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

October 18, 1993

Docket No. 50-410

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. M86610)

The Commission has issued the enclosed Amendment No. 50 to Facility Operating License No. NPF-69 for the Nine Mile Point Nuclear Station, Unit 2. The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated March 30, 1993, as superseded by your submittal dated August 27, 1993.

The amendment revises TS 4.8.1.1.2.e and adds a new TS 4.8.1.1.2.f to replace the requirement to perform a hot Loss of Off-Site Power test following the 24-hour full-power emergency diesel generator (EDG) run during shutdown with a requirement to perform a hot EDG restart test following a full-load EDG run of greater than 2 hours in any operational condition. The amendment also reletters previous TSs 4.8.1.1.2.f and g to accommodate the addition of the new TS 4.8.1.1.2.f. These changes are consistent with NUREG-1434, "Standard Technical Specifications - General Electric Plants, BWR/6."

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,

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

Enclosures:
1. Amendment No. 50 to NPF-69
2. Safety Evaluation

cc w/enclosures:
See next page

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Original signed by:
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Project Directorate I-1
Division of Reactor Projects - I/II
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cc w/enclosures:
See next page

PDI-1:LA	PDI-1:PM	EELB	OTSB	OGC	PDI-1:D
CVogan	JMenning:avl	CBerlinger	CGrimes		RACapra
9/16/93	9/16/93	9/17/93	9/24/93	9/27/93	10/18/93

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FILENAME: G:\NMP2\NM286610.AMD

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DATED: October 18, 1993

AMENDMENT NO. 50 TO FACILITY OPERATING LICENSE NO. NPF-69-NINE MILE POINT UNIT 2

Docket File
NRC & Local PDRs
PDI-1 Reading
S. Varga, 14/E/4
J. Calvo, 14/A/4
R. Capra
C. Vogan
J. Menning
OGC
D. Hagan, 3302 MNBB
G. Hill (2), P1-22
C. Grimes, 11/F/23
ACRS (10)
OPA
OC/LFDCB
PD plant-specific file
C. Cowgill, Region I
C. Berlinger, 7/E/4

cc: Plant Service list

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

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 50
License No. NPF-69

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated March 30, 1993, as superseded August 27, 1993, 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 1;

   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. NPF-69 is hereby amended to read as follows:

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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 50 are hereby incorporated into this license. Niagara Mohawk Power Corporation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance to be implemented prior to startup from the third refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Capra

Robert A. Capra, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 18, 1993

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 50 TO FACILITY OPERATING LICENSE NO. NPF-69

DOCKET NO. 50-410

Revise Appendix A as follows:

Remove Pages	Insert Pages
3/4 8-10	3/4 8-10
3/4 8-11	3/4 8-11

4.8.1.1.2.e (Continued)

8. Verify the diesel generator operates for at least 24 hours.

   a) For Divisions I and II:

   During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 4840 kW*. During the remaining 22 hours of this test, the diesel generator shall be loaded to greater than or equal to 4400 kW*. The generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 3.0 Hz within 10 seconds and 4160 ± 416 volts and 60 ± 1.2 Hz within 13 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test.

   b) For Division III:

   During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 2860 kW*. During the remaining 22 hours of this test, the diesel generator shall be loaded to greater than or equal to 2600 kW*. The generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 1.2 Hz within 15 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test.

9. Verifying that the autoconnected loads to each diesel generator do not exceed the 2000-hour rating of 4750 kW for diesel generators EDG*1 and EDG*3 and 2850 kW for diesel generator EDG*2.

10. Verifying the diesel generator's capability to:

   a) Manually synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,

   b) Transfer its loads to the offsite power source, and

   c) Be restored to its standby status.

11. Verifying that with the diesel generator operating in a test mode and connected to its bus, a simulated ECCS actuation signal overrides the test mode by (1) returning the diesel generator to standby operation and (2) automatically energizes the emergency loads with offsite power.

* Momentary transients due to changing bus loads shall not invalidate the test.

4.8.1.1.2.e (Continued)

12. Verifying that the automatic load timer relays are OPERABLE with the interval between each load block within ± 10% of its design interval for diesel generators EDG*1 and EDG*3.

13. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:

    a) For Divisions I and II, turning gear engaged and emergency stop.

    b) For Division III, engine in the maintenance mode and diesel generator lockout.

f. At least once per 18 months verify each diesel generator starts and accelerates to at least 600 RPM within 10 seconds for EDG*1 and EDG*3, and 870 RPM within 10 seconds for EDG*2. The generator voltage and frequency for EDG*1 and EDG*3 shall be 4160 ± 416 volts and 60 ± 3.0 Hz within 10 seconds and 4160 ± 416 volts and 60 ± 1.2 Hz within 13 seconds after the start signal. The generator voltage and frequency for EDG*2 shall be 4160 ± 416 volts and 60 ± 1.2 Hz within 15 seconds after the start signal. This test shall be performed within 5 minutes of shutting down the diesel generator after the diesel generator has operated for at least 2 hours at 4400 kW or more for EDG*1 and EDG*3 and 2600 kW or more for EDG*2. For any start of a diesel, the diesel must be loaded in accordance with manufacturer's recommendations. Momentary transients due to changing bus loads shall not invalidate this test.

g. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting all three diesel generators simultaneously, during shutdown, and verifying that all diesel generators EDG*1 and EDG*3 accelerate to at least 600 rpm and EDG*2 accelerates to at least 870 rpm in less than or equal to 10 seconds.

h. At least once per 10 years by:

    1. Draining each fuel oil storage tank, removing the accumulated sediment and cleaning the tank using a sodium hypochlorite solution, and

    2. Performing a pressure test of those portions of the diesel fuel oil system designed to Section III, subsection ND of the ASME Code in accordance with ASME Code Section II Article IWD-5000.

4.8.1.1.3 All diesel generator failures, valid or non-valid, shall be reported to the Commission pursuant to Specification 6.9.2, within 30 days. Reports of diesel generator failures shall include the information recommended in Position C.3.b of RG 1.108, Revision 1, August 1977. If the number of failures in the last 100 valid tests, on a per nuclear unit basis, is greater than or equal to 7, the report shall be supplemented to include the additional information recommended in Position C.3.b of RG 1.108, Revision 1, August 1977.

UNITED STATES
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WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 50 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 March 30, 1993, as superseded August 27, 1993, Niagara Mohawk Power Corporation (the licensee or NMPC) submitted a request for changes to the Nine Mile Point Nuclear Station, Unit 2 (NMP-2), Technical Specifications (TSs). The requested changes would revise TS 4.8.1.1.2.e and add a new TS 4.8.1.1.2.f to replace the requirement to perform a hot Loss of Off-Site Power (LOOP) test following the 24-hour full-power emergency diesel generator (EDG) run during shutdown with a requirement to perform a hot EDG restart test following a full-load EDG run of greater than two hours in any operational condition. The amendment would also reletter current TSs 4.8.1.1.2.f and g to accommodate the addition of the new TS 4.8.1.1.2.f.

The current TS 4.8.1.1.2.e.8 requires for each of the three EDGs the demonstration of EDG hot restart capability by initiating a LOOP test within 5 minutes of completing the 24-hour EDG run. The licensee has stated that the requirement to demonstrate hot restart capability in this manner creates significant scheduling demands during an outage and has proposed a new hot restart requirement. The proposed hot restart test would require verification that each EDG achieves the specified speed, voltage, and frequency in the required time after starting. The proposed hot restart test would be preceded by at least a 2-hour, full-load run and could be performed in any operational condition. The requirement of TS 4.8.1.1.2.e.4. to conduct a LOOP test from standby conditions at least once per 18 months during shutdown would be unaffected by the proposed changes.

2.0 EVALUATION

The licensee has proposed to modify the TSs to delete the requirement of TS 4.8.1.1.2.e.8 to perform a LOOP test within 5 minutes of completing the 24-hour full-load run on each EDG. This testing is performed at least once per 18 months during shutdown. The licensee has stated that this requirement creates significant scheduling demands during outages by reducing scheduling flexibility and imposing unnecessary operational burdens without a corresponding increase in EDG reliability. NMPC has proposed a different method of demonstrating EDG hot restart capability. Specifically, hot restart capability would be demonstrated at least once per 18 months in any operational condition by starting each EDG and verifying that it achieves the

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specified speed, voltage, and frequency in the required time. Each hot restart test would be performed within 5 minutes of completing a 2-hour, full-load EDG run in order to assure that normal operating temperature conditions have been achieved prior to demonstrating hot restart capability. The EDG manufacturers have indicated that 2-hour, full-load runs will achieve normal operating temperatures.

NMPC has proposed to add the new hot restart test requirement as TS 4.8.1.1.2.f. The addition of this new requirement would require the relettering of existing TSs 4.8.1.1.2.f and g.

The NRC staff has concluded that the primary purpose of the existing requirement to perform a LOOP test within 5 minutes of completing the 24-hour, full-power EDG run is to demonstrate the ability of each EDG to restart shortly after being shutdown following prolonged operation at or near full power (hot restart). Requiring a LOOP test in conjunction with a hot restart imposes a strain on multiple systems/components without measurable benefit. The staff has also concluded that demonstration of hot restart capability within 5 minutes of completing a 2-hour, full-power run is appropriate and consistent with NUREG-1434, "Standard Technical Specification - General Electric Plants, BWR/6." Based on these considerations, the staff has determined that the TS changes proposed by the licensee 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 and changes surveillance requirements. 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 25860) and (58 FR 48385). 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.

Principal Contributor:
John E. Menning

Date: October 18, 1993