



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

February 19, 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. M84882)

The Commission has issued the enclosed Amendment No. 186 to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated September 25, 1992.

The amendment adds operability and surveillance requirements to Tables 3.12.1, "Water Spray/Sprinkler Protected Areas," and 4.12.1, "Water Spray/Sprinkler System Tests," to reflect a plant modification that will improve fire protection at the FitzPatrick plant. The modification installed an automatic fire suppression system in the battery room corridor. The new suppression system is a wet pipe design with fusible link sprinklers that are heat actuated to allow for sectionalized fire suppression capability.

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,

Brian C. McCabe, Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 186 to DPR-59
2. Safety Evaluation

cc w/enclosures:

See next page

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DATED: February 19, 1993

AMENDMENT NO. 186 TO FACILITY OPERATING LICENSE NO. DPR-59-FITZPATRICK

Docket File

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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. 186
License No. DPR-59

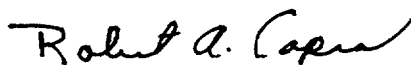
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Power Authority of the State of New York (the licensee) dated September 25, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's 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:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 186, 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, 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: February 19, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 186

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Revise Appendix A as follows:

Remove Pages

244j
244q

Insert Pages

244j
244q

JAFNPP

TABLE 3.12.1

WATER SPRAY/SPRINKLER PROTECTED AREAS

AREA	FIRE DETECTION	TYPE PROTECTION(3)	TYPE INITIATION
1) West Cable Tunnel	Ionization and Electric Heat Activated Device	Water Spray	Automatic/Manual
2) East Cable Tunnel	Ionization and Electric Heat Activated Device	Water Spray	Automatic/Manual
3) Recirculation MG Room	Electric Heat Activated Device	Fusible Link Sprinklers	Automatic/Manual
4) Emergency Diesels(1)	Electric Heat Activated Device	Fusible Link Sprinklers	Automatic/Manual
5) HPCI	Electric Heat Activated Device	Water Spray	Manual
6) RCIC	Electric Heat Activated Device	Water Spray	Manual
7) Standby Gas Treatment Trains(2)	Electric Heat Activated Device	Water Spray	Manual
8) West Diesel Fire Pump Room	Sprinkler Flow Alarm	Fusible Link Sprinklers	Automatic
9) Battery Room Corridor	Ionization and Sprinkler Flow Alarm	Fusible Link Sprinklers	Automatic

Notes for Table 3.12.1

1. Each of two (2) Emergency Diesel Generator Systems is a separate protected area, each system contains two (2) separate rooms.
2. Each of two (2) Standby Gas Treatment trains is a separate area.
3. All areas are also protected by fire hoses and portable dry chemical and/or CO₂ fire extinguishers.

JAFNPP

TABLE 4.12.1

WATER SPRAY/SPRINKLER SYSTEM TESTS

AREA	CYCLING EACH VALVE	SPRAY NOZZLE INSPECTION	HEADER INTEGRITY INSPECTION	NOZZLE AIR FLOW TEST
1) West Cable Tunnel	Once/6 Months	Once/1.5 Years	Once/1.5 Years	Once/3 Years
2) East Cable Tunnel	Once/6 Months	Once/1.5 Years	Once/1.5 Years	Once/3 Years
3) Recirculation MG Room	Once/6 Months	N/A	Once/1.5 Years	N/A
4) Emergency Diesel Rooms	Once/6 Months	N/A	Once/1.5 Years	N/A
5) HPCI	Once/6 Months	Once/1.5 Years	Once/1.5 Years	Once/3 Years
6) RCIC	Once/6 Months	Once/1.5 Years	Once/1.5 Years	Once/3 Years
7) Standby Gas Treatment Trains	Once/6 Months	Once/1.5 Years	Once/1.5 Years	Once/3 Years
8) West Diesel Fire Pump Room	None(1)	N/A	Once/1.5 Years	N/A
9) Battery Room Corridor	None(1)	N/A	Once/1.5 Years	N/A

Notes for Table 4.12.1

1. Wet pipe sprinkler system.



UNITED STATES
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 186 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 September 25, 1992, 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 add operability and surveillance requirements to Tables 3.12.1, "Water Spray/Sprinkler Protected Areas," and 4.12.1, "Water Spray/Sprinkler System Tests," to reflect a plant modification that improves fire protection at the FitzPatrick plant. The modification installed an automatic fire suppression system in the battery room corridor. The new suppression system is a wet pipe design with fusible link sprinklers that are heat actuated to allow for sectionalized fire suppression capability.

