April 5, 2005

Mr. Michael Kansler President Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601

SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT - AMENDMENT RE:

TECHNICAL SPECIFICATION IMPROVEMENT TO REVISE FREQUENCY FOR

CONTROL ROD SCRAM TIME TESTING (TAC NO. MC5506)

Dear Mr. Kansler:

The Commission has issued the enclosed Amendment No. 283 to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant. The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated December 30, 2004.

The amendment changes the frequency for TS surveillance requirement (SR) 3.1.4.2, which verifies each tested control rod scram time is within limits with reactor steam dome pressure \$ 800 psig. Specifically, the SR frequency increases from 120 days to 200 days of cumulative operation in MODE 1 (power operation).

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly *Federal Register* notice.

Sincerely,

/RA/

Patrick D. Milano, Sr. Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-333

Enclosures: 1. Amendment No. 283 to DPR-59

2. Safety Evaluation

cc w/encls: See next page

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DATE	3/7/05	3/3/05	3/3/05	3/16/05	4/4/05

DATED: <u>April 5, 2005</u>

AMENDMENT NO. TO FACILITY OPERATING LICENSE NO. DPR-59 FITZPATRICK

PUBLIC

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FitzPatrick Nuclear Power Plant

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ENTERGY NUCLEAR OPERATIONS, INC.

DOCKET NO. 50-333

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 283 License No. DPR-59

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Nuclear Operations, Inc. (the licensee) dated December 30, 2004, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (I) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-59 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 283, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days. The licensee shall incorporate the Technical Specifications Bases changes described in its application dated December 30, 2004, in the next periodic update to the Technical Specifications Bases Section.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Richard J. Laufer, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 5, 2005

ATTACHMENT TO LICENSE AMENDMENT NO. 283

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Replace the following pages of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contain marginal lines indicating the areas of change.

Remove Page	Insert Page
3.1.4-2	3.1.4-2

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 283 TO FACILITY OPERATING LICENSE NO. DPR-59

ENTERGY NUCLEAR OPERATIONS, INC.

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCKET NO. 50-333

1.0 <u>INTRODUCTION</u>

By letter dated December 30, 2004, Entergy Nuclear Operations, Inc. (the licensee) submitted a request for changes to the James A. FitzPatrick Nuclear Power Plant (JAF) Technical Specifications (TS). The requested changes would revise TS 3.1.4, "Control Rod Scram Times." Specifically, the frequency for TS surveillance requirement (SR) 3.1.4.2, which verifies each tested control rod scram time is within limits with reactor steam dome pressure \$ 800 psig, would increase from 120 days to 200 days of cumulative operation in MODE 1 (power operation).

These changes are based on TS Task Force (TSTF) change traveler no. 460 (TSTF-460), Revision 0, that has been approved generically for the boiling-water reactor (BWR) Standard TS, NUREG-1433 (BWR/4) and NUREG-1434 (BWR/6), by revising the frequency of SR 3.1.4.2 regarding control rod scram time testing from "120 days cumulative operation in MODE 1" to "200 days cumulative operation in MODE 1." A notice announcing the availability of this proposed TS change using the consolidated line item improvement process (CLIIP) was published in the Federal Register on August 23, 2004 (69 FR 51864).

2.0 REGULATORY EVALUATION

The TS requirement governing the control rod scram time surveillance is intended to assure proper function of control rod insertion. Following each refueling outage, all control rod scram times are verified. In addition, periodically during power operation, a representative sample of control rods is selected to be inserted to verify the insertion speed. A representative sample is defined as a sample containing at least 10 percent of the total number of control rods. The current TS stipulates that no more than 20 percent of the control rods in this representative sample can be "slow" during the post outage testing. With more than 20 percent of the sample declared to be "slow" per the criteria in Table 3.1.4-1, additional control rods are tested until this 20 percent criterion (e.g., 20 percent of the entire sample size) is satisfied, or until the total number of "slow" control rods (throughout the core, from all surveillances) exceeds the Limiting Condition for Operation (LCO) limit. For planned testing, the control rods selected for the sample should be different for each test. The acceptance criterion for at-power surveillance testing has been redefined from 20 percent to 7.5 percent. This tightened acceptance criterion for at-power surveillance aligns with the TS 3.1.4 requirement for the total control rods allowed to have scram times exceeding the specified limit.

The proposed change does not affect any current operability requirements and the test frequency being revised is not specified in regulations. As a result, no regulatory requirements or criteria are affected.

3.0 TECHNICAL EVALUATION

3.1 Statement of Proposed Changes

JAF TS SR 3.1.4.2 states "Verify, for a representative sample, each tested control rod scram time is within the limits of Table 3.1.4-1 with reactor steam dome pressure \$ 800 psig." SR 3.1.4.2 has a frequency of "120 days cumulative operation in MODE 1." The proposed change revises the frequency to "200 days cumulative operation in MODE 1." The TS Basis for SR 3.1.4.2 will be revised to reference the new frequency and to reduce the percentage of the tested rods which can be "slow" from 20 percent to 7.5 percent.

3.2 Evaluation of Proposed Change

The control rod insertion (scram) time test results at JAF have shown the control rod scram rates to be highly reliable. During the most recent 6 years of plant operation, out of 942 control rod insertion tests, no "Slow Rods" were identified. The extensive historical database substantiates the claim of high reliability of the JAF control rod drive system. The current TS SR 3.1.4.2 requires that a representative sample of control rods be tested every 120 days of cumulative operation in Mode 1. Bases for SR 3.1.4.2 states that a representative sample contains at least 10 percent of the control rods (i.e., 14 of the 137 total rods). The current TS Bases also indicates that the acceptance criteria showing that the sample remains representative is met if 20 percent or fewer of the control rods in the sample tested are found to be slow, per the criterion in TS Table 3.1.4-1. This acceptance criterion has been re-defined for at-power surveillance testing from 20 percent to 7.5 percent when the surveillance period is extended to 200 cumulative days of operation in Mode 1. This tightened acceptance criterion for at-power surveillance aligns with the TS 3.1.4 requirement for the total control rods allowed to have scram times exceeding the specified limit. The licensee will incorporate the revised acceptance criterion value of 7.5 percent into the TS Bases in accordance with its Bases Control Program, as a portion of the implementation of this license amendment.

The NRC staff considers the extended surveillance interval to be justified by the demonstrated reliability of the control rod insertion system, based on historical control rod scram time test data, and by the more restrictive acceptance criterion for determining whether the sample of control rods tested remains representative. Further, the amendment does not change the LCO limits for the number and location of operable control rods that can be slow. Therefore, the NRC staff finds the proposed TS change acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 <u>ENVIRON</u>MENTAL CONSIDERATION

The amendment changes a surveillance requirement. The NRC staff has determined that the amendments involve 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding (70 FR 5241). 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.

6.0 <u>CONCLUSION</u>

The Commission has concluded, based on the considerations discussed above that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: B. K. Vaidya

Date: April 5, 2005