

**From:** Alyse L. Peterson [alp@nyserda.org]  
**Sent:** Friday, June 12, 2009 2:12 PM  
**To:** Vaidya, Bhalchandra  
**Subject:** FitzPatrick fire protection exemption request  
**Attachments:** FitzPatrick Fire\_Safety exemption comments.doc

Good afternoon,

We have reviewed the February 18, 2009 request for exemption from 10CFR 50 Appendix R Section III.G.2 Requirements Based on Manual Actions for the FitzPatrick nuclear power plant. Our comments are presented in the attached file. Thank you for the opportunity to comment.

Sincerely,

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### E-mail Properties

Mail Envelope Properties (636C67B366068442AC5897B38307CCD403A4E52111)

**Subject:** FitzPatrick fire protection exemption request  
**Sent Date:** 06/12/2009 2:14:04 PM  
**Received Date:** 06/12/2009 2:14:04 PM  
**From:** Alyse L. Peterson

**Created By:** alp@nyserda.org

**Recipients:**  
Bhalchandra.Vaidya@nrc.gov (Vaidya, Bhalchandra)  
Tracking Status: None

**Post Office:**  
albexchange01.nyserda.org

Files	Size	Date & Time
MESSAGE	41101	06/12/2009
FitzPatrick Fire_Safety exemption comments.doc	27528	

Options

Expiration Date:  
Priority: olImportanceNormal  
ReplyRequested: False  
Return Notification: False

Sensitivity: olNormal  
Recipients received:

[ATTACHEMENT TO THE E-MAIL FROM ALYSE PETERSON]

[COMMENTS FROM THE STATE OF NEW YORK]

[ON THE EXEMPTION REQUEST FROM JAMES A. FITZPATRICK NUCLEAR POWER PLANT]

6/12/09

The State of New York has some concerns about the requested "exemption" from the 1980 fire safety regulations for the FitzPatrick nuclear power plant, dated February 18, 2009.

The facility in question is a MARK 1 boil water reactor that received its initial operating license in October 1974. As such, it is subject to 10 C.F.R. § 50.48 and Appendix R to Part 50 Appendix R ("Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979").

**Public Notice and Opportunity to Request a Hearing**

It appears that the requested action will effectively amend the facility's operating license as well as the operative regulation, 10 C.F.R. § 50.48 and Appendix R to Part 50 Appendix R, Section III.G. Thus, regardless of what words are used to refer to the requested change, notice of the request should be published in the Federal Register and the public should be offered an opportunity to comment on the environmental impacts and request a hearing. Such transparency and opportunity for participation is consistent with the Atomic Energy Act, the National Environmental Policy Act, the Administrative Procedure Act, the federal Council on Environmental Quality regulations, and the Commission's commitment to public participation in its administrative matters.

**The Fire Safety Regulation**

Specifically, paragraph III.G.2 of 10 C.F.R., Appendix R requires that, where electrical cables or equipment, including associated non-safety circuits that could prevent operation or cause maloperation – as a result of hot shorts, open circuits, or shorts to ground – of redundant trains of systems necessary to achieve and maintain hot shutdown conditions are located within the same fire area outside of primary containment, one of the following means of ensuring that one of the redundant trains is free of fire damage shall be provided:

- (a) separation of cables and equipment by a fire barrier having a 3-hour rating,

(b) separation of cables and equipment by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards and with fire detectors and an automatic fire suppression system in the fire area, and

(c) enclosure of cables and equipment in a fire barrier having a 1-hour rating and with fire detectors and an automatic fire suppression system in the fire area.

Paragraph III.G.2 of Appendix R does not list operator manual actions as a means of ensuring that one of the redundant trains is free of fire damage.

This regulation has been applicable since November 1980 when it was promulgated by NRC. According to RIS 2006-10, in 2000, the NRC implemented the Reactor Oversight Process which included systematic inspections of licensees' safe shutdown capability. During these inspections, fire protection inspectors noticed that many licensees had not upgraded or replaced Thermo-Lag 330-1 fire barrier material or had not provided the required separation distance between redundant safe shutdown trains, in order to satisfy the requirements in paragraph III.G.2 of Appendix R to 10 CFR Part 50.

In the present situation, the licensee states that the Safety Relief Valve electrical trains or cables, which control the emergency depressurization system, do not meet the required minimum separation distances prescribed in Appendix R. (The issue of fire insulation material does not come in to play here since the facility does not use significant amounts of such insulation around electric cables or trains.)

### **The Proposed Operator Manual Action**

According to the February 2009 filing, the licensee relies upon an Operator Manual Action that is not allowed per 10 C.F.R. Part 50, Appendix R, Section III.G.2. Further, the NRC has stated that manual actions are not specifically authorized by Appendix R, Section III.G.2.

If a fire were to occur, the manual action proposed by the licensee requires an operator to leave the control room, travel to a local control panel located in the reactor building, and then operate up to eleven (11) valves that are essential for the depressurization system and the emergency core cooling system. Based on the submissions, it appears that it could take up to

fifteen minutes for an operator to reach the local control panel in the reactor building.

While it may be appropriate to regularize and formalize the proposal to have an employee manually operate the safety related valves, the February 2009 application seeks to do so in a way that avoids the opportunity for the public to request a proceeding or comment on potential environmental impacts. Also, the application does not appear to discuss the impact of the proposed change on the defense and security of the facility and host community, the feasibility of the proposed change during a significant fire event, or the cumulative effect of the proposed change given the several previous changes to the fire protection program at the facility. It would seem appropriate to address these issues via a public forum under the AEA, APA, and NEPA before reaching any final decision.