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ACCESSION NBR: 9112170467 DOC. DATE: 91/12/09 NOTARIZED: NO DOCKET #
 FACIL: 50-335 St. Lucie Plant, Unit 1, Florida Power & Light Co. 05000335
 AUTH. NAME AUTHOR AFFILIATION
 LAUVER, C. Florida Power & Light Co.
 SAGER, D.A. Florida Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 91-008-00: on 911110 & 11, containment integrity not in compliance w/Tech Specs during core alterations. Caused by personnel failing to follow approved procedure. Containment integrity reestablished & personnel counseled. W/911209 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 5
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

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December 9, 1991

L-91-331
10 CFR 50.73

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

Gentlemen:

Re: St. Lucie Unit 1
Docket No. 50-335
Reportable Event: 91-08
Date of Event: November 10, 1991
Core Alterations Performed With Containment
Integrity Not in Compliance with Technical
Specifications due to Personnel Error

The attached Licensee Event Report is being submitted pursuant to the requirements of 10 CFR 50.73 to provide notification of the subject event.

Very truly yours,

A handwritten signature in cursive script, appearing to read "D. A. Sager", is written over the typed name.

D. A. Sager
Vice President
St. Lucie Plant

DAS/GRM/kw

Attachment

cc: Stewart D. Ebnetter, Regional Administrator, USNRC Region II
Senior Resident Inspector, USNRC, St. Lucie Plant

DAS/PSL #581-91

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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.8 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-639), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20565, AND TO THE PAPERWORK REDUCTION PROJECT 3150-0104, OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) St. Lucie Unit 1	DOCKET NUMBER (2) 05000335	PAGE (3) 1 OF 4
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TITLE (4) Core Alterations Performed With Containment Integrity Not in Compliance With Technical Specifications due to Personnel Error

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)
1	1	1991	1991	008	00	1	20	1991	N/A		05000335

OPERATING MODE (9) 6	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR : (Check one or more of the following) (11)				
POWER LEVEL (10) 000	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)	OTHER (Specify in Abstract below and in Text NRC Form 366A)
	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)		
	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 Catherine Lauver, Shift Technical Advisor	TELEPHONE NUMBER
	AREA CODE 407
	465-3550

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)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

Between 1430 on November 10, 1991, and 0210 on November 11, containment integrity was not in compliance with Technical Specifications. St. Lucie Unit 1 was in Mode 6, Refueling, and fuel assemblies were being moved in the reactor core. Containment integrity is required for core alterations.

The cause of the incomplete containment integrity was personnel error by Mechanical Maintenance department personnel for failure to follow an approved procedure. Plant procedure requires that Nuclear Plant Work Orders be approved by the Nuclear Plant Supervisor prior to starting work. Without obtaining this prior approval, maintenance workers removed a relief valve on one side of a containment penetration while a drain valve was open on the other side. This created a direct flow path from containment to the Reactor Auxiliary Building. Permission to start work was requested after the relief valve had been removed by the previous shift.

Corrective actions were: containment integrity was re-established, the responsible maintenance supervisor was counseled on the need for strict adherence to procedures, and the event will be incorporated into Maintenance journeyman training. This event was also discussed with all maintenance crews and the importance of receiving proper authorization prior to beginning work on plant systems was stressed. An INPO Human Performance Enhancement review of this event was also performed.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.8 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-535), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

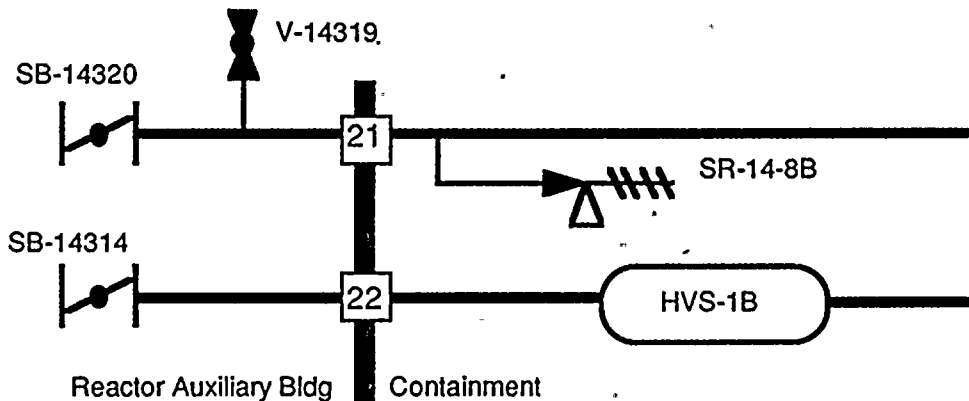
FACILITY NAME (1) St. Lucie Unit 1	DOCKET NUMBER (2) 05000335	LER NUMBER (6)		PAGE (3)	
		YEAR 91	SEQUENTIAL NUMBER 008	REVISION NUMBER 00	02 OF 04

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

DESCRIPTION OF EVENT

Unit 1 was in Mode 6, Refueling. Containment integrity was established as required for fuel movement which started November 7, 1991.

