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

April 6, 1994

Docket No. 50-220

Mr. B. Ralph Sylvia
Executive Vice President, Nuclear
Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
P.O. Box 63
Lycoming, New York 13093

Dear Mr. Sylvia:

SUBJECT: ISSUANCE OF AMENDMENT FOR NINE MILE POINT NUCLEAR STATION UNIT NO. 1 (TAC NO. M88629)

The Commission has issued the enclosed Amendment No. 147 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station Unit No. 1 (NMP-1). The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated January 21, 1994.

The amendment revises TS 4.6.3 (Emergency Power Sources), to eliminate unnecessary testing of an operable emergency diesel generator (EDG) when the redundant EDG becomes inoperable. This amendment is intended to increase EDG reliability and the overall level of plant safety by reducing the stresses on the EDGs caused by unnecessary testing. This amendment also eliminates the requirement to load the operable EDG with the offsite network when it is tested with one EDG inoperable.

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,

Donald S. Brinkman

Donald S. Brinkman, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 147 to DPR-63
2. Safety Evaluation

cc w/enclosures:
See next page

DF01-1

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Original signed by:
Donald S. Brinkman, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

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cc w/enclosures:
See next page
*See previous concurrence

OFFICE	PDI-1:LA	PDI-1:PM	*BC:EELB	*OGC	PDI-1:D
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DATE	4/6/94	4/6/94	03/17/94	03/24/94	4/6/94

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FILENAME: G:\NMP1\NM188629.AMD

Mr. B. Ralph Sylvia
Niagara Mohawk Power Corporation

Nine Mile Point Nuclear Station
Unit No. 1

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DATED: April 6, 1994

AMENDMENT NO. 147 TO FACILITY OPERATING LICENSE NO. DPR-63-NINE MILE POINT UNIT 1

Docket File
NRC & Local PDRs
PDI-1 Reading
S. Varga, 14/E/4
J. Calvo, 14/A/4
R. Capra
C. Vogan
D. Brinkman
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. 50-220

NINE MILE POINT NUCLEAR STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 147
License No. DPR-63

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

   A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated January 21, 1994, 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-63 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 147 , 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 to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

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: April 6, 1994

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 147 TO FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

Revise Appendix A as follows:

Remove Page	Insert Page
256	256

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
c. One diesel-generator power system may be inoperable provided two 115 kv external lines are energized. If a diesel-generator power system becomes inoperable, it shall be returned to an operable condition within seven days. In addition, if a diesel-generator power system becomes inoperable coincident with a 115 kv line de-energized, that diesel-generator power system shall be returned to an operable condition within 24 hours.	c. Weekly - determine the cell voltage and specific gravity of the pilot cells of each battery.
d. If a reserve power transformer becomes inoperable, it shall be returned to service within seven days.	d. Surveillance for startup with an inoperable diesel-generator - prior to startup the operable diesel-generator shall be tested for automatic startup and pickup of the load required for a loss-of-coolant accident.
e. For all reactor operating conditions except startup and cold shutdown, the following limiting conditions shall be in effect: (1) One operable diesel-generator power system and one energized 115 kv external line shall be available. If this condition is not met, normal orderly shutdown will be initiated within one hour and the reactor will be in the cold shutdown condition within ten hours.	e. Surveillance for operation with an inoperable diesel-generator - If a diesel-generator becomes inoperable from any cause other than an inoperable support system or preplanned maintenance or testing, within 8 hours, either determine that the cause of the diesel-generator being inoperable does not impact the operability of the operable diesel-generator or demonstrate operability by testing the operable diesel-generator. Operability by testing will be demonstrated by achieving steady state voltage and frequency.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 147 TO FACILITY OPERATING LICENSE NO. DPR-63

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION UNIT NO. 1

DOCKET NO. 50-220

1.0 INTRODUCTION

By letter dated January 21, 1994, Niagara Mohawk Power Corporation (the licensee or NMPC) submitted a request for changes to the Nine Mile Point Nuclear Station Unit No. 1 (NMP-1), Technical Specifications (TS). The requested changes would revise TS 4.6.3 (Emergency Power Sources), to eliminate unnecessary testing of an operable emergency diesel generator (EDG) when the redundant EDG becomes inoperable. TS 4.6.3 currently requires that with one EDG inoperable, the operable EDG shall be immediately manually started and operated at rated load for a minimum time of 1 hour and once per week thereafter. The proposed change to TS 4.6.3 would require that with one EDG inoperable from any cause other than an inoperable support system or preplanned maintenance or testing, within 8 hours, either determine that the cause of the EDG being inoperable does not impact the operability of the operable EDG or demonstrate operability by testing the operable EDG. Operability by testing would be demonstrated by achieving steady-state voltage and frequency. This amendment is intended to increase EDG reliability and the overall level of plant safety by reducing the stresses on the EDGs caused by unnecessary testing and by eliminating the requirement to load the operable EDG with the offsite network when it is being tested. The licensee stated that this proposed change is consistent with the guidance provided in NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements," and NUREG-1433, "Improved Standard Technical Specifications, General Electric Plants."

