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New York Power Authority

Harry P. Salmon, Jr.
Resident Manager

June 15, 1992

JAFP-92-0461

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

SUBJECT: DOCKET NO. 50-333
LICENSEE EVENT REPORT: 92-025-00 - Fire Watches Discontinued or Not Posted When Required

Dear Sir:

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

The report also includes an event which is reported on a voluntary basis because it had the same cause and resulting deficiency as those events which require a report under 10CFR50.73.

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/mam

Enclosure

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

Sent NO POL4705487

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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 6

TITLE (4): Fire Watches Discontinued or Not Posted When Required Due to Personnel Error and Inadequate Equipment Status Control

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 5	1 5	9 2	9 2	- 0 2 5	- 0 0	0 6	1 5	9 2		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	N	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)	X 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)	Voluntary
		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 2 - 6 0 7 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	

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 []

The plant was shut down and in the cold condition for maintenance and refuel with all irradiated fuel in the spent fuel pool. Approximately 30 fire watches are required each shift as compensatory action for a number of fire protection deficiencies. On five occasions between May 1, 1992 and May 22, 1992 personnel error, inadequate review of documentation, and/or an inadequate/ineffective equipment status control system resulted in a failure to have a fire watch posted when required. Fire watches were discontinued or not posted as compensatory action when fire suppression systems [KQ] were inoperable or when fire doors were made non-functional. In each case, the required fire watch was immediately posted following discovery of the deficiency or the non-functional fire door was restored to normal. Corrective actions include improved administrative controls for discontinuing a fire watch and evaluation of the need to improve the equipment status control system. One of the five events is being reported on a voluntary basis because it had the same cause and resulted in the same deficiency as those events requiring a report under 10CFR50.73. LERs 92-001, 92-004, 92-006, 92-010, 92-011, 92-015, 92-017, and 92-019 describe additional programmatic fire protection deficiencies.

Description

The plant was shut down and in the cold condition for maintenance and refuel with all irradiated fuel in the spent fuel pool.

Approximately 30 fire watches are required each shift to provide compensatory action for 10CFR50, Appendix R deficiencies, fire damper deficiencies, fire barrier penetration seal deficiencies, and to support maintenance and modification activities. On five occasions between May 1, 1992 and May 22, 1992, fire watches were not maintained as required by Technical Specifications 3.12.C, 3.12.F, or as required to meet commitments contained in correspondence to the NRC. Each of the five failures to provide or maintain the required fire watch is described below:

1. On May 1, 1992 at approximately 1500 hours, fire protection engineering personnel informed the Shift Supervisor that a number of fire watches could be discontinued. Engineering evaluations had shown that the conditions for which the fire watches were posted had been corrected or evaluation had shown that no deficiency actually existed. As a result, the fire watches were discontinued. On May 5, 1992, fire protection engineering personnel informed the fire protection supervisor that the information provided approximately four days earlier was in error. The engineering personnel had failed to review documentation in which the New York Power Authority had committed in a letter to the NRC on July 31, 1991 (JAFP-91-0455) to post a continuous fire watch as an interim compensatory measure until the NRC acts on an exemption request.

   As noted above, a continuous fire watch was discontinued for approximately four days. The requested exemption had not been approved by the NRC. While this event was not contrary to the requirements contained in Technical Specifications or the Final Safety Analysis Report (FSAR), and by itself does not appear to be a condition requiring a report under 10CFR50.73, the Plant Operating Review Committee (PORC) determined on June 3, 1992 that the event should be described along with other examples of the failure to properly post (or maintain posted) a fire watch.

2. On May 15, 1992 at 0325 hours, a continuous fire watch posted in the North Emergency Diesel Generator (EDG) [EK] Switchgear Room [NB] was discontinued when a fire protection instrumentation multiplexer [IC] was returned to service. The Shift Supervisor informed the fire watch supervisor that the continuous fire watch was no longer required. Approximately ten (10) hours later, during a review of fire watch requirements and post instructions, the fire protection supervisor determined that the fire watch was

also required because the carbon dioxide fire suppression system [KQ] for the area was inoperable. An hourly fire watch patrol of the area was being conducted in the area (for other fire protection deficiencies not directly related to inoperability of the multiplexer or carbon dioxide suppression system) during the ten hour period when no continuous fire watch was posted. A continuous fire watch was again posted immediately.

3. On May 16, 1992 at approximately 1010 hours, the "master valve" on the 3-ton carbon dioxide system storage tank [LW] was closed and tagged in the closed position to allow maintenance to be performed on the carbon dioxide suppression system in the North EDG Switchgear Room. Closing of the master valve also made the system inoperable in the South EDG Switchgear Room.

   A continuous fire watch had been previously posted in the North EDG Switchgear Room at a time when both the North and South EDG Switchgear Rooms could be continuously observed by a single fire watch. However, conditions had changed and the South EDG Switchgear Room could no longer be observed from the North EDG Switchgear Room. Approximately 12 hours later, at 2220 hours, when the 3-ton carbon dioxide storage tank master valve was being restored to normal, it was discovered that a continuous fire watch had not been posted in the South EDG Switchgear Room during the time period when the carbon dioxide fire suppression system was inoperable.

