



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 46 TO FACILITY OPERATING LICENSE NO. NPF-69

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION, UNIT 2

DOCKET NO. 50-410

1.0 INTRODUCTION

By letter dated February 27, 1993 (Reference 1), as supplemented June 18, 1993 (Reference 2), Niagara Mohawk Power Corporation (NMPC or the licensee) submitted a request for changes to the Nine Mile Point Nuclear Station, Unit 2 (NMP-2), Technical Specifications (TSs). The requested changes would modify the recirculation flow upscale rod block setpoint and permit the use of NRC-approved power correlations other than the GEXL correlation for NMP-2 reload analyses. GEXL is the term used to refer to a specific NRC-approved power correlation (GE Critical Quality, X_c , Boiling Length, L_b) developed to predict the onset of transition boiling. Changes to the TS Bases were also proposed that would reflect the use of NRC-approved power correlations, incorporate revisions to General Electric Company's (GE's) approved analytical techniques, update references, and reflect changes made to the Reload Section of the NMP-2 Updated Safety Analysis Report (USAR).

The June 18, 1993, letter withdrew the proposed changes to the recirculation flow upscale rod block setpoint. These changes had been proposed to facilitate operation at up to 105% of rated core flow. The licensee stated that this rod block performs no safety function and no design basis transient or accident analysis takes credit for it. That is, there is no safety basis for the setpoint. The licensee stated that the recirculation flow upscale rod block changes were being withdrawn since they could not at that time provide the staff with an analytical basis for the proposed changes. The licensee further stated that they would evaluate the necessity of retaining the recirculation flow rod blocks in the TSs and may propose removal of these rod blocks in a future amendment application. The licensee's letter of June 18, 1993, did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

Critical power ratio (CPR) is defined in TS Definition 1.9. CPR is the power in a fuel assembly that causes some point in the assembly to experience boiling transition divided by the actual fuel assembly power. Definition 1.9 currently specifies that the boiling transition power level is to be determined using the GEXL correlation.

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As GE has further developed its analytical techniques, critical power correlations other than GEXL have been used in boiling water reactor loss-of-coolant accident analyses and approved by the NRC. For instance, use of the GEXL-PLUS correlation was approved in Reference 3. The proposed change to Definition 1.9 is administrative in nature and would allow the use of any NRC-approved critical power correlation to determine operating limit minimum CPRs. The staff finds this proposed change to be acceptable.

The licensee has proposed changes to the TS Bases that are listed below. These changes reflect updated analytical techniques and new fuel information furnished by GE, modifications to the USAR, and the proposed change to Definition 1.9.

- a. A reference to the GEXL correlation in Bases paragraph 2.1.1 would be replaced with a general reference to critical power correlations.
- b. The discussion in Bases paragraph 2.1.2 would be revised to remove obsolete references, as well as a reference to the GEXL correlation, and incorporate a reference to NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel."
- c. Bases Tables B2.1.2-1 and B2.1.2-2 would be updated to reflect new fuel (GE9) values and to replace plant specific data with nominal parameters for fuel integrity analysis.
- d. References in Bases Section 3/4.2.3 would be revised to include the reload analysis section of the USAR (Appendix A), and to remove obsolete references.
- e. Bases Table B3.2.1-1 would be revised to include new fuel information.

Some of the proposed Bases changes are required to reflect the revision of TS Definition 1.9. The other proposed Bases changes are supported by analytical techniques or new fuel design information previously approved by the NRC. Therefore, the staff has no objections to these proposed changes.

By letter dated June 18, 1993, NMPC requested a withdrawal of a portion of the proposed changes. The licensee requested that the proposed changes to the recirculation flow upscale rod block setpoint be withdrawn, since they could not at that time provide the staff with an analytical basis for the proposed changes. The staff finds this acceptable. A Notice of Partial Withdrawal will be published in the Federal Register.

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.



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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 (58 FR 16866). 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 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.

6.0 References

1. Letter (NMP2L 1370) from B. Ralph Sylvia (NMPC) to USNRC, dated February 27, 1993.
2. Letter (NMP2L 1393) from B. Ralph Sylvia (NMPC) to USNRC, dated June 18, 1993.
3. Letter from A. S. Thadani (USNRC) to J. S. Charnley (GE), dated March 14, 1988.

