

LICENSEE EVENT REPORT (LER)

(See reverse for required number of
digits/characters for each block)ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY
INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS
LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED
BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN
ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-
6 F23), 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)

Haddam Neck

DOCKET NUMBER (2)

05000213

PAGE (3)

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TITLE (4)

#4 CAR Fan Surveillance Invalid Due To Plugged Instrument Tap

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
01	11	96	96	001	01	08	01	97	FACILITY NAME	DOCKET NUMBER
										05000
										05000
OPERATING MODE (9)		1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)		100	20.2201(b)		20.2203(a)(2)(v)		<input checked="" type="checkbox"/> 50.73(a)(2)(i)		50.73(a)(2)(viii)	
			20.2203(a)(1)		20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)	
			20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71	
			20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER	
			20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A	
			20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)			

LICENSEE CONTACT FOR THIS LER (12)

NAME

G. P. van Noordennen

TELEPHONE NUMBER (Include Area Code)

(860) 267-3938

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES		NO		EXPECTED SUBMISSION		MONTH	DAY	YEAR
<input checked="" type="checkbox"/> YES		<input type="checkbox"/> NO						
(If yes, complete EXPECTED SUBMISSION DATE).								

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

On January 11, 1996, at 1000 hours, with the plant in Mode 1 at 100 percent power, while checking the No. 4 Containment Air Recirculation (CAR) Fan cooling coil differential pressure gage, it was determined that the high side sensing line of the instrument was blocked. A review of past data indicated the instrument may have been reading incorrectly since August, 1995. Without accurate instrumentation the Technical Specification surveillance requirement could not have been met. The cause of the event has been attributed to a blocked sensing line and personnel failure to immediately identify a problem with the gage. The immediate corrective action was to unplug the sensing line and perform the surveillance. The surveillance was performed with satisfactory results which indicated that the No. 4 CAR Fan was operable since August 1995. Personnel were counseled on the importance of noting abnormal changes in surveillance data and bringing this to the attention of management. This event is reportable under 10CFR50.73(a)(2)(i)(B) as a condition prohibited by the plant's Technical Specifications.

This supplemental report is being issued to retract originally proposed corrective actions that were scheduled to be implemented during the next refueling outage and are no longer necessary as a result of the Haddam Neck Plant being in a permanently defueled state.

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

BACKGROUND INFORMATION

Four containment air recirculation (CAR) fans (EHS Code: BK) take suction near the outer periphery of the containment building middle level and discharge to a common duct which branches to distribution outlets within containment. During normal operation air enters the units through "bypass" dampers to cooling coils and then to the fan. These dampers are so named because they bypass the accident mitigation section of the unit (chevron moisture separators, high efficiency particulate air (HEPA) filters, and charcoal adsorbent trays). Under normal conditions the inlet to the accident section is blocked by the "face" dampers. Upon receipt of a safety injection / high containment pressure signal, the "face" dampers open and the "bypass" dampers close and air flows through the accident section of the CAR fan unit to the cooling coils to the fan. Technical Specification 3.6.2 requires four CAR fans operable in Modes 1 through 4. Technical Specification 4.6.2 requires demonstrating each CAR unit operable at least once per 31 days by verifying a heat removal rate of greater than or equal to 26.5E6 Btu/hr at 261 degrees F containment conditions. This Technical Specification is met by verification of acceptable cooler hydraulic resistance on the raw water side.

EVENT DESCRIPTION

On January 11, 1996, at 1000 hours, with the plant in Mode 1 at 100 percent power, while checking the No.4 Containment Air Recirculation (CAR) cooling coil differential pressure gage, it was determined that the high side sensing line of the instrument was completely blocked. A review of past No.4 CAR Fan Cooling Coil surveillance results indicated the instrument may have been reading incorrectly since August 1995. There was a significant decrease in the hydraulic resistance surveillance results in August 1995 that was not noticed. In December 1995, a problem with the differential pressure gage was suspected. Upon investigation on January 11, 1996, it was confirmed that the high side sensing line of the instrument was blocked. Without accurate No.4 CAR coil differential pressure, the Technical Specification surveillance requirement was not being met and, therefore, the operability of the No.4 CAR fan was not being verified. This event was considered a missed surveillance.

CAUSE OF THE EVENT

The cause of this event has been attributed to blockage of the CAR cooling coil differential pressure instrument line and personnel failure to identify an abnormal trend in a timely manner. The surveillance results were within the acceptance criteria of the procedure during the period. The acceptance criteria includes an upper limit but no lower limit. There were no specific instructions to verify that the data was not trending in a direction indicating the cooling coils were getting cleaner. Emphasis was placed on ensuring the data was not trending such that a failure of the surveillance acceptance criteria had or could occur. The abnormal data was not recognized immediately by personnel involved in testing and trending.

The blocked instrument line was caused by silt in the service water which fouled the nipple upstream of the instrument root isolation valve. Over time this fouling caused partial blocking of the instrument sensing line. It appears that when the instrument was inspected and an attempt was made to flush the sensing line, complete blockage of the line occurred.

SAFETY ASSESSMENT

This event is reportable under 10CFR50.73(a)(2)(i)(B) as operation or a condition prohibited by the plant's Technical Specifications. A review of past data indicated the instrument may have been reading incorrectly since August, 1995. Without accurate instrumentation the Technical Specification surveillance requirement could not have been met.

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

Technical Specification 4.6.2 requires demonstrating each CAR unit operable at least once per 31 days by verifying a heat removal rate of greater than or equal to $26.5E6$ Btu/hr at 261 degrees F containment conditions. The heat removal requirement is verified by the measurement of the hydraulic resistance of the service water through the cooler which is used as the cooling medium. The blockage of the high side sensing line of the pressure instrumentation resulted in the indication of a lower cooler differential pressure than the previous surveillance test. This implied that the cooler portion of the CAR fan was cleaner than previous indications. The surveillance procedure was performed after cleaning of the sensing line and the heat removal capability was demonstrated to be acceptable in accordance with the Technical Specification requirement.

Since the CAR fan was operable and capable of performing its intended function during the period in question the safety significance of this event is low.

CORRECTIVE ACTIONS

Immediate corrective action was to unplug the high side sensing line and perform the surveillance. The surveillance was performed with satisfactory results which would indicate that the No.4 CAR Fan was operable since August 1995. Personnel were counseled on the importance of noting abnormal changes in surveillance data and bringing this to the attention of management. Also, the surveillance procedure was revised and data acquisition personnel will review previous trend data prior to performing the surveillance. The procedure also includes, in the evaluation process, guidance to look for and investigate any significant changes in the data.

ADDITIONAL INFORMATION

This supplemental report is being issued to retract originally proposed corrective action: scheduled for implementation in the next refueling outage that will no longer be necessary as a result of the Haddam Neck Plant being in a permanently defueled state. These long term corrective actions included revising the surveillance procedure to flag and investigate abnormal changes in results. In addition, procedures would have been revised to incorporate the steps necessary to inspect / clean the sensing lines, gages, and calibrate the gages on line.

PREVIOUS SIMILAR EVENTS

None.