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July 25, 2007  
JAFP-07-0091

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555-0001

SUBJECT: James A. FitzPatrick Nuclear Power Plant  
Docket No. 50-333  
License No. DPR-59  
**Application for Technical Specifications (TS) Change Based on  
TSTF-477, Add Action Statement for Two Inoperable Control Room  
Air Conditioning Subsystems, Using the Consolidated Line Item  
Improvement Process (CLIP)**

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Entergy Nuclear Operations, Inc. (ENO) hereby requests an amendment to the Technical Specifications (TS) for the James A. FitzPatrick Nuclear Power Plant.

The proposed amendment would modify the TS by adding an Action statement for two inoperable control room air conditioning (AC) subsystems to the TS, consistent with NRC approved Industry/Technical Specifications Task Force (TSTF)-477, Revision 3.

Attachment 1 provides a description of the proposed changes, the requested confirmation of applicability, and plant-specific verifications.  
Attachment 2 provides the existing TS pages marked-up to show the proposed changes.  
Attachment 3 provides revised, clean TS pages (re-typed).  
Attachment 4 provides the existing TS Bases pages marked-up to show the proposed changes. The Bases changes are provided for information only. The final TS Bases pages (revised, clean pages) will be submitted with a future update in accordance with TS 5.5.11, "Technical Specifications (TS) Bases Control Program."

ENO requests approval of the proposed License Amendment by July 1, 2008, with the amendment being implemented within 60 days from the date of approval.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated New York State Official.

There are no new commitments made in this letter. If you have any questions, please contact Mr. Jim Costedio, Regulatory Compliance Manager at 315-349-6358.

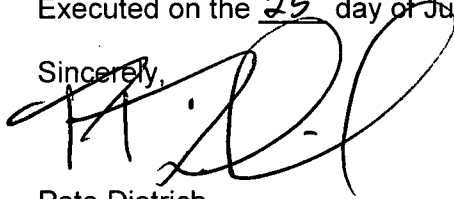
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I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 25<sup>th</sup> day of July, 2007

Sincerely,



Pete Dietrich  
Site Vice President

PD/tp

- Attachments:
1. Description and Assessment
  2. Proposed Technical Specification Pages (Marked-Up)
  3. Proposed Technical Specification Pages (Re-Typed)
  4. Proposed Technical Specification Bases Pages (Marked-Up)

cc:

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Regional Administrator, Region I  
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Attachment 1 to JAFP-07-0091  
Entergy Nuclear Operations, Inc. – FitzPatrick  
Docket No. 50-333

**DESCRIPTION AND ASSESSMENT**

## **1.0 DESCRIPTION**

The proposed amendment would modify the Technical Specifications (TS) by adding an Action statement to the Limiting Condition for Operation (LCO) for TS 3.7.4, Control Room Air Conditioning (AC) System. The new Action statement allows a finite time to restore one control room AC subsystem to operable status (72 hours) and requires verification that control room temperature remains < 104 °F every 4 hours. The licensing basis control room air temperature for the James A. FitzPatrick Nuclear Power Plant (JAFNPP) is 104 °F (References 3 and 4).

The changes are consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specifications Task Force (TSTF)-477 Revision 3. The availability of this TS improvement was published in the *Federal Register* on March 26, 2007 as part of the consolidated line item improvement process (CLIP).

## **2.0 ASSESSMENT**

### **2.1 Applicability of TSTF-477 and Published Safety Evaluation**

Entergy Nuclear Operations, Inc. (ENO) has reviewed TSTF-477 (Reference 1), and the NRC model safety evaluation (Reference 2) as part of the CLIP. ENO has concluded that the information in TSTF-477, as well as the SE prepared by the NRC staff are applicable to JAFNPP and justify this amendment for the incorporation of the changes to the JAFNPP TS.

### **2.2 Optional Changes and Variations**

ENO is not proposing any variations or deviations from the TS changes described in TSTF-477 or the NRC staff's model safety evaluation published in the *Federal Register* on December 18, 2006.

## **3.0 REGULATORY ANALYSIS**

### **3.1 No Significant Hazards Consideration Determination**

ENO has reviewed the proposed no significant hazards consideration determination (NSHC) published in the *Federal Register* as part of the CLIP. ENO has concluded that the proposed NSHC presented in the *Federal Register* Notice is applicable to JAFNPP and is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

### **3.2 Verification and Commitments**

As discussed in the notice of availability published in the *Federal Register* on March 26, 2007 (72 FR 14143) for this TS improvement, ENO verified that the information in TSTF-477, as well as the SE prepared by the NRC staff are applicable to JAFNPP.

ENO has proposed changes to the TS Bases consistent with TSTF-477 which provide guidance and details on how to implement the new requirements. JAFNPP has a TS Bases Control Program consistent with Section 5.5 of the Standard Technical Specifications (STS). Specifically, the JAFNPP program is contained in TS 5.5.11, "Technical Specifications (TS) Bases Control Program."

There are no commitments made in this proposed amendment.