Principal Contributor:
Joseph Donoghue

Date: August 11, 1993



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UNITED STATES NUCLEAR REGULATORY COMMISSION
NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION, UNIT 2
NOTICE OF PARTIAL WITHDRAWAL OF APPLICATION FOR
AMENDMENT TO FACILITY OPERATING LICENSE

The United States Nuclear Regulatory Commission (the Commission) has granted the request by Niagara Mohawk Power Corporation (NMPC) to withdraw a portion of their February 27, 1993, application for a proposed amendment to Facility Operating License NPF-69 for Nine Mile Point Nuclear Station, Unit 2, located in Oswego County, New York.

The proposed amendment involved changes to the Technical Specifications (TSs) to modify the recirculation flow upscale rod block setpoint and permit the use of NRC-approved power correlations other than the GEXL correlation. Changes to the TS Bases were also proposed that would reflect the use of NRC-approved power correlations, incorporate revisions to General Electric Company's approved analytical techniques, update references, and reflect changes made to the Reload Section of the Updated Safety Analysis Report.

On June 18, 1993, the licensee submitted a letter to the NRC requesting withdrawal of the proposed change to the recirculation flow upscale rod block setpoint. The licensee requested withdrawal since it could not at that time provide the Commission with an analytical basis for the proposed change. The recirculation flow upscale rod block performs no safety function and no design basis transient or accident analysis takes credit for it.



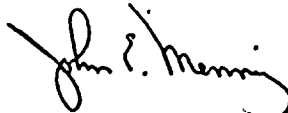
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The Commission has previously issued a Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing which was published in the FEDERAL REGISTER on March 31, 1993 (58 FR 16866).

For further details with respect to this action, see the application for amendment dated February 27, 1993, and the licensee's letter of June 18, 1993, which withdrew the portion of the application for license amendment. The above documents are available for public inspection at the Commission's Public Document Room, 2120 L Street, NW., Washington, DC 20555 and at the Reference and Documents Department, Penfield Library, State University of New York, Oswego, New York.

Dated at Rockville, Maryland, this 11th day of August 1993.

FOR THE NUCLEAR REGULATORY COMMISSION



John E. Menning, Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation



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Mr. B. Ralph Sylvia
 Executive Vice President, Nuclear
 Niagara Mohawk Power Corporation
 301 Plainfield Road
 Syracuse, New York 13212

Dear Mr. Sylvia:

SUBJECT: ISSUANCE OF AMENDMENT FOR NINE MILE POINT NUCLEAR STATION,
 UNIT 2 (TAC NO. M85937)

The Commission has issued the enclosed Amendment No. 46 to Facility Operating License No. NPF-69 for the Nine Mile Point Nuclear Station, Unit 2 (NMP-2). The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated February 27, 1993, as supplemented June 18, 1993.

The amendment revises TS Definition 1.9, "Critical Power Ratio," to replace the designation for the General Electric critical power correlation, "GEXL," with a more generic term. Changes have also been made to TS Bases Sections B2.1 and B3/4.2 to reflect the change to Definition 1.9, incorporate revisions to General Electric Company's approved analytical techniques, update references, and reflect changes made to the Reload Section of the NMP-2 Updated Safety Analysis Report.

Copies of the related Safety Evaluation and Notice of Partial Withdrawal are enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice and the Notice of Partial Withdrawal will be published separately in the Federal Register.

Sincerely,
 Original signed by:

John E. Menning, Project Manager
 Project Directorate I-1
 Division of Reactor Projects - I/II
 Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 46 to NPF-69
2. Safety Evaluation
3. Notice of Partial Withdrawal

cc w/enclosures:
 See next page

Distribution:
 See attached sheet

LA:PDI-1	PM:PDI-1	OTSB	OGC	D:PDI-1	
CVogan	JMenning:smm	Grimes		RACapra	
7/9/93	7/9/93	7/24/93	8/5/93	8/11/93	1/1

