UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

July 7, 1993

Docket No. 50-333

Mr. Ralph E. Beedle
Executive Vice President - Nuclear Generation
Power Authority of the State of New York
123 Main Street
White Plains, New York 10601

Dear Mr. Beedle:

SUBJECT: ISSUANCE OF AMENDMENT FOR JAMES A. FITZPATRICK NUCLEAR POWER PLANT (TAC NO. M86324)

The Commission has issued the enclosed Amendment No. 191 to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant. The amendment consists of changes to the Technical Specifications (TS) in response to your application transmitted by letter dated April 16, 1993.

The amendment modifies TS 4.12.F.1 to require a visual inspection of all fire barrier penetration seals for each protected area once per operating cycle, in lieu of once per 1.5 years. In addition, the modification deletes the footnote to TS 4.12.F.1 that was added in TS Amendment No. 177. The amendment, which allowed a one-time 3 month extension of the surveillance interval for visually inspecting the fire barrier penetration seals, is no longer applicable to the facility.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

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John E. Menning, Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 191 to DPR-59
2. Safety Evaluation

cc w/enclosures:
See next page

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Mr. Ralph E. Beedle
Power Authority of the State of New York

James A. FitzPatrick Nuclear
Power Plant

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DATED: July 7, 1993

AMENDMENT NO. 191 TO FACILITY OPERATING LICENSE NO. DPR-59-FITZPATRICK

Docket File
NRC & Local PDRs
PDI-1 Reading
S. Varga, 14/E/4
J. Calvo, 14/A/4
R. Capra
C. Vogan
K. Shembarger
B. McCabe
J. Menning
OGC-WF
D. Hagan, 3302 MNBB
G. Hill (2), P1-22
Wanda Jones, P-370
C. Grimes, 11/F/23
C. McCracken, 8/D/1
ACRS (10)
OPA
OC/LFMB
PD plant-specific file
C. Cowgill, Region I
S. West, 8/D/1
P. Madden, 3/D/1

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

POWER AUTHORITY OF THE STATE OF NEW YORK

DOCKET NO. 50-333

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 191
License No. DPR-59

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Power Authority of the State of New York (the licensee) dated April 16, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-59 is hereby amended to read as follows:

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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 191, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Capra

Robert A. Capra, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 7, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 191

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Revise Appendix A as follows:

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2. If the fire protection systems smoke and/or heat detectors in Tables 3.12.1 and 3.12.2 cannot be restored to an operable status within 14 days, a written report to the Commission outlining the action taken, the cause of inoperability and plans and schedule for restoring the detectors to an operable status shall be prepared and submitted within 30 days.

F. Fire Barrier Penetration Seals

1. All fire barrier penetrations, including cable penetration barriers, fire doors and fire dampers, in fire zone boundaries protecting safety related areas shall be functional.

2. With one or more of the required fire barrier penetrations non-functional, within one hour establish a continuous fire watch on at least one side of the affected penetration or verify the operability of fire detectors on at least one side of the non-functional fire barrier and establish an hourly fire watch patrol. Restore the non-functional fire barrier penetration(s) to functional status within 7 days or, in lieu of any other report required by Specification 6.9.A, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.B within 30 days outlining the action taken, the cause of the non-functional penetration and plans and schedule for restoring the fire barrier penetration(s) to functional status.

F. Fire Barrier Penetration Seals

1. All fire barrier penetration seals for each protected area shall be visually inspected once per operating cycle to verify functional integrity. For those fire barrier-penetrations that are not in the as-designed condition, an evaluation shall be performed to show that the modification has not degraded the fire rating of the fire barrier penetration.

2. Any repair of fire barrier penetration seals shall be followed by a visual inspection.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 191 TO FACILITY OPERATING LICENSE NO. DPR-59

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCKET NO. 50-333

## 1.0 INTRODUCTION

By letter dated April 16, 1993, the Power Authority of the State of New York (the licensee) submitted a request for changes to the James A. FitzPatrick Nuclear Power Plant, Technical Specifications (TS). The requested changes would modify TS 4.12.F.1 to require a visual inspection of all fire barrier penetration seals for each protected area once per operating cycle, in lieu of once per 1.5 years. In addition, the modification would delete the footnote to TS 4.12.F.1 that was added under TS Amendment No. 177, that allowed a one-time 3 month extension of the surveillance interval for visually inspecting the fire barrier penetration seals. Removal of the footnote is administrative in nature, since the footnote is no longer applicable to the facility.

## 2.0 EVALUATION

The Code of Federal Regulations, 10 CFR Part 50, Appendix R, "Fire Protection Program For Nuclear Power Facilities Operating Prior to January 1, 1979," requires that each nuclear power plant establish a fire protection program that extends the concept of defense-in-depth to fire protection in fire areas important to safety, with the following objectives:

1. To prevent fires from starting;

2. To detect rapidly, control, and extinguish promptly those fires that do occur;

3. To provide protection for structures, systems, and components important to safety so that a fire that is not promptly extinguished by the fire suppression activities will not prevent the safe shutdown of the plant.

