

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Turkey Point Unit 4										DOCKET NUMBER (2) 0 5 0 0 0 2 5 1 1 OF 0 2										PAGE (3) 1 OF 0 2									
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TITLE (4) Auxiliary Feedwater System Train Declared Out of Service Due to Failed Valves																													
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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			8			2			1			8			6			8			6			0			1			5			0			0			0			9			2			2			8			6			N/A						0 5 0 0 0 0					
0			8			2			1			8			6			8			6			0			1			5			0			0			0			9			2			2			8			6			N/A						0 5 0 0 0 0					

OPERATING MODE (9) 2										THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)																																							
POWER LEVEL (10) 0 0 1										20.402(b)										20.405(c)										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)(ix)																													

LICENSEE CONTACT FOR THIS LER (12)																				TELEPHONE NUMBER									
NAME G. Salamon, Compliance Engineer																				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 NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS		
B	B	A	I	S	I	V	A	I	S	I	V	A	I	S	I	V

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 7									

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

Event: On August 20, 1986, at 1145, and on August 21, at 0040, with both Units 3 and 4 in mode 2, Technical Specification (TS) 3.0.1 was entered due to Train 1 of Auxiliary Feedwater (AFW) being declared out of service (OOS). On August 20, TS 3.0.1 was entered due to valve MOV-4-1404 failing to close during testing per Preoperational Procedure 0800.111, "AFW Steam Supply Replacement Valve Test-Unit 4". On August 21, TS 3.0.1 was entered because during testing per Preoperational Procedure 0800.111, valve 10-4-383, failed to seat properly. Therefore, per procedure 4-OP-075, "Auxiliary Feedwater System", one of the two trains of AFW to Unit 4 was not operable. After MOV-4-1404 was declared OOS, the valve was returned to operability prior to the reactor having to be placed in hot standby. On August 21, a cooldown of Unit 4 to below 350°F was initiated. Following cooldown, valve 10-4-383 was replaced. After the completion of additional maintenance, Unit 4 returned to criticality at 1615, on August 23. Valve 10-4-383 was successfully tested per POP 0800.111 at 2230 on August 23, 1986.

Cause of event: Valve MOV 4-1404 failed to close due to a wire bundle being pressed up against the torque switch close contact spring, keeping the contact open. The reason for the failure to seat of valve 10-4-383 is not known. The valve will be returned to the manufacturer, for root cause evaluation. A LER update will be submitted upon receipt of the results of the evaluation.

## Corrective action:

- 1) The wire bundle was moved out of the way, and the valve was successfully stroked 5 times.
- 2) The two other similar valves on Unit 4 were inspected to verify that no wire bundles could interfere with valve operation.
- 3) Valve 10-4-383 was replaced with a new valve, and will be sent back to the manufacturer in order to perform a root cause evaluation.
- 4) The similar check valves recently installed on Unit 4 under plant change modification (PC/M) 86-009, Auxiliary Feedwater Steam Supply Valve Replacement, were satisfactorily tested as per POP 0800.111.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Turkey Point Unit 4	0 5 0 0 0 2 5 1	8 6	— 0 1 5 —	0 0	0 2	OF	0 2

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

## Event:

On August 20, 1986, at 1145, and on August 21, at 0040, with both Units 3 and 4 in mode 2, Unit 4 entered Technical Specification (TS) 3.0.1 due to Train 1 of Auxiliary Feedwater (AFW) being declared out of service (OOS). On August 20, TS 3.0.1 was entered due to valve MOV-4-1404, failing to close during testing per Preoperational Procedure 0800.111, "AFW Steam Supply Replacement Valve Test-Unit 4". On August 21, TS 3.0.1, was entered because during testing per Preoperational Procedure 0800.111, valve 10-4-383, one of the replacement 4C Steam Generator Steam Supply Check Valves, did not meet the acceptance criteria for leakage. Therefore, per procedure 4-OP-075, "Auxiliary Feedwater System", one of the two trains of AFW to Unit 4 was not operable. TS 3.8.4.b requires two independent AFW trains and a third AFW pump to be operable when both reactors are above hot shutdown. After MOV-4-1404 was declared OOS, the valve was returned to operability prior to the reactor having to be placed in hot standby. On August 21, after AFW train 1 was again declared OOS, a cooldown of Unit 4 to below 350°F was initiated, per TS 3.0.1. Following cooldown, valve 10-4-383 was replaced. After the completion of additional maintenance, Unit 4 returned to criticality at 1615, on August 23, 1986. Valve 10-4-383 was successfully tested per POP 0800.111 at 2230 on August 23, 1986.

## Cause of event:

Valve MOV 4-1404 failed to close due to a wire bundle being pressed up against the torque switch close contact spring, keeping the contact open. The reason for the failure to meet the leakage acceptance criteria of valve 10-4-383 was failure of the valve to seat properly. The cause of the valve failure to seat properly is not known. The valve will be returned to the manufacturer, Anchor/Darling, for root cause evaluation. A LER update will be submitted upon receipt of the evaluation.

## Analysis of event:

During the time valve 10-4-383 was OOS, AFW steam supply trains 1 and 2 from Unit 3 were operable. Also one steam supply in train 1 and steam supply train 2 from Unit 4 were operable. Either unit can supply steam to the AFW pumps. Based on the above, the health and safety of the public were not affected.

## Corrective action:

- 1) The wire bundle was moved out of the way, and the valve was successfully stroked 5 times.
- 2) The two other similar valves on Unit 4 were inspected to verify that no wire bundles could interfere with valve operation.
- 3) The results of POP 0800.111 were reviewed and a decision was made to replace 10-4-383 with a new valve. The old valve will be sent back to the manufacturer to determine a root cause for the failure.
- 4) The similar check valves recently installed on Unit 4 under plant change modification (PC/M) 86-009, Auxiliary Feedwater Steam Supply Valve Replacement, were satisfactorily tested as per POP 0800.111.

Additional Details: Manufacturer: Anchor/Darling. Model No.: W800149

Similar Occurrences: None



SEPTEMBER 22 1986

L-86-379

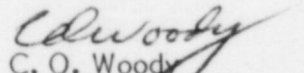
U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Gentlemen:

Re: Reportable Event 86-15  
Turkey Point Unit 4  
Date of Event: August 23, 1986  
Auxiliary Feedwater System Train Declared  
Out of Service Due to Failed Valves

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

Very truly yours,

  
C. O. Woody  
Group Vice President  
Nuclear Energy

COW/RG/gp

Attachment

cc: Dr. J. Nelson Grace, Region II, USNRC  
Harold F. Reis, Esquire

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