

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)  
Fort St. Vrain, Unit No. 1DOCKET NUMBER (2)  
0 5 0 0 0 2 6 7 1 OF 0 5TITLE (4)  
SR 5.2.23 Not Performed Within The Surveillance Interval

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 NAME	DOCKET NUMBER(S)							
0	3	2	7	8	4	8	4	0	0	4	N/A	0	5	0	0	0	0
0	3	2	7	8	4	8	4	0	0	4		0	5	0	0	0	0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50. (Check one or more of the following) (11)											
POWER LEVEL (10)	0	0	0	0	20.402(a)	20.405(a)	50.73(a)(2)(iv)	73.71(b)					
					20.405(a)(1)(i)	50.38(a)(1)	50.73(a)(2)(vi)	73.71(a)					
					20.405(a)(1)(ii)	50.38(a)(2)	50.73(a)(2)(viii)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)					
					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)(viii)(C)						
					20.405(a)(1)(vi)	50.73(a)(2)(iv)	50.73(a)(2)(ix)						

LICENSEE CONTACT FOR THIS LER (12)  
NAME  
Frank Novachek, Technical Services Engineering SupervisorTELEPHONE NUMBER  
AREA CODE  
31 013 71 8151-121214

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM

SUPPLEMENTAL REPORT EXPECTED (14)  
☐ YES (If yes, complete EXPECTED SUBMISSION DATE)  
☒ NOEXPECTED SUBMISSION DATE (15)  
MONTH DAY YEAR

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

On March 27, 1984, during a review of completed surveillance tests, it was determined that surveillance test requirements for SR 5.2.23 (Firewater Booster Pump Surveillance) were not performed in conjunction with Surveillance Test SR 5.2.7a-A (Water Turbine Drive Surveillance) as required, due to a procedural inadequacy. Discovery of this deficiency was subsequent to the SR 5.2.23 surveillance interval "late date". This condition is prohibited by the Fort St. Vrain Technical Specifications and is reportable per the requirements of 10 CFR 50.73(a)(2)(i).

Surveillance Test SR 5.2.7.a-A will be revised to specify the requirement of satisfying SR 5.2.23 in conjunction with it.

The Firewater Booster Pumps (or Emergency Water Booster Pumps) operability will be demonstrated prior to reactor operation at power following the current plant shutdown.

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PDR ADDCK 05000267  
S PDR

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104  
EXPIRES 8/31/85

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 4	— 0 0 4	— 0 0	0 2	OF	0 5

TEXT (If more space is required, use additional NRC Form 365A's) (17)

EVENT DESCRIPTION:

Surveillance Requirement SR 5.2.7 of the Fort St. Vrain Technical Specifications is provided to ensure that components of the helium circulator water turbine drive system are functional. As part of the requirement of SR 5.2.7, one helium circulator and associated water supply valving in each loop are functionally tested annually by operation on water turbine drive using feedwater, condensate and boosted condensate via performance of surveillance test SR 5.2.7.a-A.

Surveillance Requirement SR 5.2.23 is provided to ensure that the Firewater Booster Pumps (P-2109 and P-2110) are operable to provide adequate core cooling under the accident conditions described in Section 14.4.2 of the Final Safety Analysis Report (FSAR). Refer to Figure 1. This scenario postulates that adequate core cooling (for decay heat removal after sustained operation at 105% reactor power) is maintained with the combination of one firewater pump and one firewater booster pump supplying motive power to one helium circulator water turbine and cooling flow to the associated loop steam generator.

Each firewater booster pump is to be demonstrated operable on an annual basis in conjunction with the functional testing required by SR 5.2.7. This is accomplished via surveillance test SR 5.2.7.a-A, which incorporates additional steps to satisfy the requirements of SR 5.2.23.

On November 4, 1983, SR 5.2.7a-A was performed per the normal schedule. However, during performance of this test, the portions of the procedure incorporating the requirements of SR 5.2.23 were modified. This modification changed the firewater booster pump inlet head value to be more consistent with recent firewater pump test results. Fort St. Vrain Engineering personnel were later requested to evaluate booster pump performance due to recent increased maintenance (unrelated) on the pumps. During review of past booster pump performance, it was determined that the modification to SR 5.2.7 a-A was such that the requirements of SR 5.2.23 were no longer met, because the revised inlet head value was greater than may be available under the accident conditions described in Section 14.4.2 of the FSAR.

# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		01	04	00	03	OF	05

TEXT (If more space is required, use additional NRC Form 388A's) (17)

