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December 1, 1993

L-93-297

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

Re: St. Lucie Unit 1
Docket No. 50-335
Reportable Event: 93-008
Date of Event: November 1, 1993
Inadvertent Start of the 1B Containment Spray Pump
due to Personnel Error

The attached Licensee Event Report is being submitted voluntarily
to provide notification of the subject event.

Very truly yours,

A handwritten signature in dark ink, appearing to read "D. A. Sager", written over a printed name.

D. A. Sager
Vice President
St. Lucie Plant

DAS/JWH/kw

Attachment

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

DAS/PSL #1022-93

070017

9312100180 931201
PDR ADDOCK 05000335
S PDR

an FPL Group company

A handwritten signature in dark ink, possibly reading "JWH", written in the bottom right corner of the page.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, 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 3

TITLE (4)

Inadvertent Start of the 1B Containment Spray Pump 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 NAME	DOCKET NUMBER
11	01	93	93	--008--	0	12	1	93	N/A	
									N/A	

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)	100	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)		<input checked="" type="checkbox"/> OTHER	
		20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		(Specify in Abstract below and in Text, NRC Form 366A)	
		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

James A. Hurchalla, Shift Technical Advisor

TELEPHONE NUMBER (Include 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
N/A	----	----	---	---					

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 15 single-spaced typewritten lines) (16)

On November 1, 1993, St. Lucie Unit 1 was in mode 1 operating at 100% steady state reactor power. At 0045, a licensed utility operator performing a valve stroke surveillance inadvertently started the 1B Containment Spray pump. No spray flow resulted from the pump start, which lasted approximately 4 seconds, because the header flow control valve was closed.

The root cause of this event was cognitive personnel error. A licensed utility operator inadvertently operated the wrong switch when attempting to cycle the containment spray valve for the stroke time surveillance.

The corrective actions for this event: the operator immediately stopped the pump and informed his supervisor, the individual was counseled on the importance of self checking, Operations supervision conducted a crew conference on the aspects of self verification, training on self-checking continues to be emphasized, and a Human Performance Enhancement Review was performed. Also, an enhancement to the Unit 1 and Unit 2 Containment Spray pump control switches will be made by February, 1994.

This Licensee Event Report is being submitted voluntarily. The header flow control valve was closed when the 1B Containment Spray pump was started. No Engineered Safety Feature logic circuitry was energized.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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FACILITY NAME (1)		DOCKET NUMBER (2)		LER NUMBER (6)			PAGE (3)
St. Lucie Unit 1		05000335		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
				93	--008--	0	

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

DESCRIPTION OF THE EVENT

On November 1, 1993, St. Lucie Unit 1 was in mode 1 at 100% steady state power. A licensed utility reactor control operator (RCO) was performing a surveillance under Administrative Procedure AP 2-00010125, "Schedule of Periodic Tests, Checks, and Calibrations". At approximately 0045 the RCO was preparing to perform the Containment Spray (EIIIS:BE) header flow control valve stroke surveillance for FCV-07-1B. The procedure directs the RCO to cycle the valve through one complete cycle. The RCO placed his hand on the control switch for the Containment Spray pump switch and consulted the procedure to ensure he was taking the proper action. Upon verifying the appropriate step he realized that manipulation of the Containment Spray pump control switch was not part of the evolution and focused on the appropriate task which was to cycle the header flow control valve FCV-07-1B. Without realizing he had not moved his hand to the control switch for FCV-07-1B, he then manipulated the 1B Containment Spray pump switch which resulted in the starting of the pump. He observed Containment Spray pump amps increase, immediately realized the pump had started and then secured the pump. No spray flow resulted from the pump start since the header flow control valve had not been manipulated and remained closed during this time. The RCO informed the Assistant Nuclear Plant Supervisor and they determined that there were no indications of spray flow. Sequence of Events Recorder printouts indicated that the pump was run for four seconds. After a discussion of the event between the RCO and onshift supervision the flow control valve surveillance was completed satisfactorily.

CAUSE OF THE EVENT

The root cause of the event was cognitive personnel error by the licensed utility operator performing the surveillance. The RCO performed initial self verification when performing the surveillance and referenced the procedure which he had in hand, but he failed to continuously use the self checking philosophy upon discovering that the procedure had been revised. This surveillance procedure had previously required that the associated pump control switch be moved to the STOP position prior to cycling the header flow control valve. This step was determined to represent a human factors concern during a previous LER and was removed from the procedure in October, 1992.

A Human Performance Enhancement System review of this event concurs that it was a failure to repeat self checking actions after the initial actions which resulted in the containment spray pump switch being mistakenly manipulated. The two control switches are located adjacent to one another, are similar in appearance and labeling style, but the component identification is clearly marked. The RCO stated that he did not misidentify the switches; rather he failed to move to the proper control switch upon realizing that he did not need to position the containment spray pump switch. There were no other characteristics of the work location which contributed to this event.

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St. Lucie Unit 1		05000335		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
				93	--008--	0	

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

ANALYSIS OF THE EVENT

This event is being reported voluntarily for informational purposes.

The header flow control valve FCV-07-1B was fully closed prior to starting the 1B Containment Spray pump and remained fully closed during the time that the sequence of events recorder indicated that the pump was running. There was no initiation of spray flow to containment. In addition, no Engineered Safety Features Actuation System initiation or actuation logic was completed during this event. Finally, during this event both trains of the Containment Spray system remained operable at all times.

The health and safety of the public were not affected by this event.

CORRECTIVE ACTIONS

- 1) The RCO immediately secured the 1B Containment Spray pump.
- 2) The RCO was counseled by Operations supervision on the importance of self verification when performing surveillances.
- 3) Conferences were held among the operating crews by Operations supervision to discuss the importance of self checking in relation to this event and re-emphasize the management expectations in this area.
- 4) Training is continuing to emphasize the St. Lucie self-verification program (STOP) in both licensed operator initial and requalification training.
- 5) Human Factors enhancements to the Containment Spray pump control switches on both Unit 1 and Unit 2 will be made by February, 1994.
- 6) A Human Performance Enhancement System review was performed for this event and the conclusions incorporated in the root cause and corrective actions of this report.

ADDITIONAL INFORMATION

Component Failures: None

Previous Similar Events

A previous similar event was LER 335-85-006, Inadvertent Actuation of Containment Spray Pump. The primary corrective action in that LER was counseling of the RCO. Another similar event was LER 389-92-007, Inadvertent Start of the 2B Containment Spray Pump Due to Personnel Error. The primary countermeasure for that event was a procedure change to eliminate removing the Containment Spray pump from service during this surveillance. For this LER, a progressive countermeasure to eliminate recurrence of this event is to make a human factors enhancement to the pump control switches.