James A. FitzPatrick
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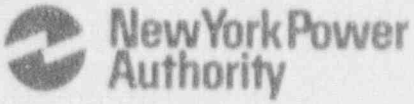

Harry P. Salmon, Jr.
Resident Manager

September 14, 1992
JAFP-92-0650

United States Nuclear Regulatory Commission
Document Control Desk
Mail Station P1-137
Washington, D. C. 20555

SUBJECT: DOCKET NO. 50-333
LICENSEE EVENT REPORT: 92-041-00 - Loss of Stack Gas Sampling Due to Low Flow Missed Indication

Dear Sir:

This Licensee Event Report is submitted in accordance with 10 CFR 50.73 (a) (2) (i).

Questions concerning this report may be addressed to Mr. W. Verne Childs at (315) 349-6071.

Very truly yours,

HARRY P. SALMON, JR.

HPS:WVC:cmc

Enclosure

cc: USNRC, Region I
USNRC, Resident Inspector
INPO Records Center

Cert No P064705009

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NRC FORM 366 (6-89)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
James A. FitzPatrick Nuclear Power Plant	0 5 0 0 0 3 3 3	1 OF 0 4

TITLE (4): Loss of Stack Gas Sampling Due to Low Flow Missed Indication by Operator

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 NAMES	DOCKET NUMBER(S)
0 8	1 7	9 2	9 2	-	0 4 1	- 0 0	0 9	1 4	9 2		0 5 0 0 0
											0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10): 0 0 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 (Specify in Abstract below and in Text, NRC Form 366A)
	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)(viii)(B)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
W. Verne Childs, Senior Licensing Engineer	AREA CODE: 3 1 5 3 4 9 - 6 0 7 1 1

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	
X	I L	P	X 9 9 9	N							

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

EIIS Codes are in [ ]

Abstract

The plant was shutdown and in the cold condition for maintenance and refuel. At 1040 hours on 8/17/92, a chemistry technician performing weekly surveillance at the plant stack found both stack sample pumps [IL] off and notified the Control Room. Without sample flow, both main stack effluent monitors are rendered inoperable which is a violation of Radiological Effluent Technical Specification 3.1.a. The technician placed the B pump in service. When sample pump B was started, the illuminated stack sample low flow annunciator cleared. The last time stack gas sampling was verified in service was five days earlier on 8/12/92, when sample pump A was observed operating. Sometime within this five-day period the A sample pump tripped. Failure to properly acknowledge and respond to the annunciator prevented immediate recognition of the event. Inattention to detail by the Control Room Operators caused the alarm to be missed in subsequent panel walkdowns. Annunciator panel clutter and simultaneous alarm annunciation caused by numerous illumination of alarms from ongoing outage activities contributed to the missed observation. A work request was written to troubleshoot the A stack sample pump. A system has been developed and implemented for tracking alarmed annunciators.

EIIS Codes are in [ ]

Event Description

At 1040 hours on August 17, 1992, with the plant shutdown and in the cold condition for maintenance and refueling, a chemistry technician found both main stack sample pumps [IL] secured while performing a weekly surveillance at the plant stack. At least one sample pump is required to be operating to supply a representative sample of stack exhaust gases to the stack radiation monitors. Having both stack gas radiation monitors inoperable by lack of sample flow is a violation of Radiological Effluent Technical Specification 3.1.a.

During the time frame the sample pumps were not running, the core was offloaded with no evolutions involving the handling of irradiated fuel occurring. In addition, the reactor building ventilation monitors were operating to provide monitoring of any radiological release that could occur.

The chemistry technician notified the Control Room when he found that there were no stack sample pumps running. Upon notification, it was observed that the Control Room alarm for stack sample flow Hi/Lo was annunciated. The Control Room Operator instructed the chemistry technician to start one of the sample pumps. The A sample pump failed to start so the B sample pump was lined up (by opening the suction and discharge valves) and placed in service. When the B sample pump was started, the low flow alarm cleared.

The alarm for stack sample flow Hi/Lo does not have an associated computer alarm point and the alarm does not print out on the Alarm Typer when the Hi/Lo flow condition is present. Therefore, the exact time that sample flow was lost could not be determined. Stack gas sampling was last observed to be operating at 0730 hours on August 12, 1992 when a chemistry technician, sent to the stack to remove a tritium sampler, noted that the A sample pump was running when he left the area. Between 0730 on August 12, 1992 and 1040 on August 17, 1992, the A stack sample pump tripped off line and the low sample flow alarm was annunciated and acknowledged, but the corrective action required by the Alarm Response Procedure (ARP) was not taken. The operator action called out in the ARP is to contact Radiation Protection to verify sample flow.

Cause

The cause for the sample pump trip is being investigated and the pump will be repaired or replaced as necessary.

The event was not immediately detected due to a failure to properly respond to an annunciator. Contributing to further delay in identifying the problem was inattention to detail during Control Room panel walkdowns. A contributing factor for the missed observation was annunciator panel clutter created by numerous illuminated alarms and a number of alarms being annunciated at the same time due to system outages that were in progress.

Analysis

The failure to recognize that the stack sample pumps were not operating resulted in the stack gas radiation monitors not receiving a sample of the air being released through the stack for a worst case maximum duration of five days and three hours. Without operable stack radiation monitors or grab samples being taken, radioactive gaseous waste released to the environment via the main stack could not be accurately monitored and recorded as required by Radiological Effluent Technical Specification 3.1.a. The reactor building ventilation monitors were operating to provide redundant monitoring of exhaust gases, and would have started emergency filtration systems and alerted the Operators of any releases exceeding radiological limits. No core alterations or evolutions involving the handling of irradiated fuel were in progress during the time period when stack sample flow was out of service. During the time frame that the sample pumps were not running, the stack monitors read the background level of five counts/second which is currently the same reading seen when the pumps are operating due do to the plant shutdown condition.

The loss of stack effluent monitoring constitutes a condition prohibited by Technical Specifications and is being reported pursuant to 10 CFR 50.73 (a) (2) (i) (B).

Corrective Action

1. Immediate corrective action was to reestablish stack monitor sample flow by starting one of the sample pumps.

2. A work request has been written to troubleshoot and correct the A stack sample pump trip condition (completion due date prior to startup from the current outage).

3. During a plant-wide safety standdown, supervisors and managers emphasized self verification, procedure compliance, and attention to detail.

4. Discussion of the event with all Operating Shifts is underway to reemphasize the importance of proper response to annunciators. (Completion due date 9/23/92)

5. A visual aid for tracking annunciators in alarmed status has been developed and is being used as part of the operator shift turnover process.

Additional Information

Failed components: Plant Stack Radiation Monitor Sample Pump

Component: GH4V160648

Manufacturer: Gartner Equipment Co.

Manufacturer NPRDS Code: None Listed

Previous Similar Events: LER 92-039 describes a similar event in which Operator inattention to detail resulted in a failure to recognize the inadvertent initiation of standby gas treatment for two shifts.