



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

May 18, 1992

Docket No. 50-220

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 NO. 1  
(TAC NO. M82972)

The Commission has issued the enclosed Amendment No. 128 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 in response to your application transmitted by letter dated March 10, 1992.

The amendment revises the Technical Specifications to delete requirements to demonstrate, by testing, that a redundant system/component is operable when a system/component is declared inoperable. In lieu of testing the redundant system/component to demonstrate its operability, the Technical Specifications are being revised to require an administrative check of plant records to verify operability of the redundant system/component. The amendment also makes administrative changes to delete superseded material and makes conforming changes to the Bases, Definitions, and paragraph numbers.

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

Enclosures:

1. Amendment No. 128 to DPR-63
2. Safety Evaluation

cc w/enclosures:  
See next page

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[Handwritten initials]

Mr. B. Ralph Sylvia  
Niagara Mohawk Power Corporation

Nine Mile Point Nuclear Station  
Unit No. 1

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DATED: May 18, 1992

AMENDMENT NO. 128 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-WF  
D. Hagan, 3302 MNBB  
G. Hill (4), P-137  
Wanda Jones, P-130A  
C. Grimes, 11/F/23  
ACRS (10)  
OPA  
OC/LFMB  
Plant File  
C. Cowgill, Region I

cc: Plant Service list



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

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 128  
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 March 10, 1992, 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:

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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 128, 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: May 18, 1992

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 128 TO FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

Revise Appendix A as follows:

Remove Pages

2  
-  
42  
47  
48  
52  
61  
72  
159  
175  
177

Insert Pages

2  
2a (added page)  
42  
47  
48  
52  
61  
72  
159  
175  
177

1.2 Operable

A system, subsystem, train, component or device shall be operable when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, except as noted in 3.0, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

A verification of operability is an administrative check, by examination of appropriate plant records (logs, surveillance test records) to determine that a system, subsystem, train, component or device is not inoperable. Such verification does not preclude the demonstration (testing) of a given system, subsystem, train, component or device to determine operability.

1.3 Operating

Operating means that a system or component is performing its required functions in its required manner.

1.4 Protective Instrumentation Logic Definitions

a. Instrument Channel

An instrument channel means an arrangement of a sensor and auxiliary equipment required to generate and transmit to a trip system a single trip signal related to the plant parameter monitored by that instrument channel.

b. Trip System

A trip system means an arrangement of instrument channel trip signals and auxiliary equipment required to initiate action to accomplish a protective trip function. A trip system may require one or more instrument channel trip signals related to one or more plant parameters in order to initiate trip system action. Initiation of protective action may require the tripping of a single trip system or the coincident tripping of two trip systems.

1.5 **Sensor Check**

A sensor check is a qualitative determination of acceptable operability by observation of sensor behavior during operation. This determination shall include, where possible, comparison of the sensor with other independent sensors measuring the same variable.

1.6 **Instrument Channel Test**

Instrument channel test means injection of a simulated signal into the channel to verify its proper response including, where applicable, alarm and/or trip initiating action.

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

- (3) At least once per day -

The solution temperature shall be checked.

- (4) At least once per operating cycle

Verify enrichment by analysis.

- c. Surveillance with Inoperable Components

When a component becomes inoperable its redundant component shall be verified to be operable immediately and daily thereafter.

LIMITING CONDITION FOR OPERATION

3.1.3 EMERGENCY COOLING SYSTEM

Applicability:

Applies to the operating status of the emergency cooling system.

Objective:

To assure the capability of the emergency cooling system to cool the reactor coolant in the event the normal reactor heat sink is not available.

Specification:

- a. During power operating conditions and whenever the reactor coolant temperature is greater than 212°F except for hydrostatic testing with the reactor not critical, both emergency cooling systems shall be operable except as specified in 3.1.3.b.
- b. If one emergency cooling system becomes inoperable, Specification 3.1.3.a shall be considered fulfilled, provided that the inoperable system is returned to an operable condition within 7 days and the additional surveillance required in 4.1.3.f is performed.

SURVEILLANCE REQUIREMENT

4.1.3 EMERGENCY COOLING SYSTEM

Applicability:

Applies to periodic testing requirements for the emergency cooling system.

Objective:

To assure the capability of the emergency cooling system for cooling of the reactor coolant.

Specification:

The emergency cooling system surveillance shall be performed as indicated below:

- a. At least once every five years -  
The system heat removal capability shall be determined.
- b. At least once daily -  
The shell side water level and makeup tank water level shall be checked.
- c. At least once per month -  
The makeup tank level control valve shall be manually opened and closed.

