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January 31, 1995 JPN-95-002 IPN-95-009

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Mail Station P1-137 Washington, D.C. 20555

SUBJECT:

James A. FitzPatrick Nuclear Power Plant

Docket No. 50-333

Indian Point 3 Nuclear Power Plant

Docket No. 50-286

NFPA (National Fire Protection Association)

Code Compliance Walkdown Project Summary

REFERENCES:

- 1. NYPA letter, R. E. Beedle to the NRC, dated May 27, 1992 (JPN-92-023), regarding the fire protection improvement program.
- 2. NYPA letter, R. E. Beedle to the NRC, dated September 13, 1991 (JPN-91-050), regarding a schedule for the long term fire protection actions.
- 3. NRC letter, J. M. Trapp to H. P. Salmon, Jr., dated August 16, 1994, regarding NRC Inspection Report 50-333/94-18.

Dear Sir:

The attached report describes the results of NFPA code walkdowns recently completed at the Authority's James A. FitzPatrick and Indian Point 3 Nuclear Power Plants. The report describes how the walkdowns were performed, lists the NFPA codes of record for each plant, and briefly summarizes the results. The walkdowns were performed in the Fall of 1993 for FitzPatrick and in the Spring of 1994 for Indian Point to identify and document the level of conformance to NFPA codes of record for fire protection systems and features.

In 1991, the Authority performed a review of the fire protection systems at FitzPatrick. During this review, it became apparent that the NFPA codes of record were not clearly identified and as a result the walkdowns were undertaken. The Authority committed, in References 1 and 2, to perform an NFPA code compliance walkdown at FitzPatrick. The FitzPatrick Fire Protection lessons learned were applied to Indian Point 3 and the Authority performed a similar walkdown at Indian Point 3.

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Deviations from the code identified during the walkdowns include: missing hangers, inadequate testing, inadequate flushing of fluid systems, painted spray heads, missing signs or labels, missing documentation, and incorrect spacing and location of sprinklers and detectors. None of these non-conformances affected the ability of a system covered by the Technical Specifications to perform its design function. Most of the open items identified by the walkdowns at both plants are minor and of limited significance to safety. However, at FitzPatrick, some fire protection systems that are not part of the Technical Specifications were declared inoperable due to inadequate of testing. These systems have been returned to service.

Corrective actions for both FitzPatrick and Indian Point 3 are formally tracked and will be scheduled through the Authority prioritization program. Actions necessary to resolve non-conformances identified during the walkdowns will be scheduled based on their safety significance. Modifications resulting from the walkdowns will be considered together with other plant modifications the Authority has committed to install, along with improvements recommended by the Authority's staff.

The remaining open items, which are documented in the "Summary of Open Items" Reports (JAF-RPT-FPS-01532 and IP3-RPT-FP-01165, as discussed in Attachment I) will be reviewed by Corporate Fire Protection / Appraisal & Compliance during their annual audits of the Fire Protection Program at each plant to assure that the corrective actions and modifications associated with each open item is tracked to resolution.

The performance of the FitzPatrick NFPA Code Compliance Walkdown completes the work on the FitzPatrick Fire Protection Post-Startup Items 2.1.2 (Reference 1) and VIII.F.3 (Reference 2). In Reference 3 (Section 2.2, page 2), the NRC documented the closure of these two Items.

If you have any questions, please contact Ms. C. D. Faison.

Very truly yours,

William J. Cahill, Jr. Chief Nuclear Officer

Nuclear Generation

cc: Next page

cc: Regional Administrator
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Attachments:

- I. James A. FitzPatrick and Indian Point 3 Nuclear Power Plants, NFPA Code Compliance Walkdown Project Summary
- II. James A. FitzPatrick and Indian Point 3 Nuclear Power Plants, NFPA Code Compliance Walkdown Project Summary Commitments

James A. FitzPatrick and Indian Point 3 Nuclear Power Plants NFPA Code Compliance Walkdown Project Summary

INTRODUCTION

During the Authority's review of the fire protection systems at the James A. FitzPatrick Nuclear Power Plant, it became apparent that the NFPA codes of record were not clearly identified. As a result, the Authority committed (References 1 and 2) to perform an NFPA Code Compliance Walkdown at FitzPatrick. When FitzPatrick Fire Protection lessons learned were evaluated at the Indian Point 3 Nuclear Power Plant, the Authority decided to perform a similar walkdown at Indian Point 3.

