

September 18, 1985

Docket No. 50-333

Mr. John C. Brons
Senior Vice President -
Nuclear Generation
Power Authority of the State
of New York
123 Main Street
White Plains, New York 10601

Dear Mr. Brons:

SUBJECT: EXEMPTION FROM APPENDIX J TO 10 CFR 50
CONCERNING CONTAINMENT AIRLOCK TESTING

Re: James A. FitzPatrick Nuclear Power Plant

The Commission has issued the enclosed Exemption from the requirements of Paragraph III.D.2.(b)(ii) of Appendix J to 10 CFR 50 to the extent that the seal leakage test specified in Paragraph III.D.2.(b) (iii) may be performed in lieu of the full pressure test specified in Paragraph III.D.2(b)(ii) prior to restoring containment integrity after periods when containment integrity is not required, and airlock doors have been opened but no maintenance has been performed on the airlocks.

The Exemption is being forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by/

Domenic B. Vassallo
Operating Reactors branch #2
Division of Licensing

Enclosure:
Exemption

cc w/enclosures
See next page

DISTRIBUTION

Docket File	HThompson	DVassallo	TBarnhart (4)	Gray file
ORB#2 Reading	GLainas	BGrimes	OPA, CMiles	Extra - 5
NRC PDR	SNorris	EJordan	ACRS (10)	
Local PDR	HAbelson	JPartlow	RDiggs	

ORB#2:DL
SNorris:rc
07/30/85

ORB#2:DL
HAbelson
07/15/85

ORB#2:DL
DVassallo
07/18/85

OELD
08/13/85
8/29 with modifications noted.

AD-OR:DL
GLainas
08/13/85

DIR:DL
HThompson
08/19/85

8510010012 850918
PDR ADOCK 05000333
PDR

Mr. John C. Brons
Power Authority of the State of New York

James A. FitzPatrick Nuclear
Power Plant

cc:

Mr. Charles M. Pratt
Assistant General Counsel
Power Authority of the State
of New York
10 Columbus Circle
New York, New York 10019

Mr. Jay Dunkleberger
Division of Policy Analysis
and Planning
New York State Energy Office
Agency Building 2
Empire State Plaza
Albany, New York 12223

Resident Inspector's Office
U. S. Nuclear Regulatory Commission
Post Office Box 136
Lycoming, New York 13093

Thomas A. Murley
Regional Administrator
Region I Office
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania :19406

Mr. Harold Glover
Resident Manager
James A. FitzPatrick Nuclear
Power Plant
Post Office Box 41
Lycoming, New York 13093

Mr. A. Klausman
Vice President - Quality Assurance
Power Authority of the State
of New York
10 Columbus Circle
New York, New York 10019

Mr. J. A. Gray, Jr.
Director - Nuclear Licensing - BWR
Power Authority of the State
of New York
123 Main Street
White Plains, New York 10601

Mr. George Wilverding, Chairman
Safety Review Committee
Power Authority of the State
of New York
123 Main Street
White Plains, New York 10601

Mr. Robert P. Jones, Supervisor
Town of Scriba
R. D. #4
Oswego, New York 13126

Mr. Leroy W. Sinclair
Power Authority of the State
of New York
10 Columbus Circle
New York, New York 10019

Mr. M. C. Cosgrove
Quality Assurance Superintendent
James A. FitzPatrick Nuclear
Power Plant
Post Office Box 41
Lycoming, New York 13093

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 (PASNY/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.

Paragraph III.D.2(b)(ii) of Appendix J to 10 CFR Part 50 requires that airlocks opened during periods when containment integrity is not required by the plant's Technical Specifications, shall be tested at the end of such periods at not less than P_a (the calculated peak containment internal pressure related to the design basis accident). The licensee, in its letter of May 2, 1985, has requested an exemption from the requirements of Paragraph III.D.2(b)(ii) of Appendix J. The licensee proposes to conduct a seal test, in lieu of the entire airlock test, following a period during which containment integrity is not required by the plant's Technical

Specifications and no maintenance has been performed on the airlock that could affect its sealing capability. The seal test would be conducted at P_a (45 psig) with a leakage limit of 120 SCFD and would require approximately 30 minutes to conduct. The licensee has provided the following discussion to support its request.

The existing airlock doors are designed so that a full pressure test of an entire airlock at P_a can only be performed after strong backs (structural bracing) have been installed on the inner door. Strong backs are required because the pressure exerted on the inner door during the test is in a direction opposite to the pressure direction following a postulated accident and the locking mechanisms are not designed to withstand reverse forces associated with pressures on the order of P_a .

Installation of the strong backs must commence approximately 24 hours prior to the need to establish containment integrity. During this 24-hour period, approximately 1 hour is required to inspect the door seal and door seat surfaces; 3 hours are required to install strong backs; and 16 to 20 hours are required to pressurize the airlocks to 45 psig and troubleshoot. This could effectively delay plant startup by up to 24 hours.

The periodic 6-month leak test of Paragraph III.D.2(b)(i) and the 3-day test requirements of Paragraph III.D.2(b)(iii) provide assurance that the airlock will not leak excessively due to its being opened during cold shutdown or refueling, assuming that no maintenance has been performed on the airlock.

We have evaluated the licensee's requested exemption from Paragraph III.D.2(b)(ii). Whenever the plant is in cold shutdown (Mode 4) or

refueling (Mode 5), containment integrity is not required. However, if an airlock is opened during Modes 4 and 5, Paragraph III.D.2(b)(ii) of Appendix J requires that an overall airlock leakage test at not less than P_a be conducted prior to plant heatup and startup (i.e., entering Mode 3).

The required 6-month test of Paragraph III.D.2.(b)(i) and the test of Paragraph III.D.2(b)(iii) will provide assurance that the airlock leakage rate will not be increased as a result of airlock openings in Mode 4 or Mode 5, provided no maintenance has been performed on the airlock.

Accordingly, the staff concludes that the licensee may substitute the seal leakage test of Paragraph III.D.2(b)(iii) for the full pressure test of Paragraph III.D.2(b)(ii) when no maintenance has been performed on an airlock. Whenever maintenance has been performed on an airlock, the requirements of Paragraph III.D.2(b)(ii) must still be met by the licensee.

Therefore, an exemption from the requirements of Paragraph III.D.2(b)(ii) of Appendix J, following normal door opening during periods when containment integrity is not required and maintenance has not been performed on the airlock, is justified and acceptable for the James A. FitzPatrick Nuclear Power Plant.

III.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption requested by the licensee's letter of May 2, 1985, is authorized by law and will not endanger life or property or the common defense and security, and is otherwise in the public interest. The Commission hereby grants to the licensee an exemption from the requirements of Paragraph III.D.2(b)(ii) of Appendix J to 10 CFR 50 to the extent that

the licensee may substitute the seal leakage test specified in Paragraph III.D.2(b)(iii), for the full pressure test specified in Paragraph III.D.2.(b)(ii), prior to restoring containment integrity after periods when containment integrity is not required, and airlock doors have been opened but no maintenance has been performed on the airlocks.

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of the exemption will have no significant impact on the environment (50 FR37736).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


Hugh L. Thompson, Jr., Director
Division of Licensing
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this 18th day of September 1985.