### LIMITING CONDITION FOR OPERATION

- | c. Make up water shall be available from the two gravity feed makeup Water tanks.
- | d. During Power Operating Conditions, each emergency cooling system high point vent to torus shall be operable.
  - 1. With a vent path for one emergency cooling system inoperable, restore the vent path to an operable condition within 30 days.
  - 2. With vent paths for both emergency cooling systems inoperable, restore one vent path to an operable condition with 14 days and both vent paths within 30 days.
- | e. If Specification 3.1.3.a, b, c, or d are not met, a normal orderly shutdown shall be initiated with one hour, and the reactor shall be in the cold shutdown conditions within ten hours.

### SURVEILLANCE REQUIREMENT

- d. At least once each shift -  
The area temperature shall be checked.
- e. During each major refueling outage -  
Automatic actuation and functional system testing shall be performed during each major refueling outage and whenever major repairs are completed on the system.  
  
Each emergency cooling vent path shall be demonstrated operable by cycling each power-operated valve (05-01R, 05-11, 05-12, 05-04R, 05-05 and 05-07) in the vent path through one complete cycle of full travel and verifying that all manual valves are in the oper position.
- f. Surveillance with an Inoperable System -  
When one of the emergency cooling systems is inoperable, the level control valve and the motor-operated isolation valve in the operable system shall be verified to be operable immediately and daily thereafter.

LIMITING CONDITION FOR OPERATION

- d. If Specifications a, b and c are not met, a normal orderly shutdown shall be initiated within one hour and the reactor shall be in the cold shutdown condition within ten hours.
- e. During reactor operation, except during core spray system surveillance testing, core spray isolation valves 40-02 and 40-12 shall be in the open position and the associated valve motor starter circuit breakers for these valves shall be locked in the off position. In addition, redundant valve position indication shall be available in the control room.
- f. Whenever irradiated fuel is in the reactor vessel and the reactor coolant temperature is less than or equal to 212°F, two core spray subsystems shall be operable except as specified in g and h below.
- g. If one of the above required subsystems becomes inoperable, restore at least two subsystems to an operable status within 4 hours or suspend all operations that have a potential for draining the reactor vessel.

SURVEILLANCE REQUIREMENT

- d. Core spray header  $\Delta P$  instrumentation
  - check                      Once/day
  - calibrate                 Once/3 months
  - test                         Once/3 months
- e. Surveillance with Inoperable Components

When a component becomes inoperable its redundant component or system shall be verified to be operable immediately and daily thereafter.
- f. With a core spray subsystem suction from the CST, CST level shall be checked once per day.
- g. At least once per month when the reactor coolant temperature is greater than 212°F, verify that the piping system between valves 40-03, 13 and 40-01, 09, 10, 11 is filled with water.

LIMITING CONDITION FOR OPERATION

- b. If a redundant component becomes inoperable, the control rod drive pump coolant injection system shall be considered operable provided that the component is returned to an operable condition within 7 days and the additional surveillance required is performed.
- c. If Specifications "a" or "b" above are not met, the reactor coolant temperature shall be reduced to 212°F or less within ten hours.

SURVEILLANCE REQUIREMENT

- b. At least once per quarter -

Pump flow rate shall be determined.

- c. Surveillance with Inoperable Components

When a component becomes inoperable its redundant component shall be verified to be operable immediately and daily thereafter.

LIMITING CONDITION FOR OPERATION

- c. If Specification "a" and "b" are not met, a normal orderly shutdown shall be initiated within one hour and reactor coolant pressure and temperature shall be reduced to less than 110 psig and saturation temperature within 24 hours.

SURVEILLANCE REQUIREMENT

- c. Surveillance with Inoperable Components

When a component becomes inoperable its redundant component shall be verified to be operable immediately and daily thereafter.

## LIMITING CONDITION FOR OPERATION

- c. If a redundant component in each of the containment spray systems or their associated raw water systems become inoperable, both systems shall be considered operable provided that the component is returned to an operable condition within 7 days and that the additional surveillance required is performed.
- d. If a containment spray system or its associated raw water system becomes inoperable and all the components are operable in the other systems, the reactor may remain in operation for a period not to exceed 7 days.
- e. If Specifications "a" or "b" are not met, shutdown shall begin within one hour and the reactor coolant shall be below 215°F within ten hours.

If both containment spray systems become inoperable the reactor shall be in the cold shutdown condition within ten hours and no work shall be performed on the reactor which could result in lowering the reactor water level to more than six feet, three inches (-10 inches indicator scale) below minimum normal water level (Elevation 302'9").

