

## LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MN88 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

WOLF CREEK GENERATING STATION

DOCKET NUMBER (2)

05000482

PAGE (3)

1 OF 3

TITLE (4)

Violation of Technical Specification 3.5.4 (Power Remained Available to SI Pump "A" Discharge Valves)

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
03	23	96	96	004	00	04	19	96	FACILITY NAME	DOCKET NUMBER
OPERATING		6	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER		0	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
			20.405(a)(1)(iii)		X	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)(vii)(B)	
			20.405(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME

William M. Lindsay

TELEPHONE NUMBER (Include Area Code)

Manager Performance Assessment

316-364-8831, ext. 8760

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
N/A									

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED

MONTH

DAY

YEAR

YES

(If yes, completed EXPECTED SUBMISSION DATE)

X

NO

## ABSTRACT:

On March 23, 1996, at 2200 hours, while performing STS KJ-001B, "Integrated D/G And Safeguard Actuation Test-Train B," Operators discovered that the Safety Injection (SI) pump discharge valves EM HV-8802A and EM HV-8821A handswitches were tagged "Do Not Operate" (DNO) closed, but still had power available to them. Technical Specification Surveillance Requirement 4.5.4.1 requires that all SI pumps shall be rendered inoperable while in Mode 5 and Mode 6 with the Reactor Vessel head on. The Technical Specification 3.5.4 allows an inoperable SI pump to be energized for testing or filling the accumulators, provided the discharge of the pump has been isolated from the Reactor Coolant System (RCS) by a closed isolation valve with power removed from the valve operator or by a manual isolation valve secured in the closed position. During STS KJ-001B, the SI pump (PEM01A) handswitch was in "Pull-To-Lock" with the breaker racked up and open, but power remained available to the SI pump discharge valves EM HV-8821A and EM HV-8802A. The request for a clearance order was incorrect, causing the generation of the inadequate Clearance Order (CO) 96-0510-EM. The CO correctly addressed the positions of the discharge valve handswitches, but did not address the valve breakers which were to be de-energized in order to comply with Technical Specifications, and provide assurance of cold over-pressurize protection. This caused the "A" Train to be in noncompliance for approximately 35 hours.

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TEXT CONTINUATION

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		96	004	00	

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

**Plant Conditions Prior to the Event:**

Operational Status: Mode 5  
Reactor Coolant Temperature: 126.9 degrees Fahrenheit  
Reactor Coolant Pressure: 346 psig  
Reactor Power: 0

**Basis for Reportability:**

Technical Specification 3.5.4, applicable in Mode 5 and Mode 6 with the Reactor Vessel head on, specifies that "All Safety Injection Pumps . . . shall be inoperable." The second footnote of this specification states that "An inoperable pump may be energized for testing or for filling accumulators provided the discharge at the pump has been isolated from the Reactor Coolant System (RCS) by a closed isolation valve with power removed from the valve operator, or by a manual isolation valve secured in the closed position." Contrary to these conditions, the "A" Safety Injection (SI) pump discharge valves were tagged "Do Not Operate" (DNO), but the discharge valves' power supply remained available. Therefore, this is reportable under 10CFR50.73(a) (2) (i) (B).

**Description of Event:**

On March 21, 1996, at 0852, Clearance Order (CO) 95-0752-EM was implemented to perform General Operating Procedure (GEN) 00-006, "Hot Standby to Cold Shutdown." This CO was intended to provide over-pressure protection from excessive volume addition. On March 22, 1996, at 1433 hours, CO 96-0510-EM was implemented to tag the handswitches for the SI pump discharge valves (EM HV-8821A and EM HV-8802A; EM HV 8802B and EM HV-8821B) in the normal closed position (capable of responding to an actuation signal) in support of STS KJ-001A, "Integrated D/G And Safeguard Actuation Test--Train A" and STS KJ-001B, "Integrated D/G And Safeguard Actuation Test--Train B". The handswitches to the "A" and "B" valves were tagged. The breakers for EM HV-8802B (NG02BCR2) and EM HV-8821B (NG02AGR2) were off as directed by STS KJ-001B surveillance. As required by the CO, the breakers for SI pumps PEM01A and B were in the open/racked down position for the performance of GEN 00-006, and both SI pump breakers were restored to the open/racked up position on March 22, 1996, at 1709 hours, to support STS KJ-001A, "Integrated D/G And Safeguard Actuation Test--Train A" and STS KJ-001B, "Integrated D/G And Safeguard Actuation Test--Train B" testing. On March 23, 1996, at 2200 hours, personnel identified that the "A" SI pump discharge valves EM HV-8802A and EM HV-8821A feeder breakers were not de-energized as required when the pump was inoperable per Technical Specification 3.5.4. A change to CO 96-0510-EM was processed March 24, 1996, at 0233 hours, to add feeder breakers NG01BGR3 (EM HV-8802A), NG01ADR1 (EM HV-8821A), NG02BCR2 (EM HV-8802B) and NG02AGR2 (EM HV-8821B). Although it was not required to tag out both "A" and "B" train discharge valve feeder breakers, this conservative action was taken to ensure compliance with Technical Specifications while further evaluation of this event was performed.

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Wolf Creek Generating Station	05000482	96	004	00	3 OF 3

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

Root Cause and Corrective Actions:

Root Cause:

The root cause of this event is cognitive personnel error in that the Operations personnel responsible for test implementation did not recognize how Clearance Order 96-0510-EM affected the need for cold over-pressure protection when requesting the CO. The Operations personnel restored both trains of SI pumps for the STS KJ-001B test. Procedure STS KJ-001B opened the breakers for EM HV-8802B and EM HV-8821B such that the "B" train discharge valves met the requirements of Technical Specification 3.5.4, but did not address the discharge valves for the "A" train.

Contributing Factors:

The Shift Supervisor who reviewed Clearance Order 96-0510-EM did not recognize the inadequately prepared aspects of this CO.

Corrective Actions:

Immediate:

Clearance Order 95-0510-EM was revised to address tagging the feeder breakers de-energized for the four SI pump discharge valves.

Performance Improvement Request 96-0962 was issued to address this issue.

Long-term:

Procedures STS KJ-001A and B will be revised by May 30, 1996, to ensure both SI pumps' manual discharge valves or motor-operated discharge valves are tagged "Do-Not-Operate Closed" prior to removing an over-pressure protection CO. Further, both procedures are being changed to more clearly reflect the requirements of Technical Specification 3.5.4. These changes will define the clearance order process to control SI pump and discharge valve configuration during STS KJ-001A and B testing. These clarifications are being made because this test is performed infrequently (18-month intervals), and to complement the Operators' level of knowledge. The procedure changes were determined to be the most effective methods of correction.

Safety Significance:

During the time frame that the Technical Specification for cold over-pressure protection was not being met, administrative controls remained in place to protect the vessel from over-pressurization. The discharge valves EM HV-8802A and EM HV-8821A were tagged closed, and no additional volume could have been added to the vessel. Even if the SI pumps were inadvertently started, the closed discharge valves would have prevented additional volume to the vessel. Therefore, the safety significance of this event is low.

Other Previous Occurrences:

None