Fire barriers are just one feature of the FitzPatrick fire protection program. The functional integrity of these fire barrier penetrations ensures that fire will be confined or adequately retarded from spreading to an adjacent portion of the facility. This design feature minimizes the possibility of a single

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fire rapidly involving several areas of the facility prior to detection and extinguishment. The fire barrier penetrations are a passive element in the facility fire protection program and are subject to periodic inspections.

The facility has proposed two modifications to TS 4.12.F.1. First, the facility proposed to change the visual inspection requirement for all fire barrier penetration seals for each protected area from once per 1.5 years to once per operating cycle. The modification would account for the time the unit is shut down, providing added flexibility to the required testing schedule. For example, the modification would permit access to penetration seals in radiation areas during outages when radiation levels are generally lower, which would minimize personnel radiation exposure incurred during the inspections.

With the modification, the start date of the current fire barrier penetration surveillance interval would be reset from September 27, 1991, to January 3, 1993. Resetting the start date is acceptable for several reasons.

First, the licensee verified that the fire barrier penetrations were in excellent physical condition at the end of the 1992 refueling outage, which ended in January 1993, as a result of the inspection, repair, and reinspection programs conducted during the outage on the fire barrier penetration seals, fire doors, and fire dampers. For the fire barrier penetration seals, a baseline inspection was completed during the 1992 refueling outage. During this baseline inspection, detailed data on the physical configuration of the penetration seals was collected. Deficient seals were repaired and subsequently reinspected and baselined. Future routine seal inspections will visually verify that the seal configuration has not changed from the baseline and visually verify that the surface of the seal has not degraded.

Second, the fire barrier penetration seal baseline inspection was more detailed than the regular visual inspection. The baseline inspection documented the following information for each of the approximately 7200 fire barrier penetration seals:

- Penetration details (location, size, shape, orientation, serial number, presence of label, applicable Fire Areas/Fire Zones, applicable penetration design drawings, and applicable penetration location drawings).
- Barrier (wall/ceiling/floor) construction details.
- Number, size, and distance between pipes or conduit passing through the penetration.
- Type and depth of seal material.
- Type and location of damming material.

Third, because of the design and materials used in the construction of fire barrier penetrations, they do not degrade rapidly. Degradation normally occurs due to the long term effects of moisture, heat, radiation, physical wear, and dirt. Therefore, the small amount of degradation the fire barrier penetrations may undergo prior to their inspection is insignificant, and will not significantly reduce a fire barrier penetration's ability to prevent the spread of fire from one side of a barrier to the other.

Fourth, the fire protection system is designed with the defense-in-depth concept outlined in 10 CFR Part 50, Appendix R, to assure that a fire in the vicinity of a fire barrier penetration will be promptly detected and extinguished. The defense-in-depth concept at FitzPatrick, which is not compromised by the amendment, includes the following detection, suppression, and protection features:

- Automatic suppression and/or detection systems in many fire areas, including carbon dioxide systems, halon, sprinklers, and water sprays.

- Manual hose stations and portable extinguishers installed throughout the plant.

- A trained fire brigade on site to respond to a fire.

- A local fire department available to respond to a fire.

- Fire protection systems periodically inspected and tested to assure that they are capable of performing their intended function.

- Fire barriers which separate safety-related components and reduce the potential for the spread of fire between fire areas or zones.

- Remote/alternate safe shutdown panels, procedures and operator training that assure the plant can be safely shut down and maintained in a shutdown condition for a fire in the Control Room, the Relay Room, the Cable Spreading Room, the North Cable Tunnel, or the Battery Room Corridor.

- A dedicated emergency lighting system and a communication system for remote/alternate shutdown.

The NRC staff has reviewed the proposed amendment and concludes that the degradation that may occur, as a result of changing the surveillance requirement from once per 1.5 years to once per operating cycle, will be minimal, and thus will not significantly reduce the ability to prevent the spread of fire from one side of the barrier to the other. Should seal degradation occur as a result of the change, the current levels of fire detection, suppression, and protection at FitzPatrick are adequate to ensure maintenance of safe shutdown capability and provide reasonable assurance of prompt extinguishment of postulated fires.

The second proposed modification to TS 4.12.F.1 would delete the footnote to the TS that was added under TS Amendment No. 177, that allowed a one time three month extension of the surveillance interval for visually inspecting the fire barrier penetration seals. Removal of the footnote eliminates information that is no longer applicable, and therefore, the staff finds the change acceptable.

In conclusion, the NRC staff has reviewed the proposed changes to the Technical Specifications and finds the changes acceptable.

## 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (58 FR 30198). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor:
K. Shembarger

Date: July 7, 1993

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Docket No. 50-333

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Executive Vice President - Nuclear Generation
Power Authority of the State of New York
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Sincerely,

Original signed by:

John E. Menning, Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 191 to DPR-59
2. Safety Evaluation

cc w/enclosures:
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