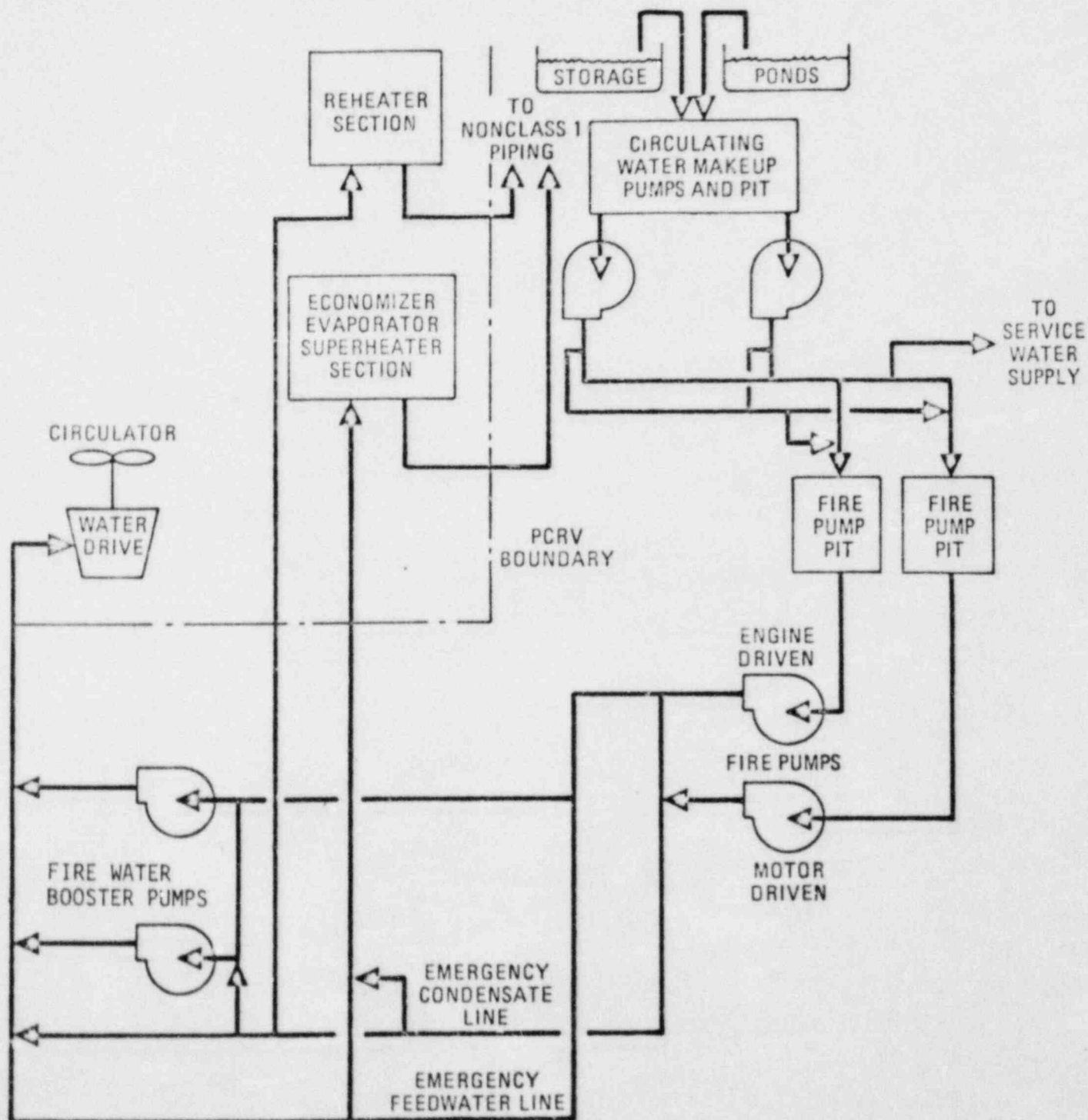


FIGURE 1

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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EXPIRES: 8/31/85

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TEXT (If more space is required, use additional NRC Form 388A's) (17)

ANALYSIS OF EVENT:

Although the functional testing requirements of SR 5.2.7 were satisfied, the booster pump operability requirements of SR 5.2.23 were not. Therefore, it is uncertain that these pumps would have provided adequate core cooling for the accident conditions described in the FSAR. However, during the present shutdown period, both booster pumps have been operable to provide helium circulator motive power for decay heat removal.

Safe shutdown cooling of the Fort St. Vrain Reactor can be accomplished adequately without the use of the booster pumps for decay heat conditions resulting from sustained operation at up to 73 percent power.

Based on the above analysis and the very limited operation of the Fort St. Vrain Reactor above 73 percent power during the time period involved, there was no potential effect on the health and safety of the public.

CAUSE DESCRIPTION:

Procedural Inadequacy.

Surveillance Test SR 5.2.7.a-A did not specify the requirement to satisfy SR 5.2.23 in conjunction with it. As a result, the pertinent steps of the surveillance test were modified and operability of the two Firewater Booster Pumps was not demonstrated, as required.

CORRECTIVE ACTION:

Surveillance Test SR 5.2.7.a-A will be revised to clearly state that the requirements of SR 5.2.23 are to be performed in conjunction with SR 5.2.7.

Prior to plant operation at power, the two firewater booster pumps will be tested in accordance with SR 5.2.23 in conjunction with SR 5.2.7.a-A.

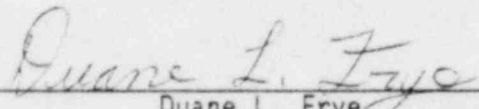
No further corrective action is anticipated or required.

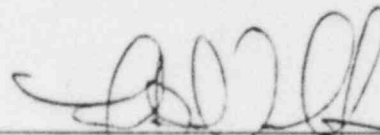
LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104  
EXPIRES 6/31/85

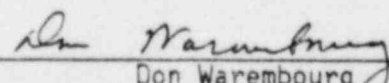
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		8 4	0 0 4	0 0	0 5	OF	0 5

TEXT (If more space is required, use additional NRC Form 388A's) (17)

  
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