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)
Turkey Point Unit 4	0 5 0 0 0 2 5 1	1 OF 0 2

TITLE (4)

Engineered Safety Feature Actuation - Reactor Trip

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 6	2 6	8 4	8 4	0 1 4	0 0	0 7	2 5	8 4	N/A	0 5 0 0 0
									N/A	0 5 0 0 0

OPERATING MODE (9)	N	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
Randall D. Hart, Licensing Engineer	AREA CODE 3 0 5 2 4 5 - 2 9 1 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	
B	I G	D E T	W 1 2 0	Y							

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 June 26, 1984, Unit 4 experienced a reactor trip while at hot shutdown conditions. The root cause was due to a source range detector, N-32, that failed high above the reactor trip setpoint. Reactor power was below the P6 permissive which unblocks the reactor trip logic for a source range high neutron flux level at shutdown trip. Therefore, when N-32 failed high, the reactor trip logic was completed and a reactor trip occurred. All equipment functioned as designed on initiation of the Engineered Safety Feature Actuation Signal (ESFAS). Immediate corrective actions included: 1) I and C switched the failed detector for N-32 with the spare detector for refueling, 2) N-32 was recalibrated by I and C, and 3) Operations performed a source range periodic functional test on both source range detectors N-32 and N-31. Subsequently, on July 16, 1984, the failed detector was replaced and the system returned to normal configuration. The health and safety of the public were not affected. Similar occurrences: None.

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(9-83)

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Turkey Point Unit 4	0 5 0 0 0 2 5 1	8 4	0 1 4	0 0	0 2 OF 0 2

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

On June 26, 1984, at 11:23 a.m., the Unit 4 reactor tripped from hot shutdown conditions while the unit was being made subcritical for practice start-ups. The root cause was determined to stem from a source range detector, N-32, that failed high above the reactor trip setpoint while power was below the P6 permissive.

When both intermediate range detectors decrease their readings to below 10^{-10} amps, the source range detectors energize and begin reading in counts per second. When N-32 energized, it failed high (at 4×10^5 cps). This fulfilled the reactor trip logic for a source range high flux at shutdown (1 out of 2 channels) reactor trip. The unit was stabilized and I and C was called to investigate the problem and effect repairs. They found that the detector was bad and proceeded to switch N-32 to the spare refueling detector. Operations commenced and completed a source range periodic functional test on both N-32 and N-31. I and C calibrated N-32 with high voltage and discriminator adjustments as per operating procedure. The calibration was completed and N-32 was returned to service and released to Operations. The unit was returned to power operation at approximately 4:33 p.m., on June 27, 1984. On July 16, 1984, the failed detector was replaced and the system returned to normal configuration.

FLORIDA POWER & LIGHT COMPANY

July 25, 1984
PNS-LI-84-257

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

Gentlemen:

Re: Reportable Event 84-14
Turkey Point Unit 4
Date of Event: June 26, 1984
Engineered Safety Feature
Actuation - Reactor Trip

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

Very truly yours,

H. D. Johnson II

for J. W. Williams, Jr.
Group Vice President
Nuclear Energy

JWW/PLP/js

Attachment

cc: J. P. O'Reilly, Region II, USNRC
Harold F. Reis, Esquire
File 933.1 TP

IE22
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