#### **4.0 ENVIRONMENTAL EVALUATION**

The amendment changes requirements with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment adopting TSTF-477, Revision 3, 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 TSTF-477, Revision 3, involves no significant hazards considerations, and there has been no public comment on the finding in *Federal Register* Notice 71 FR 75774, dated December 18, 2006. 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 REFERENCES**

1. TSTF-477, Revision 3, Add Action Statement for Two Inoperable Control Room Air Conditioning Subsystems.
2. NRC Model Safety Evaluation, *Federal Register* Notice 71 FR 75774, dated December 18, 2006.
3. TS Bases 3.7.4, Control Room Air Conditioning (AC) System.
4. UFSAR Section 9.9.3.11, Control and Relay Room Air Conditioning Systems.

**PROPOSED TECHNICAL SPECIFICATION PAGES (MARKED-UP)**

**TS PAGES**

3.7.4-1  
Insert 1 page  
3.7.4-2  
3.7.4-3

3.7 PLANT SYSTEMS

3.7.4 Control Room Air Conditioning (AC) System

LCO 3.7.4 Two control room AC subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.  
During movement of recently irradiated fuel assemblies in the secondary containment,  
During operations with a potential for draining the reactor vessel (OPDRVs).

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ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One control room AC subsystem inoperable.	A.1 Restore control room AC subsystem to OPERABLE status.	30 days
<p><i>C.B.</i> Required Action and associated Completion Time of Condition <i>A or B</i> not met in MODE 1, 2, or 3.</p>	<p><i>C</i> <i>B.1</i> Be in MODE 3.</p> <p><u>AND</u></p> <p><i>B.2</i> Be in MODE 4.</p> <p><i>C</i></p>	<p>12 hours</p> <p>36 hours</p>

INSERT 1

(continued)





ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p><i>D.c.</i> Required Action and associated Completion Time of Condition A not met during movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs.</p>	<p>-----NOTE-----                      LCO 3.0.3 is not applicable.                      -----</p> <p><i>D</i>  <del>3.1</del> Place OPERABLE control room AC subsystem in operation.</p> <p><u>OR</u></p> <p><i>D</i>  <del>3.2.1</del> Suspend movement of recently irradiated fuel assemblies in the secondary containment.</p> <p><u>AND</u></p> <p><i>D</i>  <del>3.2.2</del> Initiate action to suspend OPDRVs.</p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p>
<p><del>D. Two control room AC subsystems inoperable in MODE 1, 2, or 3.</del></p>	<p><del>D.1 Enter LCO 3.0.3.</del></p>	<p><del>Immediately</del></p>

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>E. <del>Two control room AC subsystems inoperable</del> during movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs.</p> <p><i>Required Action and associated Completion Time of Condition B not met</i></p>	<p>-----NOTE-----                      LCO 3.0.3 is not applicable.                      -----</p> <p>E.1 Suspend movement of recently irradiated fuel assemblies in the secondary containment.</p> <p><u>AND</u></p> <p>E.2 Initiate action to suspend OPDRVs.</p>	<p>Immediately</p> <p>Immediately</p>

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SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.4.1 Verify each control room AC subsystem has the capability to remove the assumed heat load.</p>	<p>24 months</p>

**PROPOSED TECHNICAL SPECIFICATION PAGES (RE-TYPED)**

**TS PAGES**

3.7.4-1  
3.7.4-2  
3.7.4-3

3.7 PLANT SYSTEMS

3.7.4 Control Room Air Conditioning (AC) System

LCO 3.7.4 Two control room AC subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3,  
During movement of recently irradiated fuel assemblies in the  
secondary containment,  
During operations with a potential for draining the reactor vessel  
(OPDRVs).

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One control room AC subsystem inoperable.	A.1 Restore control room AC subsystem to OPERABLE status.	30 days
B. Two control room AC subsystems inoperable.	B.1 Verify control room area temperature < 104 °F.	Once per 4 hours
	<u>AND</u> B.2 Restore one control room AC subsystem to OPERABLE status.	72 hours
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, or 3.	C.1 Be in MODE 3.	12 hours
	<u>AND</u> C.2 Be in MODE 4.	36 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME	
<p>D. Required Action and associated Completion Time of Condition A not met during movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs.</p>	<p>----- NOTE -----                      LCO 3.0.3 is not applicable.                      -----</p>		
	<p>D.1 Place OPERABLE control room AC subsystem in operation.</p>		<p>Immediately</p>
	<p><u>OR</u></p> <p>D.2.1 Suspend movement of recently irradiated fuel assemblies in the secondary containment.</p>		<p>Immediately</p>
<p>E. Required Action and associated Completion Time of Condition B not met during movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs.</p>	<p>----- NOTE -----                      LCO 3.0.3 is not applicable.                      -----</p>		
	<p>E.1 Suspend movement of recently irradiated fuel assemblies in the secondary containment.</p>		<p>Immediately</p>
	<p><u>AND</u></p> <p>E.2 Initiate action to suspend OPDRVs.</p>		<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.4.1      Verify each control room AC subsystem has the capability to remove the assumed heat load.	24 months

