

October 30, 2000

Mr. James Knubel
Chief Nuclear Officer
Power Authority of the State of
New York
123 Main Street
White Plains, NY 10601

SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT - AMENDMENT
RE: CHANGE TO THE TECHNICAL SPECIFICATIONS REGARDING MINIMUM
CRITICAL POWER RATIO SAFETY LIMIT (TAC NO. MA9522)

Dear Mr. Knubel:

The Commission has issued the enclosed Amendment No. 266 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 July 27, 2000, as supplemented August 16, 2000, and September 29, 2000.

The amendment provides for the applicability of the current safety limit minimum critical power ratio, TS Section 1.1.A, to cycles beyond Cycle 14. The change also updates the approved version of the topical report in TS Section 6.9.A.4.b.1.

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/

Guy S. Vissing, 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. 266 to DPR-59
2. Safety Evaluation

cc w/encls: See next page

James A. FitzPatrick Nuclear Power Plant

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Mr. James Knubel
Chief Nuclear Officer
Power Authority of the State of
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White Plains, NY 10601

October 30, 2000

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/RA/

Guy S. Vissing, Sr. Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-333

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2. Safety Evaluation

cc w/encls: See next page

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OGC	M. Oprendeck, Region I	

ACCESSION NO. ML003758169

*Safety Evaluation - Input dated 9/29/00 was provided
no major changes were made

OFFICE	PM:PDI-1	LA:PDI-1	OGC	SC:PDI-1	SC:SRXB
NAME	GVissing	SLittle	MYoung	MGamberoni	RCaruso*
DATE	10/12/00	10/12/00	10/23/00	10/27/00	9/29/2000

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POWER AUTHORITY OF THE STATE OF NEW YORK

DOCKET NO. 50-333

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 266
License No. DPR-59

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Power Authority of the State of New York (the licensee) dated July 27, 2000, as supplemented August 16, 2000, and September 29, 2000, 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) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 266 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Marsha Gamberoni, 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: October 30, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 266

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

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

Remove Pages

7
254c

Insert Pages

7
254c

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 266 TO FACILITY OPERATING LICENSE NO. DPR-59
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
DOCKET NO. 50-333

1.0 INTRODUCTION

By letter dated July 27, 2000, as supplemented August 16, 2000, and September 29, 2000, the Power Authority of the State of New York (PASNY or the licensee) submitted a request for changes to the James A. FitzPatrick Nuclear Power Plant Technical Specifications (TSs). The requested change would delete a note which would allow TS Section 1.1.A, regarding the safety limit minimum critical power ratio (SLMCPR), to be applicable beyond Cycle 14. TS Section 1.1.A is currently only applicable for Cycle 14. The Cycle 15 core has 560 fuel assemblies, of which there are 196 fresh General Electric (GE)12 bundles, 192 once burned GE12 bundles, and 172 twice burned GE12 bundles. The requested change would also update the approved version of the topical report in TS Section 6.9.A.4.b.1. The August 16 and September 29, 2000, letters provided clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The licensee requested a change to the FitzPatrick Nuclear Power Plant TSs in accordance with 10 CFR 50.91. The proposed revision of TSs 1.1.A and 6.9.A.4.b.1 is described below.

2.1 TS 1.1.A Reactor Pressure >785 psig and Core Flow >0% of Rated

The licensee proposed to delete the cycle specific footnote "Note. TS 1.1.A is applicable for Cycle 14 only."

The licensee described the methodologies used to calculate the SLMCPR values for the proposed TS changes in the submittal. The Cycle 15 SLMCPR analysis was performed by Global Nuclear Fuel (GNF) using the plant- and cycle-specific fuel and core parameters, and NRC-approved methodologies including NEDC-32505P, Revision1 (R-Factor Calculation Method for GE11, GE12 and GE13 Fuel), NEDO-10958-A (GETAB), NEDC-32601P (Methodology and Uncertainties for Safety Limit MCPR Evaluations), NEDC-32694P (Power Distribution Uncertainties for Safety Limit MCPR Evaluation), and Amendment 25 to NEDE-24011-P-A (GESTAR-II). These methodologies are appropriate for use at FitzPatrick.

The NRC staff has reviewed the justification for no change to the SLMCPR value of 1.09 for two recirculation loop operation and 1.10 for single loop operation for Cycle 15 and beyond using the approach stated in Amendment 25 to GESTAR II. Based on our review of the submittal and the detailed summary results of the analysis for Cycle 14 and 15 operation in Table 1 of the Attachment II to JPN-00-023 submittal, the staff has concluded that the SLMCPR analysis for operation of FitzPatrick for Cycle 15 and beyond using the plant- and cycle-specific parameters in conjunction with the approved method is acceptable. The selected Cycle 15 SLMCPR, which is 0.03 higher than the calculated values, will ensure that 99.9 percent fuel rods in the core will not experience boiling transition which satisfies the requirements of General Design Criterion 10 of Appendix A to 10 CFR Part 50 regarding acceptable fuel design limits. Therefore, the staff has concluded that the justification for analyzing and determining the SLMCPR of 1.09 for two recirculation loop operation and 1.10 for single loop operation for the FitzPatrick plant for Cycle 15 and beyond is acceptable.

The staff has reviewed the proposed change to delete the cycle-specific footnote and found it acceptable since the staff has approved the methodologies for cycle-specific MCPR Safety Limit calculations described in Amendment 25 to NEDE-24011-P-A, the methodologies are appropriate for use at FitzPatrick, and the licensee has performed its analyses based on the approved methodologies.

Based on our review, we conclude that the proposed change to TS 1.1.A is acceptable for the James A. FitzPatrick Nuclear Power Plant for Cycle 15 and beyond since the changes are analyzed based on the NRC-approved method and the most conservative cycle-specific parameters for SLMCPR analysis are used.

2.2 TS 6.9.A.4 Core Operating Limits Report

The proposed change involves updating the approved version of the topical report in TS 6.9.A.4.b.1 (NEDE-24011-P-A-14, June 2000). The staff has reviewed the proposed TS change and found it acceptable since the change reflects the latest approved revision of NEDE-24011-P-A which will ensure that values for cycle-specific parameters are determined consistent with applicable safety limits.

We have reviewed the request by PASNY to revise the TS for operation of the FitzPatrick plant for Cycle 15 and beyond. Based on the review, we conclude that these revisions are acceptable.

3.0 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.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to 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 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (65 FR 51362). The amendment also involves changes to recordkeeping or reporting requirements. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (c)(10). 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 CONCLUSION

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: T. Huang

Date: October 30, 2000