

Mr. John H. Mueller  
 Chief Nuclear Officer  
 Niagara Mohawk Power Corporation  
 Nine Mile Point Nuclear Station  
 Operations Building, Second Floor  
 P. O. Box 63  
 Lycoming, NY 13093

March 18, 1999

SUBJECT: ISSUANCE OF AMENDMENT FOR NINE MILE POINT NUCLEAR STATION, UNIT NO. 2 (TAC NO. MA4288)

Dear Mr. Mueller:

The Commission has issued the enclosed Amendment No. 86 to Facility Operating License No. NPF-69 for the Nine Mile Point Nuclear Station, Unit No. 2 (NMP2). The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated November 19, 1998.

This amendment changes surveillance frequencies in TS 4.8.4.4a and 4.8.4.5a to require testing of the Electrical Protection Assemblies once every 6 months with the plant on-line rather than shut down.

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

Sincerely,

ORIGINAL SIGNED BY:

Darl S. Hood, Senior Project Manager  
 Project Directorate I-1  
 Division of Licensing Project Management  
 Office of Nuclear Reactor Regulation

Docket No. 50-410

Enclosures: 1. Amendment No. 86 to NPF-69  
 2. Safety Evaluation

cc w/encls: See next page

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DATE	03/11/99		03/11/99	03/18/99	03/12/99	03/ /99

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 18, 1999

Mr. John H. Mueller  
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A handwritten signature in cursive script that reads "Darl S. Hood".

Darl S. Hood, Senior Project Manager  
Project Directorate I-1  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-410

Enclosures: 1. Amendment No.86 to  
NPF-69  
2. Safety Evaluation

cc w/encls: See next page

John H. Mueller  
Niagara Mohawk Power Corporation

Nine Mile Point Nuclear Station  
Unit No. 2

cc:

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Mr. Richard Goldsmith  
Syracuse University  
College of Law  
E.I. White Hall Campus  
Syracuse, NY 12223

DATED: March 18, 1999

**AMENDMENT NO. 86 TO FACILITY OPERATING LICENSE NO. NPF-69 NINE MILE POINT  
NUCLEAR POWER STATION UNIT NO. 2**

- Docket File
- PUBLIC
- PDI-1 Reading
- J. Zwolinski/S. Black
- S. Bajwa
- S. Little
- D. Hood
- OGC
- G. Hill (2), T-5 C3
- W. Beckner
- ACRS
- A. Blough, Region I
- R. Norsworthy (e-mail SE only)

cc: Plant Service list

03/18/99



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. 86  
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 November 19, 1998, 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. 86 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 within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



S. Singh Bajwa, Director  
Project Directorate I-1  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 18, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 86

TO FACILITY OPERATING LICENSE NO. NPF-69

DOCKET NO. 50-410

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

Remove

3/4 8-32

3/4 8-33

Insert

3/4 8-32

3/4 8-33

## ELECTRICAL POWER SYSTEMS

### ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

#### REACTOR PROTECTION SYSTEM ELECTRIC POWER MONITORING (RPS LOGIC)

#### LIMITING CONDITIONS FOR OPERATION

---

3.8.4.4 Two RPS UPS electrical protection assemblies for each inservice UPS set or alternate source shall be OPERABLE.

**APPLICABILITY:** At all times.

**ACTION:**

- a. With one RPS electrical protection assembly for an inservice RPS UPS inoperable, restore the inoperable electrical protection assembly to OPERABLE status within 72 hours or remove the associated RPS UPS from service.
- b. With both RPS electrical protection assemblies for an inservice RPS UPS inoperable, restore at least one electrical protection assembly to OPERABLE status within 30 minutes or remove the associated RPS UPS from service.

#### SURVEILLANCE REQUIREMENTS

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4.8.4.4 The above specified RPS electrical protection assemblies instrumentation shall be determined OPERABLE:

- a. At least once every 6 months by performance of a CHANNEL FUNCTIONAL TEST.
- b. At least once per 18 months by demonstrating the OPERABILITY of overvoltage, undervoltage and underfrequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints.
  1. Overvoltage Bus A:  $\leq 132$  volts AC  
Bus B:  $\leq 132$  volts AC
  2. Undervoltage Bus A:  $\geq 117.1$  volts AC  
Bus B:  $\geq 115.75$  volts AC
  3. Underfrequency  $\geq 57$  Hz