**PROPOSED TECHNICAL SPECIFICATION BASES PAGES (MARKED-UP)**

**TS BASES PAGES**

B 3.7.4-3  
Bases Insert 1 page  
B 3.7.4-4  
B 3.7.4-5

BASES

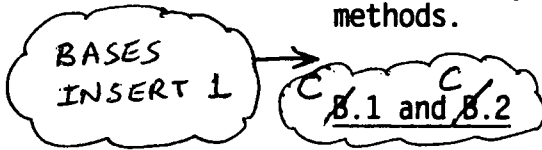
APPLICABILITY  
(continued)

- a. During operations with a potential for draining the reactor vessel (OPDRVs); and
- b. During movement of recently irradiated fuel assemblies in the secondary containment. Due to radioactive decay, the Control Room AC system is only required to be OPERABLE during fuel handling involving handling recently irradiated fuel (i.e., fuel that has occupied part of a critical reactor core within the previous 96 hours).

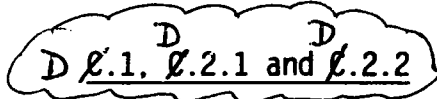
ACTIONS

A.1

With one control room AC subsystem inoperable, the inoperable control room AC subsystem must be restored to OPERABLE status within 30 days. With the plant in this condition, the remaining OPERABLE control room AC subsystem is adequate to perform the control room air conditioning function. However, the overall reliability is reduced because a single active component failure in the OPERABLE subsystem could result in loss of the control room air conditioning function. The 30 day Completion Time is based on the low probability of an event occurring requiring control room isolation, the consideration that the remaining subsystem can provide the required protection, and the availability of alternate safety and nonsafety cooling methods.



In MODE 1, 2, or 3, if the inoperable control room AC subsystem cannot be restored to OPERABLE status within the associated Completion Time, the plant must be placed in a MODE that minimizes risk. To achieve this status, the plant must be placed in at least MODE 3 within 12 hours and in MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.



LCO 3.0.3 is not applicable while in MODE 4 and 5. However, since recently irradiated fuel assembly movement can occur in MODES 1, 2, or 3 the Required Actions of Condition ~~L~~ are modified by a Note indicating that LCO 3.0.3 does not apply.

(continued)



## BASES INSERT 1

### B.1 and B.2

If both control room AC subsystems are inoperable, the Control Room AC System may not be capable of performing its intended function. Therefore, the control room area temperature is required to be monitored to ensure that temperature is being maintained low enough that equipment in the control room is not adversely affected. With the control room temperature being maintained within the temperature limit, 72 hours is allowed to restore a control room AC subsystem to OPERABLE status. This Completion Time is reasonable considering that the control room temperature is being maintained within limits and the low probability of an event occurring requiring control room isolation.

BASES

ACTIONS

<sup>D</sup> E.1, <sup>D</sup> E.2.1 and <sup>D</sup> E.2.2 (continued)

If moving recently irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of recently irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs, if Required Action A.1 cannot be completed within the required Completion Time, the OPERABLE control room AC subsystem may be placed immediately in operation. This action ensures that the remaining subsystem is OPERABLE, that no failures that would prevent actuation will occur, and that any active failure will be readily detected.

An alternative to Required Action <sup>D</sup> E.1 is to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the plant in a condition that minimizes risk.

If applicable, movement of recently irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of this activity shall not preclude completion of movement of a component to a safe position. Also, if applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Action must continue until the OPDRVs are suspended.

D.1

If both control room AC subsystems are inoperable in MODE 1, 2, or 3, the Control Room AC System may not be capable of performing the intended function. Therefore, LCO 3.0.3 must be entered immediately.

E.1 and E.2

LCO 3.0.3 is not applicable when in MODE 4 or 5. However, since recently irradiated fuel assembly movement can occur in MODE 1, 2, or 3 the Required Actions of Condition E are modified by a Note indicating that LCO 3.0.3 does not apply.

(continued)

BASES

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ACTIONS

E.1 and E.2 (continued)

If moving recently irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of recently irradiated fuel assemblies is not a sufficient reason to require a reactor shutdown.

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*If Required Actions B.1 and B.2 cannot be met within the required Completion Times,*

During movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs, ~~with two control room AC subsystems inoperable,~~ action must be taken to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the plant in a condition that minimizes risk.

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If applicable, handling of recently irradiated fuel in the secondary containment must be suspended immediately. Suspension of this activity shall not preclude completion of movement of a component to a safe position. Also, if applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Action must continue until the OPDRVs are suspended.

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SURVEILLANCE  
REQUIREMENTS

SR 3.7.4.1

This SR verifies that the heat removal capability of the system is sufficient to remove the control room heat load assumed in the safety analyses with ESW providing water to the cooling coils of the air handling units. The SR consists of a combination of testing and calculation. It is acceptable to perform the test using chilled water as the cooling medium to the cooling coils, but a calculation must be performed to ensure that the heat load can be removed with ESW at 85°F. The 24 month Frequency is appropriate since significant degradation of the Control Room AC System is not expected over this time period.

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REFERENCES

1. UFSAR, Section 9.9.3.11.
  2. 10 CFR 50.36(c)(2)(ii).
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