

LICENSEE EVENT REPORT

CONTROL BLOCK:

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(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

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7	8	14						15	25										26	30					57	CAT	58		
		LICENSEE CODE							LICENSE NUMBER											LICENSE TYPE									

CON'T

0 1
7 8

REPORT SOURCE L 6 0 5 0 0 0 2 6 1 7 0 6 1 9 8 1 6 9 5 75 REPORT DATE 80

60 61 DOCKET NUMBER 68 69 EVENT DATE 74

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

On June 19, 1981, at 1717 hours, with the unit at 0% power following a reactor trip, "A" Auxiliary Feedwater (AFW) Pump tripped on low discharge pressure resulting from improper throttle setting of the discharge valve. The valve was repositioned, and the pump restarted. "B" AFW pump was supplying the necessary feedwater so there was no threat to the public health and safety. Since the Steam Driven AFW pump was out-of-service, this event resulted in a degraded mode of operation permitted by Technical Specification 3.4.3 which is reportable pursuant to 6.1.2.b.2.

SYSTEM CODE H H		CAUSE CODE D		CAUSE SUBCODE Z		COMPONENT CODE P U M P X X				COMP. SUBCODE B		VALVE SUBCODE Z	
9 10		11 12		13 14		15 16 17 18				19 20		21 22	
EVENT YEAR 8 1		SEQUENTIAL REPORT NO. 0 1 7		OCCURRENCE CODE 0 3		REPORT TYPE L		REVISION NO. 0		ACTION TAKEN B		FUTURE ACTION Z	
23 24		25 26		27 28		29 30		31 32		33 34		35 36	
EFFECT ON PLANT Z		SHUTDOWN METHOD Z		HOURS 0 0 0 0		ATTACHMENT SUBMITTED Y		NPRD-4 FORM SUB. N		PRIME COMP. SUPPLIER N		COMPONENT MANUFACTURER W 3 1 8	
37 38		39 40		41 42		43 44		45 46		47 48		49 50	

E DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 C AFW pump trip was caused by low discharge pressure resulting from improper throttle
1 1 setting of the discharge valve. The valve was repositioned to the proper discharge
1 2 pressure setting, and the pump was restarted satisfactorily. The operating procedures,
1 3 which did not provide sufficient information, have been revised to clarify proper valve
1 4 position setting. No further action is considered necessary.

8 9

FACILITY STATUS (28) 1 5 C

% POWER 0 0 0 (29)

OTHER STATUS (30) N/A

METHOD OF DISCOVERY (31) A

DISCOVERY DESCRIPTION (32) Operator Observation

ACTIVITY CONTENT
RELEASED OF RELEASE

1 6 2 3 33 4 34 10 11

AMOUNT OF ACTIVITY (35)
N/A

LOCATION OF RELEASE (36)
N/A

PERSONNEL EXPOSURES										
NUMBER		TYPE		DESCRIPTION						
1	7	0	0	0	37	2	38	N/A		

PERSONNEL INJURIES		NUMBER		DESCRIPTION	
1	2	0	0	0	40 N/A

1		2		3		4		5		6		7		8		9		10		11		12	
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PUBLICITY

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PDR ADCK 05000261
S PDR

N/A

68 69 80

NAME OF PREPARER

Howard T. Cox

PHONE (803) 383-4524

Item 10

On June 19, 1981, at 1717 hours, with the unit at 0% power following a reactor trip, "A" Auxiliary Feedwater (AFW) Pump tripped on low discharge pressure resulting from improper throttle setting of the discharge valve. The valve was repositioned, and the pump restarted. "B" AFW pump was supplying the necessary feedwater so there was no threat to the public health and safety. Since the Steam Driven AFW pump was out-of-service, this event resulted in a degraded mode of operation permitted by Technical Specification 3.4.3 which is reportable pursuant to 6.9.2.b.2.

Item 27

The AFW pump trip was caused by low discharge pressure resulting from improper throttle setting of the discharge valve. The valve was repositioned to the proper discharge pressure setting, and the pump was restarted satisfactorily. The operating procedures, which did not provide sufficient information, have been revised to clarify proper valve position setting. No further action is considered necessary.

SUPPLEMENTAL INFORMATION
FOR
LICENSEE EVENT REPORT 81-17

1. Cause Description and Analysis

On June 19, 1981, at 1711 hours, with the unit at 0% power following a reactor trip, "A" and "B" Auxiliary Feedwater (AFW) pumps started automatically as required. At 1717 hours "A" AFW pump tripped due to low discharge pressure. Further investigation revealed that the low pressure was caused by an improper throttle setting on the discharge valve (AFW-45) which allowed pump cavitation to occur. "A" AFW pump had been out of service for maintenance on the discharge check valve and motor operated valve on June 18, 1981, while the plant was at 93% power. Following this maintenance effort, the pump was tested, using the recirculation line as a flow path, and returned to service. However, since the operating procedures did not specify the valve settings to be used when the unit is at power (93%), AFW-45 was repositioned using the discharge valve position on "B" AFW pump as a guide. Apparently there were sufficient differences between the two pumps and their discharge valves that this approach was inadequate. After tripping on June 19, 1981, "A" AFW pump was restarted at 1928 hours and AFW-45 was repositioned using direct pressure indication while feeding the steam generators. During this event, "B" AFW pump was operating and supplying 100% of the necessary feedwater. For this reason, there was no threat to the public health and safety. Since the Steam Driven AFW pump was out of service for maintenance at this time, the failure of "A" AFW pump resulted in a degraded mode of operation permitted by Technical Specification 3.4.3, which is reportable pursuant to 6.9.2.b.2.

2. Corrective Action

The immediate corrective action was to restart the pump and adjust the discharge valve using the pump discharge pressure to establish the proper setting. To insure operability, Periodic Test 22.1A was performed satisfactorily, and "A" AFW pump was declared in service June 19, 1981, at 1947 hours.

3. Corrective Action To Prevent Recurrence

The procedures, General Procedure-2, Operating Procedure-14, and Operating Work Permits AFW-1 and AFW-2 have been revised and an operating curve for the AFW pumps was added to the Curve Book (POM Volume 15). The revisions and addition of an operating curve clarify the method by which the discharge valves are positioned under all operating conditions, thereby insuring operability of the AFW pumps. Although these actions are considered entirely adequate to prevent recurrence, this event will be reviewed as part of an on-going general review of the AFW system. Any additional corrective actions related to this event which results from the review will be reported in a revision to this LER.