

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 (MNBB 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)

Beaver Valley Power Station Unit 2

DOCKET NUMBER (2)

05000412

PAGE (3)

1 OF 3

Train 'B' Recirculation Spray System Header Cooling Flow Below Technical Specification Requirements

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
07	14	95	95	-- 003 --	00	08	14	95	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 20 CFR § (Check one or more) (11)							
1			20.402(b)			20.405(c)			50.73(a)(2)(iv) 73.71(b)	
POWER LEVEL (10)			20.405(a)(1)(i)			50.36(c)(1)			50.73(a)(2)(v) 73.71(c)	
100%			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) (Specify in abstract below and in Text NRC Form 366A)	
			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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME

L. R. Freeland, General Manager Nuclear Operations

TELEPHONE NUMBER (include Area Code)

(412) 643-1258

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS				COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
A	BE	V	P340	N						

SUPPLEMENTAL REPORT EXPECTED (14)

YES (if yes, complete EXPECTED SUBMISSION DATE)	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limited to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On Friday, 7/14/95 at 1345 hours, with Unit 2 in Mode 1 at 100% power, an operator discovered [2SWS*82] (Recirculation Spray Cooler Discharge Header Cross Connection Valve) in the wrong position (closed) and improperly locked while performing operations surveillance test 2OST-48.7, "Padlock Quarterly Review". The valve was found with a short length of chain through the valve hand wheel and around an adjacent platform hand railing with the lock installed through a cut link in the end of the chain. After notifying the Shift Supervisor, the operator repositioned the valve to the locked open position. It has been conservatively assumed that there is reasonable evidence that this valve may have been in the wrong position since May 1995. Engineering calculations were performed to determine the implications due to [2SWS*82] being shut. The calculations showed that with [2SWS*82] modeled closed and the highest experienced river temperatures, the B train RSS (Recirculation Spray System) heat exchanger header cooling flow may have been slightly (approximately 1%) below Technical Specification requirements. Because the B train may have been below Technical Specification requirements, it was concluded that the plant may have operated in a condition prohibited by Technical Specifications as a result of [2SWS*82] being closed.

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TEXT CONTINUATION**

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Beaver Valley Power Station Unit 2		05000412		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
				95	003	00	

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

DESCRIPTION OF EVENT

On Friday, 7/14/95 at 1345 hours, while performing operations surveillance test 2OST-48.7, "Padlock Quarterly Review", an operator discovered [2SWS*82] (Recirculation Spray Cooler Discharge Header Cross Connection Valve) closed and improperly locked. The valve is located in the North Safeguards Area and is normally locked open. Originally, the plant design was to operate with this valve closed to separate the train A recirculation spray heat exchangers discharge from the train 'B' heat exchangers. However, due to system performance, it became necessary to open [2SWS*82] to improve the margin for meeting flow requirements. On 7/14/95, the valve was found with a short length of chain through the valve hand wheel and around a platform hand railing with the lock installed through a cut link in the end of the chain. Shift supervision was notified and the valve was correctly positioned to the locked open position. The correct valve positioning and locking was verified by another operator. At approximately 1500 hours, Operations Management and Security were notified of this event and a detailed root cause investigation was initiated, which included a review of previously performed OSTs (Operations Surveillance Tests), operator logs and clearances. Also at this time, preliminary interviews were conducted with station personnel involved in system testing during a recent refueling outage, in an attempt to determine when [2SWS*82] was mispositioned. The root cause investigation could not definitively determine that [2SWS*82] was properly positioned following outage activities on 5/1/95, and an engineering calculation was performed to determine Technical Specification implications of [2SWS*82] being shut. Flow data collected during the recent refueling outage with [2SWS*82] shut for informational testing on the 'A' train was 11,256 gpm. This was below the Technical Specification Acceptance Criteria for 89F river temperature. Engineering calculations were performed for a river temperature of 82F, which was the highest recorded value from 5/1/95 through 7/14/95. Engineering results determined that all SWS flows were within Technical Specification limits, except the 'B' train RSS heat exchangers. Therefore, the 'A' train of Recirculation spray Heat Exchangers remained operable throughout this event. The calculated (engineering model) 'B' train RSS heat exchangers flow rate with [2SWS*82] modeled closed was predicted to be 10,890 gpm. Further Engineering analysis has demonstrated that the B train flow condition would ensure that the Design Basis function would have been met while [2SWS*82] was closed. Because the B train was predicted to be below Technical Specification requirements for actual river water temperatures, it was concluded that the plant may have operated in a condition prohibited by Technical Specifications.

CAUSE OF EVENT

There is reasonable evidence that the cause of this event can be attributed to valve mispositioning resulting from inadequate work practices following outage activities on 5/1/95. Reviews by Operations and Security concluded that tampering did not play a role in this event.

REPORTABILITY

This event is being reported as condition prohibited by the plant's Technical Specifications in accordance with 10CFR50.73(a)(2)(i)(B) because train B recirculation spray heat exchanger cooling flow was predicted to be slightly below Technical Specification requirements by engineering model.

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

SAFETY IMPLICATIONS

There were minor safety implications as a result of this event. Both trains of recirculation spray heat exchangers would have been able to fulfill their Design Basis Function. The A train remained fully operable in accordance with Technical Specifications for all river temperatures experienced from start up following refueling until [2SWS*82] was correctly positioned. Train B was predicted by engineering model to be within approximately 1% of Technical Specification requirements.

CORRECTIVE ACTIONS

The following corrective actions have been taken as a result of this event:

1. All Unit 2 Safeguards Building valve positions were verified in proper position.
2. All safety related Unit 2 Safeguards Building instrument valves were verified in proper position.
3. Key safety system components throughout both Units were verified to be in their proper position.
4. Administrative and work practice requirements regarding valve position verification will be reviewed and enforced by Operations Department line supervisory personnel.
5. Administrative procedures addressing locked and chained components were revised to include specific guidance on the correct techniques for locking valves.

PREVIOUS SIMILAR EVENTS

No similar events involving mispositioned and improperly locked components have been reported in the recent past.