The NMP-1 emergency AC power distribution system is divided into two physically separate and electrically independent redundant divisions. Each division supplies power to one independent train of emergency core cooling. Each division is normally energized from one of two offsite sources via reserve transformers. Each division is also provided with a standby EDG capable of powering the division in the event offsite power is lost.

The reliability of the EDGs during normal plant operation is demonstrated by routine surveillance testing required by the NMP-1 TSs. In addition to these normal surveillance tests, TS 4.6.3.e requires EDG testing immediately and

once per week thereafter if an EDG is inoperable. The purpose of the latter testing is to verify that there is no common mode problem that could affect the remaining EDG and to provide additional assurance that the EDG is, in fact, operable during those conditions when it might be called upon.

While the additional testing described above provides assurance that the EDGs are operable, the demands of testing cause additional wear on the EDG components. Operational experience has shown that the TSs have required EDG testing when there was clearly no reason to believe that common mode failure was a possibility. Such testing does not contribute to improved EDG reliability and is considered excessive. Excessive testing is detrimental to the mechanical components and could contribute to an overall reduction in the reliability of an EDG to start and perform its intended function. In view of these considerations, the licensee has proposed a change to TS 4.6.3.e that would eliminate unnecessary EDG testing when an EDG is inoperable.

2.0 EVALUATION

TS 4.6.3.e currently requires that with an inoperable EDG, the operable EDG be immediately, and once per week thereafter, manually started and operated at rated load for a minimum of one hour. The operating EDG is connected to the offsite electrical distribution network during these tests. The intent of this additional testing is, in part, to determine if a common mode failure exists in the EDGs and, in part, to provide assurance that the operable EDG is capable of supplying emergency power. This additional testing can result in unnecessary testing of the otherwise operable EDG when an EDG is inoperable and the cause of the inoperability does not impact the operable EDG (i.e., no common mode failure exists).

The licensee has proposed to revise TS 4.6.3.e such that with one EDG inoperable, an operator would be required to determine if the inoperability was due to preplanned maintenance or testing or due to a support system being inoperable. If so, testing of the operable EDG would not be required. If an EDG became inoperable for any cause other than preplanned maintenance or testing or an inoperable support system, the operator would be required to verify that the cause of the inoperability does not affect the operability of the operable EDG (i.e., no common cause failure exists) within 8 hours or test the operable EDG. This proposed change would eliminate the requirement for EDG testing when the inoperability is not due to a common cause failure and will thereby potentially increase EDG reliability by reducing the stresses on the EDG caused by unnecessary testing while maintaining the requirement to perform a single test if a common cause failure exists. The requirement to perform weekly tests thereafter would be deleted. The additional weekly tests are considered unnecessary since the ability of the EDGs to supply their rated outputs is adequately demonstrated by the routine surveillance tests required by the other portions of the TS which are not being changed by this proposed amendment.

The proposed change would also eliminate the requirement to connect the EDG output to the offsite electrical network and to operate the EDG at rated load for a minimum of 1 hour. The proposed change would require a single test during which operability would be demonstrated by achieving steady-state voltage and frequency. As discussed in NRC Information Notice 84-69, "Operation of Emergency Diesel Generators," when an EDG is being operated connected to the offsite electrical network, the EDG is not independent of disturbances on the offsite power systems that could adversely affect emergency power availability. Therefore, EDG availability could be adversely affected by a demonstration of operability requiring connection of the operable EDG to the offsite electrical network. At a time when one EDG is already inoperable, the current TS could increase the risk of losing the remaining operable EDG. The current TS provide an adequate demonstration of the EDGs ability to supply there rated loads and additional tests to demonstrate the ability of the remaining operable EDG to supply its rated load are unnecessary. Therefore, these proposed changes 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 (59 FR 10009). 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: Donald S. Brinkman

Date: April 6, 1994