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Docket No. 50-333

JUL 1 1983

Mr. J. P. Bayne  
 Executive Vice President,  
 Nuclear Generation  
 Power Authority of the State  
 of New York  
 123 Main Street  
 White Plains, New York 10601

Dear Mr. Bayne:

SUBJECT: EXEMPTION REQUESTS - 10 CFR 50.48 FIRE PROTECTION AND APPENDIX R  
 TO 10 CFR PART 50

Re: James A. FitzPatrick Nuclear Power Plant

The Commission has issued the enclosed Exemption from certain requirements of Section 50.48 and Appendix R to 10 CFR Part 50 for the James A. FitzPatrick Nuclear Power Plant. This action is in partial response to your request in a letter dated February 26, 1982, as supplemented by your letters dated July 13, and November 11, 1982. In your submittals, you requested twelve exemptions from certain provisions of Appendix R. By letter dated April 26, 1983, we granted two of your requests pertaining to alternate safe shutdown capability and determined that a third request was unnecessary. Our letter also transmitted our Safety Evaluation of your proposed alternate safe shutdown capability.

The enclosed Exemption addresses two additional exemption requests pertaining to the Control Room and the Torus Room. The remaining requests regarding the reactor building crescent area and stairwells, for which you provided additional information on March 1, April 5, and May 19, 1983, will be addressed as a separate action.

Based on our evaluation, we find that the level of protection currently provided in the Control Room and the Torus Room is equivalent to the level of fire protection required by Sections III.G and III.L and, therefore, exemption from the requirements is granted to the extent specified in the enclosed Exemption.

A copy of the Exemption is being filed with the Office of the Federal Register for publication.

Sincerely,

ORIGINAL SIGNED BY

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 PDR ADOCK 05000333  
 F PDR

Previous concurrence sheet concurred **Domenic B. Vassallo, Chief**  
 \* on by S. Norris 6/20/83 & J. Hegner 6/20/83 **Operating Reactors Branch #2**

Division of Licensing

OFFICE	DL:ORB#2	DL:ORB#2	DL:ORB#2	DL:AD:OR	OELD	DE:SENHUT	DE:ORB#5
SURNAME	Enclosure: *SNorris	Exemption *JHegner:pob	<i>[Signature]</i> DVassallo	<i>[Signature]</i> GLainas	<i>[Signature]</i> EJordan	<i>[Signature]</i> DL:DIR	TWambach
DATE	6/1/83	6/1/83	6/24/83	6/14/83	6/30/83	6/1/83	6/24/83

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Based on our evaluation we find that the level of protection currently provided in the Control Room and the Torus Room is equivalent to the level of fire protection required by Section III.G and, therefore, exemption from the requirements of Section III.G is granted.

A copy of the Exemption is being filed with the Office of the Federal Register for publication.

Sincerely,

Domenic B. Vassallo, Chief  
 Operating Reactors Branch #2

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OFFICE	DL:ORB#2	DL:ORB#2	DL:ORB#2	DL:ORB#2	AD:OR:DL	OELD
SURNAME	SNorris	JHegner:pg	TWambach	DVassallo	GCLainas	
DATE	6/20/83	6/21/83	6/ /83	6/ /83	6/ /83	6/ /83

Mr. J. P. Bayne  
Power Authority of the State of New York  
James A. FitzPatrick Nuclear Power Plant

cc:

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	Docket No. 50-333
POWER AUTHORITY OF THE STATE OF	)	
NEW YORK	)	
(James A. FitzPatrick Nuclear	)	
Power Plant)	)	

EXEMPTION

I.

The Power Authority of the State of New York (the licensee) is the holder of Facility Operating License No. DPR-59 which authorizes the licensee to operate the James A. FitzPatrick Nuclear Power Plant (the facility) at power levels not in excess of 2436 megawatts thermal. The facility is a boiling water reactor (BWR) located at the licensee's site in Oswego County, New York. The license provides, among other things, that it is subject to all rules, regulations and Orders of the Commission now or hereafter in effect.

II.

Section 50.48 of 10 CFR Part 50 requires that licensed operating reactors be subject to the requirements of Appendix R of 10 CFR Part 50. Appendix R contains the general and specific requirements for fire protection programs at licensed nuclear facilities. On February 17, 1981, the fire protection rule for nuclear power plants, 10 CFR 50.48 and Appendix R, became effective. This rule required all licensees of plants licensed prior to January 1, 1979, to submit by March 19, 1981: (1) plans and schedules for meeting the applicable requirements of Appendix R, (2) a design description of any modifications proposed to provide alternative safe shutdown capability pursuant to Paragraph III.G.3 of Appendix R, and (3) exemption requests for which the tolling

provision of Section 50.48(c)(6) was to be invoked. On March 19, 1981, the licensee requested and was subsequently granted a schedular exemption for submitting the required information until February, 1982.