Nuclear Plant Work Order (NPWO) 3836 was written to remove a one-inch Component Cooling Water (CCW) (EIS:CC) safety relief valve, SR-14-8B, to implement a plant modification. The NPWO was planned November 4, 1991. The NPWO package contained instructions for work performed in the maintenance shop on the new valve and for work performed in the Reactor Containment Building to remove the old valve. Work was started in the maintenance shop on November 7. On November 9, clearance 1-11-113 was authorized and hung to support removal of SR-14-8B. The clearance closed SB-14314 and SB-14320, inlet and outlet CCW isolation valves for the 1B Containment Cooler (HVS-1B)(EIS:BK), and opened drain valve V-14319 to remove water from the system. The drain valve is located outside containment between Penetration 21 and isolation valve SB-14320.



On November 10, 1991, fuel assemblies were being moved in the reactor core. A utility maintenance worker was assigned to work NPWO 3836. He entered containment and removed SR-14-8B at about 1430. Since shop preparation work for the NPWO had been in progress for a few days, the worker mistakenly believed all approvals had been previously acquired. The foreman had signed onto the clearance earlier but had not brought the NPWO to the Control Room to obtain permission to start work. Administrative Procedure 0010432, "Nuclear Plant Work Orders," states that the approval of the Nuclear Plant Supervisor (NPS), Assistant Nuclear Plant Supervisor (ANPS), or Nuclear Watch Engineer (NWE) is required prior to starting work. The NPWO was turned over to the next shift who brought it to the Control Room for approval. The ANPS reviewed the NPWO and did not approve it, realizing that the removal of the relief valve with the drain valve open should not be permitted. However, he was informed that the valve had already been removed. The ANPS then directed a nonlicensed operator to close the drain valve. Complete containment integrity was restored at 0210 on November 11, 1991.

A review of the Final Fuel Transfer Record indicates eleven fuel moves were performed in the reactor core between 1400 and 1808 on November 10, 1991.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION
REQUEST: 50.8 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS
AND REPORTS MANAGEMENT BRANCH (P-330), U.S. NUCLEAR REGULATORY COMMISSION,
WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE
OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
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.TEXT (If more space is required, use additional NRC Form 366A's) (17)

CAUSE OF EVENT

The root cause of the event is personnel error by utility Mechanical Maintenance department personnel. The error was contrary to approved plant procedure, which requires approval from the NPS, ANPS, or NWE prior to starting work. There are no unusual characteristics of the work location that directly contributed to the error.

As a contributing factor, clearance controls were identified as a weakness. This clearance was written and hung while containment integrity existed and was required for refueling operations. While the clearance itself did not breach containment integrity, it involved valves known to be containment boundaries and did not provide specific guidance stating that the drain valve needed to be closed before the relief valve was removed.

ANALYSIS OF THE EVENT

Technical Specification 3.9.4, "Refueling Operations: Containment Penetrations," requires each penetration to be closed during core alterations. The removal of SR-14-8B with open drain valve V-14319 created a flow path across Penetration 21 from about 1430 on November 10, 1991, to 0210 on November 11, 1991. Eleven fuel moves were performed in the reactor core during this time interval. This event is reportable per 10 CFR 50.73.a.2.i.B, any condition or operation prohibited by Technical Specifications. Containment integrity is required during fuel movement to restrict radioactive material released from a fuel element rupture. No failures of fuel elements occurred during the time interval containment integrity was breached. In the event of a fuel element rupture, the amount of radioactive material released through a 1" line would be minimal. This is due to the lack of a pressurization potential associated with a refueling accident. Any material released would enter the Reactor Auxiliary Building, not the environment. Therefore, the health and safety of the public was not at risk during this event.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION
REQUEST: 50.8 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS
AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION,
WASHINGTON, DC 20535, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE
OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) St. Lucie Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 3 5	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

CORRECTIVE ACTIONS

- (1) Operations closed the drain valve and restored containment integrity.
- (2) The responsible foreman was counseled on his failure to follow procedures, i.e., failure to obtain the proper authorization prior to beginning work on plant systems. The event was also discussed with all Mechanical Maintenance crews.
- (3) A task team, lead by Operations, is reviewing the clearance procedure. Any necessary changes to the procedure related to this event will be made.
- (4) The event will be included as part of In House/Industry Events training, performed every quarter with journeymen, during the first quarter of 1992.
- (5) The Training Department will incorporate this event into the Licensed Operator Requalification Program.
- (6) An INPO Human Performance Enhancement System evaluation of this event was performed and its conclusions agree with this report.

ADDITIONAL INFORMATION

Component Failures

There are no component failures associated with this event.

Previous Similar Events

The most recent previous similar event was submitted in LER 335-81-044. In this event, holes were drilled in piping between the Main Steam Isolation Valve and containment, causing a breach of containment integrity, while fuel moves were being performed.