

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Turkey Point Unit 4	DOCKET NUMBER (2) 0 5 0 0 0 2 5 1	PAGE (3) 1 OF 0 2
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TITLE (4)  
Auxiliary Feedwater Flow Control Valve Failure to Open Fully Due to Corroded Terminals

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 4 8 6	3 6	0 1 8	0 0	0	9	2 3 8 6	N/A			0 5 0 0 0		
									N/A			0 5 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 0	<input type="checkbox"/> 20.462(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)						
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)							
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input checked="" type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)							
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)								

LICENSEE CONTACT FOR THIS LER (12)

NAME G. Salamon, Compliance Engineer	TELEPHONE NUMBER AREA CODE: 3 0 5 2 4 6 - 1 3 0 1 0
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRRDS

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH DAY YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

Event:  
On August 24, 1986 at 0230, with both Units 3 and 4 in Mode 2, Unit 4 entered Technical Specifications (TS) 3.0.1 due to train 2 of Auxiliary Feedwater (AFW) being declared out of service (OOS). During the performance of test 4-OSP-075.2, "Auxiliary Feedwater Train 2 Operability Verification", Valve CV-4-2831, the AFW flow control valve to the 'A' steam generator (S/G) failed to open fully; therefore, one train of AFW was not available to the 'A' S/G. The valve opened to about 70% of full travel instead of the required 80% to 85%. Troubleshooting and repair of the valve was completed at 0307. As the repair and post maintenance testing was completed in less than one hour, the unit was not required to be placed in hot standby.

Cause of event:  
Valve CV-4-2831 failed to open fully due to the current to pressure conversion module (I/P) having a terminal with some corrosion resulting in high electrical resistance and lower than required current. The low current resulted in low instrument air pressure to the valve operator, with the consequent failure to open fully. The apparent root cause of the corrosion on the terminal was the presence of water within the I/P module. At the time of this event the internals of the I/P module and the subject terminal were dry.

Corrective action:  
The corroded I/P terminal was cleaned, and proper valve operation was verified. The corrective action of LER 250-86-31 was also implemented, prior to this event.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

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

Event:

On August 24, 1986 at 0230, with both Units 3 and 4 in Mode 2, Unit 4 entered Technical Specifications (TS) 3.0.1 due to train 2 of Auxiliary Feedwater (AFW) being declared out of service (OOS). During the performance of test 4-OSP-075.2, "Auxiliary Feedwater Train 2 Operability Verification", Valve CV-4-2831, the AFW flow control valve to the 'A' steam generator (S/G) failed to open fully; therefore, one train of AFW was not available to the 'A' S/G. The valve opened to about 70% of full travel instead of the required 80% to 85%. Troubleshooting and repair of the valve was completed at 0307. As the repair and post maintenance testing was completed in less than one hour, the unit was not required to be placed in hot standby.

Cause of event:

Valve CV-4-2831 failed to open fully due to the current to pressure conversion module (I/P) having a terminal with some corrosion resulting in high electrical resistance and lower than required current. The low current resulted in low instrument air pressure to the valve operator, with the consequent failure to open fully. The apparent root cause of the corrosion on the terminal was the presence of water within the i/P module. At the time of this event the internals of the I/P module and the subject terminal were dry.

Analysis of event:

During the time valve CV-4-2831 was OOS, AFW train 1 was operable, and AFW was available to Steam Generators B and C from train 2. Even though valve CV-4-2831 could open to about 70% of full travel, while it was OOS, the valve was capable of delivering the design flow of 125 gpm in that position. Based on the above, the health and safety of the public were not affected.

Corrective action:

- 1) The corroded I/P terminal was cleaned, and proper valve operation was verified.
- 2) The problem of water accumulating within the I/P case has been corrected, as reported in LER 250-86-31.

Additional Details: Similar Occurrences: LER 250-86-31



SEPTEMBER 24 1986

L-86-385

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

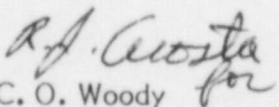
Gentlemen:

Re: Reportable Event 86-18  
Turkey Point Unit 4  
Date of Event: August 24, 1986  
Auxiliary Feewater Flow Control Valve Failure  
to Open Fully Due to Corroded Terminal

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

This LER is being transmitted one day late due to a processing problem.

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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