## SURVEILLANCE REQUIREMENT

### c. Raw Water Cooling Pumps

At least once per quarter manual startup and operability of the raw water cooling pumps shall be demonstrated.

### d. Surveillance with Inoperable Components

When a component or system becomes inoperable its redundant component or system shall be verified to be operable immediately and daily thereafter.

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

- g. At least once per operating cycle, not to exceed 24 months, automatic initiation of each branch of the emergency ventilation system shall be demonstrated.
- h. At least once per operating cycle, not to exceed 24 months, manual operability of the bypass valve for filter cooling shall be demonstrated.
- i. When one circuit of the emergency ventilation system becomes inoperable all active components in the other emergency ventilation circuit shall be verified to be operable within two hours and daily thereafter.

The replacement charcoal for the adsorber tray removed for the test should meet the same adsorbent quality. Any HEPA filters found defective shall be replaced with filters qualified pursuant to ANSI 509-1980.

All elements of the heater should be demonstrated to be functional and operable during the test of heater capacity. Operation of the inlet heater will prevent moisture buildup in the filters and adsorber system.

With doors closed and fan in operation, DOP aerosol shall be sprayed externally along the full linear periphery of each respective door to check the gasket seal. Any detection of DOP in the fan exhaust shall be considered an unacceptable test result and the gaskets repairs and test repeated.

If significant painting, fire or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign material, the same tests and sample analysis shall be performed as required for operational use. The determination of significant shall be made by the operator on duty at the time of the incident. Knowledgeable staff members should be consulted prior to making this determination.

Demonstration of the automatic initiation capability and operability of filter cooling is necessary to assure system performance capability. If one emergency ventilation system is inoperable, the other system must be verified to be operable daily. This substantiates the availability of the operable system and thus reactor operation or refueling operation may continue during this period.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 128 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 March 10, 1992, Niagara Mohawk Power Corporation (the licensee) submitted a request for changes to the Nine Mile Point Nuclear Station Unit No. 1, Technical Specifications (TS). The requested changes would revise Technical Specifications (TS) 4.1.2 (Liquid Poison System), 4.1.3 (Emergency Cooling System), 4.1.4 (Core Spray System), 4.1.6 (Control Rod Drive Pump Coolant Injection), 4.1.8 (High Pressure Coolant Injection), 4.3.7 (Containment Spray System), and 4.4.4 (Emergency Ventilation System) to delete the current requirements to demonstrate, by testing, that a redundant system/component is operable when a system/component is declared inoperable. These testing requirements would be replaced by requirements to verify that the redundant system/component is operable. These operability verifications would be accomplished by administrative checks of appropriate plant records (e.g., appropriate surveillance records, temporary modification logs, equipment tagging records, operating logs, and shift turnover logs). Conforming changes would be made to Definition 1.2 (Operable) and to the Bases for TS 4.4.4. Administrative changes to delete superseded material and to renumber affected paragraphs would also be made to TS 3.1.3, 4.1.3, 3.3.7, and 4.3.7.

2.0 EVALUATION

The requirement to demonstrate the operability, by testing, of a redundant system/component when a system/component is declared inoperable is a typical requirement that was included in technical specifications when Nine Mile Point Unit 1 was granted its operating license. However, based on further operating experience, the NRC staff subsequently dropped such testing requirements. Testing of redundant systems/components is not required in the NRC's Standard Technical Specifications nor in recently issued technical specifications. Deletion of such testing requirements was implemented by the NRC staff since the added operability assurance provided by such testing is not sufficient to justify the loss of safety function during the test, provided the periodic surveillance testing is current and that there are no known reasons to suggest that the redundant system/component is inoperable. The periodic surveillance tests and the proposed verifications that the redundant systems/components are

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operable are sufficient to demonstrate the operability of the redundant system/component. Therefore, the proposed changes to delete demonstration of operability by testing of redundant system/components are acceptable.

The proposed deletion of superseded material and renumbering of affected paragraphs are only administrative changes and are also, 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. 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 (57 FR 13133). 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: May 18, 1992

May 18, 1992

Docket No. 50-220

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 NO. 1  
(TAC NO. M82972)

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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,  
Original Signed By:  
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. 128 to DPR-63
- 2. Safety Evaluation

cc w/enclosures:

See next page

OFFICE	PDI-1:LA	PDI-1:PM <i>DAB</i>	OGC	PDI-1:D	
NAME	CVogan <i>cc</i>	DBrinkman:av1	<i>BB</i>	RACapra <i>cc</i>	
DATE	4/16/92	4/17/92	4/21/92	05/18/92	/ /

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