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 3	0 5 0 0 0 2 5 0	1 OF 0 2

TITLE (4)
Intake Cooling Water 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)
0 9	2 3	8 4	8 4	0 2 5	0 0	1 0	2 3	8 4	Turkey Point Unit 4	0 5 0 0 0 2 5 1
									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)	1 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	X 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	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		0 2	0 1	8 5

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

On September 23, 1984, while Unit 3 was at 100% power and Unit 4 was at 50% power, the results of performance tests and preliminary engineering evaluation on the Intake Cooling Water (ICW) System revealed the Component Cooling Water (CCW) System heat exchangers (HX) may not meet the design heat removal capability under design ICW inlet conditions. The tests and engineering evaluation of the ICW System were performed after a concern was raised with plant management on the performance of the ICW System. The original concerns were a flow restriction in the ICW System piping and a temporary repair to a section of ICW piping. The Plant Nuclear Safety Committee (PNSC) reviewed the performance tests, the engineering evaluations and determined the ICW and CCW Systems were capable of performing their safety functions under current ICW inlet conditions. In addition, the following short term corrective actions were implemented:

1) A temporary Limiting Condition for Operation (LCO) based on ICW System inlet temperature, pump, and HX arrangement was established immediately.

2) Engineering performed a 10 CFR 50.59 evaluation of the temporary repair to a section of ICW piping and found no unreviewed safety questions.

3) Operating procedures were modified to address the actions to be taken during off-normal conditions of the ICW System.

4) Additional performance tests and inspections have been identified to determine the root cause and permanent corrective actions.

The health and safety of the public were not affected. Significant event notification was made to NRCOC via ENS pursuant to 10 CFR 50.72(B)(2)(iii). Additional details on the short and long term corrective actions may be found in the accompanying text. Similar occurrences: None.

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

On September 23, 1984, while Unit 3 was at 100% power and Unit 4 was at 50% power, a preliminary engineering evaluation of the Intake Cooling Water (ICW) System performance test results revealed the Component Cooling Water (CCW) heat exchangers (HX) may not meet design heat removal capability under design ICW inlet conditions. These tests were initiated after a concern was raised to plant management on the performance of the ICW System. The concern was that a flow restriction on the discharge of the ICW pumps combined with design ICW inlet temperature of 95°F would reduce the heat removal capability of the system to less than Final Safety Analysis Report (FSAR) assumptions and that leakage from a temporary patch on the ICW piping would impact flow requirements and integrity of the system. The Plant Nuclear Safety Committee (PNSC) reviewed 10 CFR 50.59 operability and design evaluations performed by Engineering to justify operation in the current ICW System configuration as an interim measure until efforts are completed to restore the system to the original configuration described in the FSAR. In addition, the PNSC reviewed the 10 CFR 50.59 evaluations of the temporary ICW System pipe patch and determined that there was no unreviewed safety question. The immediate corrective actions taken by plant management included establishment of a temporary Limiting Condition for Operation based on ICW inlet temperature, pump and HX configuration with a 24 hour action statement if operability requirements cannot be met. Short term corrective actions implemented included:

1) A surveillance program has been developed to monitor the performance of the CCW HX. As part of this program, Engineering will evaluate the need for hardware changes to determine system losses and HX performance; Mechanical Maintenance has inspected, cleaned and recorded the present CCW HX conditions; the plant performance group developed a HX efficiency test to record base line clean HX operability data. The data from the HX efficiency test will be used to develop acceptance criteria for future CCW HX performance and operability tests.

2) All instrumentation used during testing and by Operations to assure operability requirements will be in the periodic calibration program.

3) Engineering is performing additional tests and evaluations of system performance to determine the root cause for ICW System flow degradation to the CCW System HX and the necessary system requirements to remove the present operating constraints concerning the ICW inlet temperature.

4) The Operations Department has reviewed operating procedures to address the actions necessary during off-normal conditions when either one or two CCW HX fail acceptance criteria.

5) A test has been developed and will be conducted to determine system flow losses of the ICW System on Unit 3.

6) Procedure changes to incorporate ICW operability requirements will be completed prior to the PNSC review of the procedure updates.

The results of the above tests will be analyzed and should further actions or modifications be necessary, an LER update will be submitted describing such actions.

FPL

FLORIDA POWER & LIGHT COMPANY

October 23, 1984
L-84-293

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

Gentlemen:

Re: Reportable Event 84-25
Turkey Point Unit 3
Date of Event: September 23, 1984
Intake Cooling Water System

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,

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
PNS-LI-84-378-1

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PEOPLE . . . SERVING PEOPLE