ELECTRICAL POWER SYSTEMS

ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

REACTOR PROTECTION SYSTEM ELECTRIC POWER MONITORING (SCRAM SOLENOIDS)

LIMITING CONDITIONS FOR OPERATION

---

3.8.4.5 Two RPS electrical protection assemblies (EPAs) for each inservice RPS MG set or alternate source shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one RPS electrical protection assembly for an inservice RPS MG set or alternate power supply inoperable, restore the inoperable EPA to OPERABLE status within 72 hours or remove the associated RPS MG set or alternate power supply from service.
- b. With both RPS electrical protection assemblies for an inservice RPS MG set or alternate power supply inoperable, restore at least one EPA to OPERABLE status within 30 minutes or remove the associated RPS MG set or alternate power supply from service.

SURVEILLANCE REQUIREMENTS

---

4.8.4.5 The above specified RPS electrical protection assemblies shall be determined OPERABLE:

- a. At least once every 6 months by performance of a CHANNEL FUNCTIONAL TEST.
- b. At least once per 18 months by demonstrating the OPERABILITY of overvoltage, undervoltage and underfrequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints.

1. Overvoltage Bus A:  $\leq 128.8$  volts AC  
Bus B:  $\leq 130.0$  volts AC
2. Undervoltage Bus A:  $\geq 114.5$  volts AC  
Bus B:  $\geq 115.1$  volts AC
3. Underfrequency  $\geq 57$  Hz



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 86 TO FACILITY OPERATING LICENSE NO. NPF-69  
NIAGARA MOHAWK POWER CORPORATION  
NINE MILE POINT NUCLEAR STATION, UNIT NO. 2  
DOCKET NO. 50-410

1.0 INTRODUCTION

By letter dated November 19, 1998, Niagara Mohawk Power Corporation (NMPC and the licensee) proposed a license amendment to change the Technical Specifications (TSs) for Nine Mile Point Nuclear Station, Unit No. 2 (NMP2). The proposed changes would change the surveillance frequencies in TSs 4.8.4.4a, "Surveillance Requirements--Reactor Protection System Electric Power Monitoring (RPS Logic)," and 4.8.4.5a, "Surveillance Requirements--Reactor Protection System Electric Power Monitoring (Scram Solenoids)," to require channel functional testing of the RPS Motor Generator Set (M/G) and RPS Uninterruptible Power Supplies (UPS) Electrical Protection Assemblies (EPAs) at least once every 6 months. These TSs currently require that channel functional testing be performed each time the plant is in cold shutdown for a period of more than 24 hours, unless performed within the previous 6 months.

2.0 EVALUATION

During the last refueling outage (RFO6), NMPC modified the NMP2 design for the RPS M/G and RPS UPS EPAs to provide relay actuated protection systems. The relays of the new design may be individually isolated from an essential power circuit for testing and may be actuated without tripping the associated breaker. The relay actuated system allows the EPA system monitoring an essential power supply to be functionally tested with the plant on-line. On-line testing was not provided for by the previous design as it utilized logic cards to monitor system conditions and could not be isolated from the circuit for testing. The modification during RFO6 replaced the old system with new EPAs having three separate independent relays--an undervoltage, an overvoltage, and an underfrequency relay. These relays have normally-closed contacts that will change to the open state when the EPA senses voltage or frequency outside the required parameters. The three normally-closed contacts are arranged in series such that any contact opening will result in a loss of voltage to the breaker undervoltage release coil, causing the breaker to trip.

Channel functional testing can be performed by isolating the individual relay and its associated contacts by using test devices. This can be done without tripping the EPA breaker or losing the EPA loads.

The proposed 6-month testing interval in TS 4.8.4.4a and 4.8.4.5a is more conservative than the manufacturer's recommended 1-year interval. NMPC confirmed that the actual system

conditions required for EPA actuation remain the same, and the relay setpoints for EPA relay actuation are not affected by the modification. In addition, the new design and the capability of testing the system online has increased the EPA reliability, did not involve a significant reduction in a margin of safety, and did not introduce any new or different accident initiators not previously evaluated.

Accordingly, the NRC staff finds that the proposed TS changes result in reliable RPS M/G and RPS UPS EPA system monitoring due to the recent design modifications and the increased frequency for testing. The proposed changes are, therefore, 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 (63 FR 71970). 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 Contributors: S. Saba  
D. Hood

Date: March 18, 1999