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ACCESSION NBR: 8704280384 DOC. DATE: 87/04/21 NOTARIZED: NO DOCKET #
FACIL: 50-335 St. Lucie Plant, Unit 1, Florida Power & Light Co. 05000335
AUTH. NAME AUTHOR AFFILIATION
POWELL, J. M. Florida Power & Light Co.
WOODY, C. O. Florida Power & Light Co.
RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-006-00: on 870322, spurious main steam isolation occurred when energized wires inadvertently allowed to make contact w/metal cabinet. Caused by personnel error. Personnel instructed on working w/energized ESFAS. W/870421 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD2-2 LA	1	1	PD2-2 PD	1	1
	TOURIGNY, E	1	1			
INTERNAL:	ACRS MICHELSON	1	1	ACRS MOELLER	1	1
	AEOD/DOA	1	1	AEOD/DSP/ROAB	2	2
	AEOD/DSP/TPAB	1	1	NRR/DEST/ADE	1	0
	NRR/DEST/ADS	1	0	NRR/DEST/CEB	1	1
	NRR/DEST/ELB	1	1	NRR/DEST/ICSB	1	1
	NRR/DEST/MEB	1	1	NRR/DEST/MTB	1	1
	NRR/DEST/PSB	1	1	NRR/DEST/RSB	1	1
	NRR/DEST/SGB	1	1	NRR/DLPQ/HFB	1	1
	NRR/DLPQ/QAB	1	1	NRR/DOEA/EAB	1	1
	NRR/DREP/EPB	1	1	NRR/DREP/RAB	1	1
	NRR/DREP/RPB	2	2	NRR/PMAS/ILRB	1	1
	NRR/PMAS/PTSB	1	1	REG FILE 02	1	1
	RES SPEIS, T	1	1	RGN2 FILE 01	1	1
EXTERNAL:	EG&G GROH, M	5	5	H ST LOBBY WARD	1	1
	LPDR	1	1	NRC PDR	1	1
	NSIC HARRIS, J	1	1	NSIC MAYS, G	1	1

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NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
St. Lucie, Unit 1	0 5 0 0 0 3 3 5	1 OF 0 3

TITLE (4)
INADVERTENT MAIN STEAM ISOLATION SIGNAL WHILE SHUTDOWN 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)
0 3	2 2	8 7	8 7	— 0 0 6	— 0 0	0 4	2 1	8 7	N/A	0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 0 0	20.402(b)	20.405(c)	X 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)	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
J. M. Powell, Shift Technical Advisor	AREA CODE 3 0 5 — 4 6 5 - 3 5 5 0

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)

ABSTRACT

While Unit 1 was in Mode 5, a spurious main steam isolation signal occurred when utility Instrument and Controls personnel performing maintenance on steam generator pressure transmitters inadvertantly allowed energized wires to make contact with the side of a metal cabinet. The components actuated by the signal were not in service at the time of the event as the unit was shut down for a scheduled refueling outage. There were no safety consequences of the event as the reactor was shut down in Mode 5.

Short-term corrective actions included resetting the spurious main steam isolation signal and de-energizing the remaining transmitter loops while maintenance was in progress. Long-term corrective actions included instructing the I & C supervisors on the importance of considering the ramifications of working on Energized Engineered Safety Feature Actuation System (EIIS:JE) channels. The plant Training Department will evaluate this event to determine the appropriate training requirements and methods.

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

DESCRIPTION OF EVENT

At 2314 hours on March 22, 1987, while Instrumentation and Controls (I&C) department technicians were performing maintenance on Steam Generator (S/G) Pressure instrumentation loops, a spurious Main Steam Isolation Signal (MSIS) was actuated on low S/G pressure through the St. Lucie Unit One Engineered Safety Features Actuation System (ESFAS) (EIIS:JE). The Unit was in Mode 5 at the time of the event, with the reactor head bolted and reactor level at mid-nozzle. The Reactor Coolant System temperature and pressure were 90 degrees and atmospheric, respectively. As the Unit was shutdown for a normally scheduled refueling outage, the components normally actuated by the MSIS were not in service at the time of the event. The signal was immediately reset, and power was removed from the remaining channels to prevent a reoccurrence of the spurious signal.

Prior to the event, I&C technicians were replacing Conax connectors on the energized S/G pressure instrumentation loops. Two pressure transmitter channels, D and C, sequentially shorted when hot cables were inadvertantly allowed to touch the sides of the transmitter cabinet. The resulting current to the loops caused the transmitters to peg high, and then drop when current was removed. A block permissive signal, which is provided to permit shutdown depressurization of the main steam system without initiating a MSIS, was automatically removed when the steam generator pressure indicated greater than 670 psia. When current stopped flowing through the loops, the pressure signal dropped and the MSIS logic was made up first on the D channel, and then on the C, resulting in the spurious ESFAS actuation on low S/G pressure.

CAUSE OF EVENT

The cause of the event was a cognitive personnel error by a utility maintenance supervisor in allowing technicians under his supervision to work on energized ESFAS loops.

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

ANALYSIS OF EVENT

This event has been deemed reportable as per 10CFR50.73.a.2.iv, any event or condition resulting in manual or automatic actuation of any Engineered Safety Feature.

There were no safety consequences of this event as the reactor was shut down at the time of the MSIS actuation. The function of the MSIS is to terminate blowdown of steam from the steam generators and normal feedwater flow to the steam generators in the event of a steam line break accident, and to effect isolation of the main steam lines in event of a LOCA. As the reactor coolant system was at ambient temperatures at the time of the event, no protection was required. Therefore, the health and safety of the public were at no time threatened.

CORRECTIVE ACTIONS

1. The main steam isolation signal was immediately reset upon verification that the signal was spurious.

2. The I&C Supervisors were instructed on the importance of considering the potential ramifications of performing maintenance on energized ESFAS channels. The Supervisor involved has recognized the error and appreciates the need to exercise care when working on these loops.

3. The St. Lucie Plant Training Department will evaluate this event to determine the appropriate training requirements and methods.

ADDITIONAL INFORMATION

Component failures

There were no component failures identified during the event.

Previous similar events

For a previous spurious Engineered Safeguard Actuation, see LER 335-87-003.

BOX 14000, JUNO BEACH, FL 33408

FLORIDA POWER & LIGHT COMPANY

APRIL 21 1987

L-87-181
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: 87-06
Date of Event: March 22, 1987
Inadvertent Main Steam Isolation Signal
While Shutdown Due to Personnel Error

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

Very truly yours,

C. O. Woody
Group Vice President
Nuclear Energy

COW/GRM/gp

Attachment

cc: Dr. J. Nelson Grace, Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, St. Lucie Plant

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