The Authority conducted the NFPA Code Compliance Walkdowns at FitzPatrick in the Fall of 1993 and Indian Point in the Spring of 1994 to document the level of conformance to these NFPA codes of record for the fire protection systems and features.

The completion of the FitzPatrick NFPA Code Compliance Walkdown completes the work on the FitzPatrick Fire Protection Post-Startup Items 2.1.2 (Reference 1) and VIII.F.3 (Reference 2).

METHODOLOGY

Code of Record

"NFPA Code of record" means the NFPA standard and edition to which each fire protection feature or system at FitzPatrick or Indian Point 3 was designed or to which the Authority has committed to the NRC. By reviewing plant documentation, such as drawings, vendor manuals, specifications and licensing commitments, a determination was made as to which NFPA standards and editions were the NFPA codes of record. In addition, there may be more than one edition for any particular NFPA Code due to the fact that some fire protection systems and features were installed or significantly modified at different times. Table 1 delineates the NFPA Codes of record for FitzPatrick and Indian Point 3.

Code Shells

For the selected NFPA Code editions "code shells" were prepared for use during the field walkdowns. These "code shells" were the walkdown documents which had the applicable requirements of the particular NFPA Code in a consistent format. The "code shells" also contained applicable compliance exemptions to the NFPA Codes and applicable Authority commitments. In addition, a review of the applicable NFPA Codes against plant procedures was conducted to determine whether applicable maintenance and testing requirements and criteria specified in the NFPA Codes are incorporated in the plant procedures.

Walkdowns

At least one member of the walkdown team at each plant was a full member of the Society of Fire Protection Engineers (SFPE). The SFPE Engineer reviewed all the non-conformances to determine if they affected the system's ability to perform its design function. After the review for each system was completed, the SFPE Engineer also reviewed the non-conformances to determine their cumulative effect on the system. If the SFPE Engineer, in conjunction with other Authority Fire Protection personnel, determined that system operability was potentially affected, a Deviation Event Report (DER) was initiated.

Non-Conformances

The non-conformances and recommended corrective actions were documented in the "code shells" and evaluated by the SFPE Engineer. The evaluations include a recommendation for resolving the non-conformances. The non-conformances are being resolved by engineering evaluations demonstrating compliance with the code's intent, short-term compensatory measures, procedure changes, work requests and modifications.

Those non-conformances that were not resolved during the walkdowns have been compiled into a "Summary of Open Items" Report (for FitzPatrick report JAF-RPT-FPS-01532 [Reference 3] and for Indian Point 3 report IP3-RPT-FP-01165 [Reference 4]).

RESULTS

There are less than one hundred open items associated with each plant. Most of the open items identified by the walkdowns at both plants are minor and of limited significance to safety. Deviations from the code identified during the walkdowns include: missing hangers, inadequate testing, inadequate flushing of fluid systems, painted spray heads, missing signs or labels, missing documentation, and incorrect spacing and location of sprinklers and detectors. Each discrepancy was evaluated by a member grade SFPE Engineer and the Authority's Fire Protection staff. None of these non-conformances affected the ability of a system covered by the Technical Specifications to perform its design function. However, at FitzPatrick, some fire protection systems that are not part of the Technical Specifications were declared inoperable due to inadequate of testing. These systems have been returned to service.

SCHEDULE FOR RESOLUTION OF NON-CONFORMANCES

In Reference 5 (page 6), the Authority committed to the NRC for FitzPatrick to:

"Evaluate, justify or modify the systems as required. Complete the evaluations, justifications, and/or evaluations one year after the completion of the NFPA code review."

A similar schedule was not submitted to the NRC for Indian Point 3.

The Authority is extending the schedule for the completion of the corrective actions and modifications at FitzPatrick based on the results of the walkdowns. This is reasonable considering the limited safety significance of the non-conformances identified.

