

# Entergy

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December 11, 2009  
JAFP-09-0144

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

**Subject: James A. FitzPatrick Nuclear Power Plant – Response to Request For Additional Information Regarding: Request For Exemption (TAC NO. ME0727)**

**Entergy Nuclear Operations, Inc.**  
**James A. FitzPatrick Nuclear Power Plant**  
**Docket No. 50-333**  
**License No. DPR-59**

- References:
- 1) Entergy Letter, JAFP-09-0025, James A. FitzPatrick Nuclear Power Plant Request for Exemption from 10 CFR 50 Appendix R Section III.G.2 Requirements Based on Manual Actions (TAC No. ME0727), dated February 18, 2009.
  - 2) USNRC Letter, James A. FitzPatrick Nuclear Power Plant – Request For Additional Information On The Request For Exemption From 10 CFR 50, Appendix R, Section III.G.2 Requirements Based On Manual Actions At James A. Fitzpatrick Nuclear Power Plant (TAC NO. ME0727), dated September 16, 2009.
  - 3) Entergy Letter, JAFP-09-0130, James A. FitzPatrick Nuclear Power Plant – Response to Request For Information Regarding: Request For Exemption (TAC NO. ME0727), dated November 17, 2009.
  - 4) USNRC Telephone Request For Additional Information On The Request For Exemption From 10 CFR 50, Appendix R, Section III.G.2 Requirements Based On Manual Actions At James A. Fitzpatrick Nuclear Power Plant (TAC NO. ME0727), dated December 2, 2009.

Dear Sir or Madam:

Entergy Nuclear Operations Inc., (ENO) submitted James A. FitzPatrick Nuclear Power Plant Request for Exemption from 10 CFR 50 Appendix R Section III.G.2 Requirements Based on Manual Actions (TAC No. ME0727), dated February 18, 2009 [Reference 1]. Subsequently ENO received James A. FitzPatrick Nuclear Power Plant – Request For Information Re: Request For Exemption (TAC NO. ME0727), dated September 16, 2009 [Reference 2].

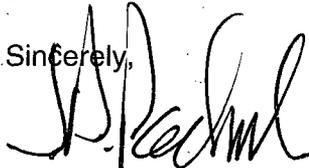
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NRR

On November 17, 2009 JAF provided a written response [Reference 3] to the request for additional information. Subsequent to JAF's response [Reference 3] the staff requested additional information to support their review of the exemption request [Reference 4]. This letter provides the information requested in reference 4 as discussed via telephone with the NRC staff.

There are no new commitments made in this letter.

If you have any questions or require additional information, please contact me, at 315-349-6766.

Sincerely,



Joseph Pechacek  
Licensing Manager

Enclosure 1: Request For Additional Information On The Request For Exemption From 10 CFR 50, Appendix R, Section III.G.2 Requirements Based On Manual Actions At James A. Fitzpatrick Nuclear Power Plant (TAC NO. ME0727)

JP/ed

cc:

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**JAFP-09-0144**

**Enclosure 1**

**Request For Additional Information On The Request For Exemption  
From 10 CFR 50, Appendix R, Section III.G.2 Requirements Based On  
Manual Actions At James A. Fitzpatrick Nuclear Power Plant  
(TAC NO. ME0727)**

**Request For Additional Information On The Request For Exemption From  
10 CFR 50, Appendix R, Section III.G.2 Requirements Based On Manual Actions  
At James A. Fitzpatrick Nuclear Power Plant (TAC NO. ME0727)**

**RAI Regulatory Deficiency**

**Enclosure 1 of the November 17, 2009, "Response to Request for Information for Acceptance Review," provided background regarding the change but did not fully address spatial separation. Please provide a discussion of the spatial separation between redundant trains that are assumed to be lost and between the redundant trains and the Automatic Depressurization System (ADS).**

**RAI Response**

JAF has three methods available to achieve and maintain safe shutdown during a fire within Fire Area 10. The three methods are the Reactor Core Isolation Cooling (RCIC) system, the High Pressure Coolant Injection (HPCI) system, and the Low Pressure Coolant Injection mode of the Residual Heat Removal (RHR-LPCI) system or the Core Spray (CS) system in conjunction with the Automatic Depressurization System (ADS).

As discussed in the February 18, 2009, March 30, 2009, and November 17, 2009 submittals, JAF credits the ADS in conjunction with either RHR-LPCI or the CS system to achieve and maintain hot shutdown for a fire occurring in Fire Area 10. Since the control cables associated with operation of the main steam safety relief valves (SRVs) from the Control Room are assumed lost for a fire in Fire Area 10, the safe shutdown procedures direct that an operator be dispatched to the Local SRV Control Panel located in Fire Area 8 to operate the SRVs. Additional details on this Operator Action can be found in the previous submittals.

The JAF Safe Shutdown Analysis was reviewed to identify cables and components supporting HPCI or RCIC operation which are routed through Fire Area 10. This review revealed that cables required for HPCI and RCIC operation are located in the same cable tray as the SRV cables that are assumed lost. In addition, several cables required for HPCI and RCIC operation are located in other cable trays that follow the same raceway routing path as the SRV cables. The common raceway routing path occurs where the "A" division cables traverse the barrier between the Reactor Building (Fire Area 10) and the North Cable Tunnel (Fire Area 1D/Fire Zone CT-4).

In summary, no appreciable spatial separation exists between the SRV cables that are assumed lost and cables supporting operation of other potential safe shutdown systems, i.e. HPCI and RCIC, within Fire Area 10. Therefore, in the unlikely event that a fire developed to such a magnitude to result in the loss of control of the SRV's from the main Control Room, the availability of the HPCI and RCIC systems cannot be assured. A detailed description of this location, including the fire hazards present and the defense-in-depth aspects of the JAF Fire Protection Program can be found in the previous submittals.