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)
CRYSTAL RIVER UNIT 3	0 5 0 0 0 3 0 2	1 OF 0 3

TITLE (4)
UNPLANNED ACTUATION OF ENGINEERED SAFEGUARDS SYSTEM

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
0 7	2 9	8 5	8 5	—	0 0 8	— 0 0	0 8	2 8	8 5	N/A	0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
	5	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 0 0	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)	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
	AREA CODE
W. K. Bandhauer, Nuclear Safety Supervisor	9 0 4 7 9 5 - 6 4 8 6

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)

On July 29, 1985, while in Cold Shutdown (Mode 5) recovering from Refuel V Outage, Crystal River Unit 3 experienced actuation of the Engineered Safeguards System. Surveillance Procedure SP-132, "Engineered Safeguards Channel Calibration" was in progress at approximately 0130 when the control board operator performed an incorrect switch manipulation which caused the "B" train of the Low Pressure Injection (LPI) subsystem to be actuated. All available LPI equipment functioned as designed. When the actuation was recognized as spurious, it was reset and the LPI equipment was returned to standby condition.

The actuation was caused by the operator inadvertently placing a reset switch in the wrong position. The operator was counseled on verifying proper control switch designation and position prior to operating the switch and on proper procedural compliance.

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

EVENT DESCRIPTION

On July 29, 1985, while in Cold Shutdown (Mode 5) recovering from Refuel V Outage, Crystal River Unit 3 experienced a partial actuation of the Engineered Safeguards System (JE). The Reactor Coolant System (AB) pressure was less than 500 psig, which is the actuation setpoint for the Low Pressure Injection (LPI) (BP) subsystem of the Emergency Core Cooling System (ECCS), and Actuation Channels 1, 2, and 3 of both trains of LPI were bypassed in accordance with plant procedures. Surveillance Procedure SP-132, ES Channel Calibration, was in progress on the LPI portion of the "B" train. Actuation Channel 1 was in the tripped condition in accordance with this Surveillance Procedure. When the control board operator (Reactor Operator, licensed) started the recovery of Actuation Channel 1, he inadvertently placed the Actuation Channel 3 switch to the "RESET" position instead of placing the Actuation Channel 1 switch to the "BYPASS" position. This removed the bypass on Actuation Channel 3, momentarily gave a tripped indication on Actuation Channel 3, and completed the two out of three logic necessary to cause LPI actuation. Upon actuation, all components in the LPI subsystem responded as designed, including an automatic start of the "B" Emergency Diesel Generator (EK, DJ). The high pressure injection subsystem (HPI) of the Emergency Core Cooling System could not actuate due to the Mode 5 restraint which removes the power breakers for the HPI pump motors. The HPI discharge valves did stroke to midposition as designed.

The control board operator was immediately notified by the auxiliary building operator of the "B" Emergency Diesel Generator start and quickly recognized his error in switch manipulation. Actuation Channels 1 and 3 of the LPI subsystem were returned to the bypassed condition and all components which had actuated were returned to their standby status.

This operator, who has several years of control board experience, made an error and used the procedure for restoration from an inadvertent actuation at power instead of the Actuation Channel restoration procedure. Restoration from an inadvertent actuation at power would include, as a first step, placing the Actuation Channel 3 switch in the "RESET" position rather than placing the Actuation Channel 1 switch in the "BYPASS" position. This action led directly to the inadvertent LPI subsystem actuation.

SAFETY CONSIDERATIONS

The High Pressure Injection subsystem was out of service per plant shutdown procedure due to low temperature overpressurization mitigation concerns. The Low Pressure Injection subsystem of the Emergency Core Cooling System functioned as designed and therefore, this event did not impact plant safety. This specific event could not occur at power because the three Actuation Channels would already be reset and would not be susceptible to inadvertent reset of the Actuation Channel bypasses.

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

CORRECTION ACTION

The control board operator involved was counseled on the need to verify proper control switch designation and required position prior to manipulation of a switch and on the need for strict procedural compliance. The procedure involved was reviewed and found acceptable.

PREVIOUS SIMILAR EVENTS

There have been eight previous occurrences of inadvertent Engineered Safeguards System actuations. One previous event was caused by personnel error.

Florida Power
CORPORATION

August 28, 1985
3F0885-17

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

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
Licensee Event Report No. 85-008-00

Dear Sir:

Enclosed is Licensee Event Report (LER) No. 85-008-00 which is submitted in accordance with 10 CFR 50.73.

Should there be any questions, please contact this office.

Sincerely,

G. R. Westafer

G. R. Westafer
Manager, Nuclear Operations
Licensing and Fuel Management

AEF/feb

Enclosure

cc: Dr. J. Nelson Grace
Regional Administrator, Region II
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
101 Marietta Street N.W., Suite 2900
Atlanta, GA 30323

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