2.0 EVALUATION

Nuclear power plants use the concept of defense-in-depth to achieve the required high degree of safety by using echelons of safety systems. This concept is also applicable to fire safety in nuclear power plants. With respect to the fire protection program, the defense-in-depth principle is aimed at achieving an adequate balance in:

- a. Preventing fires from starting;
- b. Detecting fires quickly, suppressing those fires that occur, putting them out quickly, and limiting their damage; and
- c. Designing plant safety systems so that a fire that starts in spite of the fire prevention program and burns for a considerable time in spite of fire protection activities will not prevent essential plant safety functions from being performed.

The primary objective of the fire protection program is to minimize both the probability and consequences of postulated fires. In spite of steps taken to reduce the probability of fire, fires are expected to occur. Therefore, means

are needed to detect and suppress fires with particular emphasis on providing passive and active fire protection of appropriate capability and adequate capacity for the systems necessary to achieve and maintain safe plant shutdown with or without offsite power.

The licensee has proposed adding the Battery Room Corridor fire suppression system to Technical Specification (TS) Tables 3.12.1 and 4.12.1 to reflect a plant modification that improves fire protection at the FitzPatrick plant. Specifically, during the 1992 refueling outage, the licensee installed a fire suppression system in the Battery Room Corridor to improve the ability of the plant fire protection system to suppress fires. The new suppression system is a wet pipe design with fusible link sprinklers that are heat actuated to allow for sectionalized fire suppression capability. The system is automatically initiated when the nearby temperature reaches the melting point of the fusible link. The system is a Class M system that will be Seismic Class II supported. The licensee has evaluated the potential for flooding and water damage events in the Battery Room Corridor and has determined that these events will not affect the ability of the plant to achieve and maintain safe shutdown from the control room. This evaluation concluded that the affects of the postulated fire in the Battery Room Corridor are more severe than those from water damage. Therefore, the addition of sprinklers provides a net safety benefit since the response time to such a fire is reduced with a corresponding reduction in potential fire damage. In addition to the new fire suppression system, the Battery Room Corridor is protected by an existing fire detection capability consisting of ionization smoke detectors. These detectors alarm in the control room when initiated. In addition, a system pressure switch, installed with the new suppression system, will indicate actuation by alarming in the control room.

The proposed limiting conditions for operation and surveillance requirements for the new Battery Room Corridor suppression system are consistent with those already established for existing similar fire protection systems (wet pipe system with closed sprinklers) and those described in NUREG-0123, "Standard Technical Specifications for General Electric Boiling Water Reactors," Revision 3, dated Fall 1980. Specifically, from the time that water spray and/or sprinkler protection for any of the areas listed in TS Table 3.12.1 is made or found inoperable, backup fire suppression equipment and a continuous fire watch will be established for the unprotected area within 1 hour. If the water spray and/or sprinkler protection system for any area listed in TS Table 3.12.1 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 system to an operable status shall be prepared and submitted within 30 days. The surveillance requirements for the new Battery Room Corridor suppression system consist of performing a header integrity inspection once every 1.5 years. These proposed

limiting conditions for operation and surveillance requirements for the Battery Room Corridor suppression system assure that this new suppression system is maintained and verified operable through periodic surveillance and provide appropriate compensatory measures if the system becomes inoperable.

In conclusion, the NRC staff finds that the addition of a new suppression system for the Battery Room Corridor improves the ability of the plant fire protection system to suppress fires and limit fire damage. Furthermore, the potential for flooding and water damage has been evaluated and found to be less limiting than other analyzed events including a fire in this area. Also, the limiting conditions for operation and surveillance requirements are adequate to assure that this new suppression system is maintained operable through periodic surveillance and provide appropriate compensatory measures if the system becomes inoperable. Therefore, the NRC staff finds the proposed TS 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 (57 FR 58249). 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:
Brian C. McCabe

Date: February 19, 1993

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Executive Vice President - Nuclear Generation
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Sincerely,
Original Signed By:

Brian C. McCabe, Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

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2. Safety Evaluation

cc w/enclosures:
See next page

PDI-1:LA	PDI-1:PM	SPLB <i>CA</i>	OGC	PDI-1:D	
CVogan <i>w</i>	BMcCabe: <i>sm</i>	CMcCracken	<i>S/HOM</i>	RACapra <i>rac</i>	
<i>2/1/93</i>	<i>2/11/93</i>	<i>2/13/93</i>	<i>2/16/93</i>	<i>2/19/93</i>	<i>1/1</i>

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~~Approved to O&D~~
d.p.p.