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)
Turkey Point Unit 4	0 5 0 0 0 2 5 1	1 OF 0 3

TITLE (4)
Inadvertent Component Cooling Water Pump Auto-Start

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 1	1 2	8 7	8 7	- 0 0 2	- 0 0	0 2	1 1	8 7		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)				
	1	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)	
POWER LEVEL (10)	1 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
Gabe Salamon	AREA CODE 3 0 5 2 4 6 - 1 3 0 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)	NO				

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

On January 12, 1987, at 1805, with Unit 4 at 100% power, the 4B Component Cooling Water Pump (CCWP) Header Low Pressure alarmed and the 4B CCWP auto started. As the 4A CCWP was running at this time, it was suspected of degraded performance which would result in low header pressure, and it was declared out of service (OOS). The CCW header low pressure sensing switch (PC-611) was checked out and the set point was found to be within the acceptance criteria. Testing indicated proper performance of each CCWP. An inspection of the 4A CCWP breaker and the 4B start delay relay was performed and no abnormal indications were found. A review of the operators logs and discussions with the operators did not discover any activity which could have resulted in decreasing the CCW header pressure at the time of the event. Tests verified proper system performance upon sensing low header pressure, and to verify the actual start time delay relays' performance. The Agastats on the 3 Unit 4 pumps were adjusted to correct the as-found time delays. The as-found time delays were slightly longer than indicated, and therefore, the relays could not have initiated the event. A complete check out showed the system to function as designed, with no equipment faults identified.

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

EVENT

On January 12, 1987, at 1805, with Unit 4 at 100% power, the 4B Component Cooling Water Pump (CCWP) Header Low Pressure alarmed and the 4B CCWP auto started. No plant evolutions were taking place at this time. As the 4A CCWP was running at this time, it was suspected of degraded performance which would result in low header pressure, and it was declared out of service (OOS). Following the event, the three CCWP's were tested with satisfactory results.

CAUSE OF EVENT

The cause of the low pressure auto-start of the CCWP was investigated. The CCW header low pressure sensing switch (PC-611) was checked out and the as-found setpoint was 80 psig. The acceptance criteria for PC-611 specified 78.5 (+/-5) psig, and therefore PC-611 was set properly. Proper operation of PC-611 was verified. The 3 Unit 4 CCWP's were run, one at a time, and the discharge pressure was observed to be between 86.5 and 87.5 psig for each pump. Testing following the event indicated proper pump performance of each pump. A visual inspection of the 4A CCWP breaker was performed, as a momentary power interruption due to a breaker malfunction may cause pump 4A to start a coast-down, with a consequent decrease of CCW header pressure. An inspection of the 4B CCWP start delay relay (Agastat) was also performed to assure that the relay was physically intact and that the time delay was set properly. If the time delay is too short, a brief drop in header pressure could result in the auto-start of a pump. These inspections found no abnormal indications. A review of the operators logs and discussions with the operators did not discover any activity which could have resulted in decreasing the CCW header pressure at the time of the event. Tests were run to verify proper performance upon sensing low header pressure, and to verify the actual start time delay relays' performance. The Agastats on the 3 Unit 4 pumps were adjusted to correct the as-found time delays. The as-found time delays were slightly longer than indicated, and therefore the relays could not have initiated the event.

The complete check out of the pumps and the auto-start on low CCW header pressure control system showed the system to function as designed, with no equipment fault identified. The 3 Unit 4 CCWP's were run, one at a time, resulting in correct pressure indication. Based on this detailed inspection, no apparent root cause for the 4B CCWP automatic start could be found.

ANALYSIS OF EVENT

The Unit 4 CCWP's were demonstrated operable. No indication of actual low CCW header pressure was found. Based on the above, the health and safety of the public were not affected.

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

CORRECTIVE ACTION

1) The CCW header low pressure sensing switch was checked out and found to be operating properly.

2) Testing of the pumps subsequent to the event indicated proper pump performance.

3) Inspection of the 4A CCWP breaker and the 4B start delay relay revealed no degraded components.

4) Tests were run confirming proper system performance upon sensing low header pressure.

ADDITIONAL DETAILS

The CCW pumps are horziontally mounted, single stage centrifugal pumps manufactured by Worthington Pump Inc.
Similar occurrences: none.

P. O. BOX 14000, JUNO BEACH, FL 33408-0420

FPL

FEBRUARY 11 1987
L-87-63
10 CFR 50.73

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

Gentlemen:

Re: Reportable Event 87-02
Turkey Point Unit 4
Docket No. 50-251
Date of Event: January 12, 1987
Inadvertent Component Cooling Water Pump Auto-Start

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

Very truly yours,

for C. O. Woody
Group Vice President
Nuclear Energy

COW/PLP/gp

Attachment

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

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