perform a containment isolation function. CAP-205 isolates piping downstream of CAP exhaust isolation valves 203 and 204 and serves to divert any leakage past CAP-203 and CAP-204 through a vent to the Containment Annulus (EIIS Identifier VC). This leakage would then be filtered through the Shield Building Ventilation System (EIIS Identifier VC) prior to release. This arrangement allows the leakage past CAP-203 and CAP-204 to be classified as non-bypass leakage as defined in TS 3.6.1.2. The leakage recorded for CAP-203 and CAP-204 was reclassified as bypass leakage during the period in which CAP-205 was in service without a current stroke test surveillance and all of the limits of TS 3.6.1.2 were still met. CAP-104, which was satisfactorily stroke tested, is redundant to CAP-103 since both isolate the same pipe penetration. CAP-103 and CAP-205 performed properly when stroke tested, no repair work had been performed on these valves since the previous test, and no problems were noted in their operation during the purges which were conducted. Thus, there was no threat to the health or safety of the general public or plant personnel.

SIMILAR EVENTS

LERs 85-009, 85-010, 87-010, 87-014

PLANT CONTACT

D.A. Schultz, STA Supervisor, 504/464-3353

LOUISIANA POWER & LIGHT / WATERFORD 3 SES • P.O. BOX B • KILLONA, LA 70066-0751
MIDDLE SOUTH UTILITIES SYSTEM

Ref: 10CFR50.73(a)(2)(i)

September 30, 1988

W3A88-0110
A4.05
QA

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

SUBJECT: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
Reporting of Licensee Event Report

Attached is Licensee Event Report Number LER-87-031-01 for Waterford Steam Electric Station Unit 3. This Licensee Event Report is submitted pursuant to 10CFR50.73(a)(2)(i).

Very truly yours,

N.S. Carns
Plant Manager - Nuclear

NSC/WEM:jc

Attachment

cc: R.D. Martin, NRC Resident Inspectors Office, INPO Records Center (J.T. Wheelock), E.L. Blake, W.M. Stevenson, D.L. Wigginton

IE22
1/1