The licensee responded to these requirements by letter dated February 26, 1982, and supplemented its response by information contained in letters July 13 and November 11, 1982.

In these submittals, the licensee requested certain exemptions from the requirements of Section III.G of Appendix R to 10 CFR Part 50. Section III.G of Appendix R requires that one train of cables and equipment necessary to achieve and maintain safe shutdown be maintained free of fire damage by one of the following means:

- a. Separation of cables and equipment and associated non-safety circuits of redundant trains by a fire barrier having a 3-hour rating. Structural steel forming a part of or supporting such fire barriers shall be protected to provide fire resistance equivalent to that required of the barrier;
- b. Separation of cables and equipment and associated non-safety circuits of redundant trains by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards. In addition, fire detectors and an automatic fire suppression system shall be installed in the fire area; or
- c. Enclosure of cables and equipment and associated non-safety circuits of one redundant train in a fire barrier having a 1-hour rating. In addition, fire detectors and an automatic fire suppression system shall be installed in the fire area.

If these conditions are not met, Section III.G.3 requires alternative shutdown capability independent of the fire area of concern.

The exemption requests we found to be acceptable are as follows:

1. The licensee requested an exemption from the provisions of Section III.G.3. of Appendix R for the Control Room to the extent that an area-wide fire detection system and a fixed fire suppression system is required.

The licensee justified the exemption by stating that: the control room is enclosed in perimeter walls, floor, and ceiling having at least a three-hour resistance rating; existing fire protection consists of a fire detection system in the control room safety related panels and in the HVAC system air intakes, and portable fire extinguishers and manual hose station are located in the control room. In addition, the control room is continuously manned and the fire hazard loading is low. The licensee has also proposed modifications acceptable to the staff which would provide an alternate shutdown capability independent of the control room.

We have reviewed the licensee's submittals and agree with the licensee's evaluation that the area does not comply with Section III.G.3 in that no area-wide fire detection system or fixed fire suppression system currently exists. However, we find that because the fire loading is low; the control room is continuously manned and provided with adequate portable fire fighting equipment; the safety-related equipment and HVAC system are equipped with fire detection systems; and an acceptable alternate safe shutdown capability has been identified; there is reasonable assurance that a fire would be promptly extinguished and the ability to achieve safe shutdown would be maintained.

Therefore, we concluded that the existing fire protection program for the control room provides a level of fire protection equivalent to the technical requirements of Section III.G.3 of Appendix R and that the licensee's request should be granted.

2. The licensee requested an exemption from the provisions of Section III.G.2., III.G.3, and III.L. to the extent that separation and/or fire protection of redundant shutdown divisions or the installation of an alternate shutdown capability is required for the Torus Room.

The licensee justified the exemption by stating that: the area contains only the suppression pool and is a controlled access area bounded on all sides by three-hour fire-rated masonry construction; there are no combustible materials and no significant fire hazards in the area; and that shutdown related components in the area consist only of the RHR pump suction valves of both divisions. These valves are in an open position and all power cables to them have been disabled under a previously approved plant modification.

We have reviewed the licensee's submittals and agree with the licensee's evaluation that the area does not comply with the provisions of Appendix R because of the lack of adequate separation between the valves and the absence of area wide fire detection and fire suppression systems. However, there are no definable fire hazards in this room. If a minor fire should occur, there is no significant amount of combustible materials present to contribute to its severity, as represented by smoke, flame, and hot gases. Consequently, no credible fire threat exists for the safety related valves. In addition, the valves are in the required open position and all power cables to them have been disabled. Therefore, this flowpath would be available for safe shutdown during a fire in the area.

Therefore, we conclude that the modifications required to achieve compliance with Sections III.G and III.L would not significantly enhance the level of fire safety above that provided by the existing fire protection. Therefore, the licensee's request for exemption for the Torus Room should be granted.

### III.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. Therefore, the Commission hereby approves the following exemption request:

Exemption is granted to the extent indicated from the requirements of Sections III.G and III.L of Appendix R of 10 CFR Part 50 for the following areas:

1. Control Room - to the extent that an area-wide fire detection system and a fixed fire suppression system is required
2. Torus Room - to the extent that separation and/or fire protection of redundant shutdown divisions, or the installation of an alternate shutdown capability is required.

The NRC Staff has determined that the granting of these exemptions will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4), an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with this action.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert A. Purple, Deputy Director  
Division of Licensing  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland,  
this 1st day of July 1983.