Corrective actions for both FitzPatrick and Indian Point 3 are formally tracked and will be scheduled through the Authority prioritization program. Actions necessary to resolve non-conformances identified during the walkdowns will be scheduled based on their safety significance. Modifications resulting from the walkdowns will be considered together with other plant modifications the Authority has committed to install, along with improvements recommended by the Authority's staff.

The remaining open items, which are documented in the "Summary of Open Items" Reports will be reviewed by Corporate Fire Protection / Appraisal & Compliance during their annual audits of the Fire Protection Program at each plant to assure that the corrective actions and modifications associated with each open item is tracked to resolution.

REFERENCES

- 1. NYPA letter, R. E. Beedle to the NRC, dated May 27, 1992 (JPN-92-023), regarding the fire protection improvement program.
- 2. NYPA letter, R. E. Beedle to the NRC, dated September 13, 1991 (JPN-91-050), regarding a schedule for the long term fire protection actions.
- 3. NYPA Report JAF-RPT-FPS-01532, "James A. FitzPatrick NFPA Code Conformance Review Project, Summary of Open Items", Rev. 0, dated May 1994.
- 4. NYPA Report IP3-RPT-FP-01165, "Indian Point 3 NFPA Code Conformance Review Project, Summary of Open Items", Rev, 0, dated August 1994.
- 5. NYPA letter, R. E. Beedle to USNRC, dated March 27, 1992 (JPN-92-014), regarding Fire Protection Program.

TABLE 1

National Fire Protection Association (NFPA) Codes Of Record

(Multiple NFPA Code Editions are listed because fire protection systems or features covered by that code were installed or significantly modified since initial construction.)

NFPA Code	Edition JAF	Edition IP3	Code Title	
10	1990	1990	Portable Fire Extinguishers	
11	1972	NA	Foam Extinguishing Systems	
12	1968	1977	Carbon Dioxide Extinguishing Systems	
12A	1985	1980	Halon 1301 Fire Extinguishing Systems	
13	1972	1983	Installation of Sprinkler Systems	
14	1978	1976	Installation of Standpipe and Hose Systems	
15	1969, 1982	1977	Water Spray Fixed Systems	
16	1974	1968	Foam-Water Sprinkler and Spray Systems	
20	1970, 1988	1976	Installation of Centrifugal Fire Pumps	
22	NA	1976	Water Tanks for Private Fire Protection	
24	1969	1977	Outside Protection	
26	1958	1976	Supervision of Valves	
50A	1984	1969	Gaseous Hydrogen Systems at Consumer Sites	
72D	1967, 1979	1975, 1986	Proprietary Signaling Systems	
72E	1978	1974, 1987	Automatic Fire Detectors	
74	1978	NA	Household Fire Warning Equipment	
80	1970	1977	Fire Doors and Windows	
90A	1971	1978	Installation of Air Conditioning and Ventilating Systems	
204M	1968	1968	Smoke and Heat Venting	

James A. FitzPatrick and Indian Point 3 Nuclear Power Plants NFPA Code Compliance Walkdown Project Summary Commitments

Commitment Number	Commitment	Due Date
JPN-95-002-01	The remaining open items, which are documented in the "Summary of Open Items" Report for FitzPatrick (JAF-RPT-FPS-01532) will be reviewed by Corporate Fire Protection / Appraisal & Compliance during their annual audit of the Fire Protection Program at FitzPatrick to assure that the corrective action(s) and/or modification(s) associated with each open item is tracked and resolved in a timely manner.	The next audit of the Fire Protection Program at FitzPatrick is scheduled for September 1995.
IPN-95-009-01	The remaining open items, which are documented in the "Summary of Open Items" Report for Indian Point 3 (IP3-RPT-FP-01165) will be reviewed by Corporate Fire Protection / Appraisal & Compliance during their annual audit of the Fire Protection Program at Indian Point 3 to assure that the corrective action(s) and/or modification(s) associated with each open item is tracked and resolved in a timely manner.	The next audit of the Fire Protection Program at Indian Point 3 is scheduled for August 1995.