4. On May 20, 1992, it was discovered that a welding lead, which had been run through a doorway between EDG A Room and the South EDG Switchgear Room, had been left unattended for a period of approximately three (3) hours between 0400 and 0700 hours.

   The doorway between the EDG Room and its associated Switchgear Room is normally open and is equipped with a fire door designed to close automatically in response to postulated fires when thermal links are fused as a result of fire or as a result of actuation of the Switchgear Room carbon dioxide fire suppression system. The presence of the welding lead would have prevented automatic closure of the fire door. While a continuous fire watch was posted in the South EDG Switchgear Room during the entire 3-hour time period of concern, the contract maintenance personnel using the welding equipment left the area at approximately 0400 hours at the completion of their work shift and failed to either remove the welding lead or take other action to allow the fire watch post instructions to be properly modified.

5. On May 22, 1992 at approximately 0940 hours, the Reactor Core Isolation Cooling (RCIC) System [BN] Enclosure Room north fire door was found partially closed and incapable of full closure due to placement of a hand tool to prevent full closure of the fire door. The fire door had been obstructed by licensee maintenance personnel working in the area during the night shift. When maintenance personnel left the area at the completion of the night shift at 0400 hours, the obstruction was not removed and no action was taken to result in the posting of a fire watch as compensatory action for the fire door which was inoperable due to the obstruction.

Cause

Each of the five cases discussed above involved a lapse in providing adequate compensatory action in the form of a fire watch due to: (1) personnel error, (2) inadequate review of available documentation, or (3) an inadequate or ineffective equipment status control system (which did not provide personnel responsible for maintaining the plant in compliance with fire protection requirements with the information necessary to make the correct decision).

1. The engineering personnel that informed the Shift Supervisor that certain fire watches could be discontinued were in error in one case. When additional fire protection related documentation was reviewed, the letter containing the commitment to maintain a continuous fire watch was found. The same engineering personnel discovered the error and took action as necessary to restore the continuous fire watch.

2. The Shift Supervisor that informed the fire watch supervisor that the North EDG Switchgear Room continuous fire watch could be discontinued based his decision on the information available to him without consulting the fire protection supervisor. The equipment status control system did not provide the Shift Supervisor with the information necessary to make the correct decision. While the fire protection supervisor was aware that other conditions required continuation of the fire watch, he was not present at the plant at the time.

The Shift Supervisor made an error when he authorized closing and tagging the master valve on the 3-ton carbon dioxide storage tank. The Shift Supervisor recognized that the carbon dioxide fire suppression systems for the North and South EDG Switchgear Rooms would be inoperable and that a continuous fire watch for both areas (which are adjoining) would be required. However, he did not perform an adequate review of the description of fire watch postings (which was available in the Shift Supervisor's

office) or consult with the fire watch supervisor. Review of either the description of fire watch postings or discussion with the fire watch supervisor should have made it clear that an additional continuous fire watch (posted in the South EDG Switchgear Room) would be required.

4. The May 20, 1992 failure of contract maintenance personnel to either remove the welding lead or to inform supervision so that the post instructions for the existing continuous fire watch could be appropriately modified was a personnel error.

5. The May 22, 1992 failure of licensee maintenance personnel to either remove the obstruction of the RCIC Enclosure Room north fire door or inform supervision so that a fire watch could be posted was a personnel error.

Analysis

The May 1, 1992 event in which a continuous fire watch was discontinued when required as a result of a commitment made to the NRC in a letter is not considered to be an event requiring a report under 10CFR50.73. The event has been included in this report on a voluntary basis because it is an additional example of events with the same or closely related causes.

The May 15, 16, 20, and 22, 1992 events each resulted in a violation of Technical Specification requirements to provide a fire watch as a compensatory measure due to fire suppression equipment inoperability or a non-functional fire barrier (fire door) as a result of personnel error, inadequate review of documentation and/or an inadequate or ineffective equipment status control system. In each case, postulated fires could be more severe or spread to adjacent areas in a manner different than assumed in the fire hazards analysis as a result of the inoperable fire suppression equipment or non-functional fire doors. The events require a report under 10CFR50.73(a)(2)(i)(B).

Corrective Action

1. In each case, the required fire watch was posted or the non-functional fire barrier (fire door) was restored to normal immediately following discovery of the deficiency. These actions resulted in compliance with the Technical Specifications and/or associated commitment.

2. Administrative controls have been developed and implemented to provide more specific guidelines for the conditions, review of documentation and review of plant equipment status which must be completed prior to establishing or discontinuing a fire watch. These administrative controls should reduce the probability of human error in the decision process associated with discontinuing a fire watch. Completed June 5, 1992.

3. The equipment status control system will be evaluated to determine what changes are necessary to provide assurance that the Shift Supervisor has available at all times sufficient information concerning the operability of systems, structures and components. This action will result in a system in which the Shift Supervisor will not be required to depend on the fire protection supervisor (or any other individual or group) that is not normally on duty 24 hours a day and 7 days a week. Any changes necessary will be implemented prior to plant start-up. Scheduled due date August 15, 1992.

Additional Information

Failed Components: None

Similar Events: LERs 92-001, 92-004, 92-006, 92-010, 92-011 92-015, 92-017, and 92-019 describe additional events involving programmatic fire protection deficiencies since January 1, 1992.