(7-77)

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1	LICENSEE CODE: S C H B R 2 (2)	LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3)	LICENSE TYPE: 4 1 1 1 1 (4)	CAT: (5)

CON'T

0 1	REPORT SOURCE: L (6)	DOCKET NUMBER: 0 5 0 0 0 2 6 1 (7)	EVENT DATE: 0 6 0 4 7 9 (8)	REPORT DATE: 0 7 0 5 7 9 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During heatup following refueling, while at 379 degrees F, the "A" AFW pump was
0 3 started to supply S/G makeup. The pump motor breaker tripped shortly after pump
0 4 startup and the pump was declared inoperable at 2000 hours. As the steam driven
0 5 AFW pump was inoperable at this time, this constitutes operation in a degraded mode
0 6 as allowed by T.S. 3.4.3 and is a reportable occurrence per T.S. 6.9.2(b)2. Since the
0 7 "B" AFW pump was available throughout the event, there was no threat to either plant
0 8 or public safety.

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	H H (11)	E (12)	B (13)	M O T O R X (14)	Z (15)	Z (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	7 9	—	0 1 8	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
D (18)	F (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	Y (24)	A (25)	W 1 2 0 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The Westinghouse Type A, 350 HP, 3600 RPM motor failed as a result of rotor bars
1 1 having cracked and broken loose from the end rings. This has been attributed to
1 2 excessive start-stop cycling of the pump while being used to feed the S/Gs. The rotor
1 3 bars were resoldered to the end rings and the motor was returned to service at 2030
1 4 hours on June 6, 1979.

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	C (28)	0 0 0 (29)	NA	A (31)	Operator Observation

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	NA

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	NA

PUBLICITY

	ISSUED	DESCRIPTION (45)
2 0	N (44)	NA

7907100378

NRC USE ONLY

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SUPPLEMENTAL INFORMATION
FOR
LICENSEE EVENT REPORT 79-18

1. Cause Description and Analysis:

While in heatup following refueling, with the primary coolant at 379°F, the "A" AFW pump was started to supply makeup to the steam generators. The pump had run for approximately five minutes when the motor breaker tripped. The pump was restarted and the trip was repeated. The pump was declared inoperable at 2000 hours. Primary system temperature was reduced below 350°F by 1910 hours, June 6, 1979 in accordance with Technical Specification, Paragraph 3.4.3.

Subsequent inspection of the motor while running revealed sparks flying from the rotor. The motor was removed for repair and further inspection revealed that some of the solder welds of the rotor bars to the end rings had cracked and bars had broken loose. A balance weight which had come loose was also found; however, this had not caused any mechanical damage. The primary cause of the failure has been identified as excessive start-stop cycling of the pump while being used to maintain S/G level. Two secondary contributing causes are (1) loss of a rotor balance weight and (2) insufficient weld material at the rotor bar to end ring joint.

Since the "B" AFW pump was available throughout the course of the event, there was no threat to either plant or public safety.

2. Corrective Action:

The motor was disassembled and the stator was steam cleaned, dried and varnish treated and baked. All the rotor bars were cleaned and rewelded to the end rings with silver solder. The rotor was dynamically balanced and the motor was assembled and tested in the shop. The motor was reinstalled and retested in the field. The pump was declared operable at 2030 hours on June 6, 1979.

3. Corrective Action to Prevent Further Occurrence:

In order to eliminate the necessity for start-stop cycling operation when feeding the S/Gs, throttling capability will be built into this system during the 1980 refueling outage. No further corrective action is deemed necessary at this time.

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