February 1, 1991

Docket No. 50-220

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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 1 (TAC NO. 69205)

The Commission has issued the enclosed Amendment No. 122 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 June 20, 1988, as supplemented October 19, 1989.

This amendment revises the Technical Specification to consolidate the requirements for suppression chamber water level instrumentation into one Technical Specification.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly 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. 122 to DPR-63
2. Safety Evaluation

cc: w/enclosures
See next page

PDI-1:LA	PDI-1:PM	OGC	PDI-1:D
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DOCUMENT NAME: AMEND TAC NO. 69205

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

February 1, 1991

Docket No. 50-220

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Executive Vice President, Nuclear
Niagara Mohawk Power Corporation
301 Plainfield Road
Syracuse, New York 13212

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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. 122 to DPR-63
2. Safety Evaluation

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See next page

cc:

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

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 122
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 June 20, 1988, as supplemented October 19, 1989, 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 122, 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

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

Attachment: 122
Changes to the Technical Specifications

Date of Issuance: February 1, 1991

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 122 TO FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

Revise Appendix A as follows:

Remove Pages	Insert Pages
ii	ii
iii	iii
188	188
190	190
232b	232b
232c	232c
232d	deleted
232e	deleted
236	236
237	237
241ii	241ii

3.6.2 PROTECTIVE INSTRUMENTATION

Applicability:

Applies to the operability of the plant instrumentation that performs a safety function.

Objective:

To assure the operability of the instrumentation required for safe operation.

Specification:

a. The set points, minimum number of trip systems, and minimum number of instrument channels that must be operable for each position of the reactor mode switch shall be as given in Tables 3.6.2a to 3.6.2l.

If the requirements of a table are not met, the actions listed below for the respective type of instrumentation shall be taken.

(1) Instrumentation that initiates scram - control rods shall be inserted, unless there is no fuel in the reactor vessel.

4.6.2 PROTECTIVE INSTRUMENTATION

Applicability:

Applies to the surveillance of the instrumentation that performs a safety function.

Objective:

To verify the operability of protective instrumentation.

Specification:

a. Sensors and instrument channels shall be checked, tested and calibrated at least as frequently as listed in Tables 4.6.2a to 4.6.2l.

(8) Off-Gas and Vacuum Pump Isolation - The respective system shall be isolated or the instrument channel shall be considered inoperable and Specification 3.6.1 shall be applied.

(9) Diesel Generator Initiation - The diesel generator shall be considered inoperable and Specification 3.6.3 shall be applied.

(10) Emergency Ventilation Initiation - The emergency ventilation system shall be considered inoperable and Specification 3.4.4 shall be applied.

(11) High Pressure Coolant Injection Initiation - The high pressure coolant injection system shall be considered inoperable and Specification 3.1.8.c shall be applied.

(12) Control Room Ventilation - The control room ventilation system shall be considered inoperable and Specification 3.4.5 shall be applied.

b. During operation with a Maximum Total Peaking Factor (MTPF) greater than the design value, either:

Table 3.6.21

CONTROL ROOM AIR TREATMENT SYSTEM INITIATION

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable			
				Shutdown	Refuel	Startup	Run
(1) High Radiation Ventilation Intake	1	1	$\leq$ 1000 CPM		x	x	x

Table 4.6.21

CONTROL ROOM AIR TREATMENT SYSTEM INITIATION

Surveillance Requirement

Parameter	Sensor Check	Instrument Channel Test	Instrument Channel Calibration
(1) High Radiation Ventilation Intake	Once/shift	Once per quarter	Once each operating cycle not to exceed 24 months

The set points on the generator load rejection and turbine stop valve closure scram trips are set to anticipate and minimize the consequences of turbine trip with failure of the turbine bypass system as described in the bases for Specification 2.1.2. Since the severity of the transients is dependent on the reactor operating power level, bypassing of the scrams below the specified power level is permissible.

Although the operator will set the setpoints at the values indicated in Tables 3.6.2.a-1, the actual values of the various set points can differ appreciably from the value the operator is attempting to set. The deviations include inherent instrument error, operator setting error and drift of the set point. These errors are compensated for in the transient analyses by conservatism in the controlling parameter assumptions as discussed in the bases for Specification 2.1.2. The deviations associated with the set points for the safety systems used to mitigate accidents have negligible effect on the initiation of these systems. These safety systems have initiation times which are orders of magnitude greater than the difference in time between reaching the nominal set point and the worst set point due to error. The maximum allowable set point deviations are listed below:

Neutron Flux
APRM, +2.7% of rated neutron flux
IRM, +2.5% of rated neutron flux

Recirculation Flow, ±1% of rated recirculation flow

Reactor Pressure, ±15.8 psig

Containment Pressure, ±0.053 psig

Reactor Water Level, ±2.6 inches of water

Main Steam Line Isolation Valve Position, ±2.5% of stem position

Scram Discharge Volume, +0 and -1 gallon

Condenser Low Vacuum, ±0.5 inches of mercury

High Flow-Main Steam Line, ±1 psid

High Flow-Emergency Cooling Line, ±1 psid

High Area Temperature-Main Steam Line, ±10F

High Area Temperature-Clean-up and Shutdown, ±6F

High Radiation-Main Steam Line, +100% and -50% of set point value

High Radiation-Emergency Cooling System Vent, +100% and -50% of set point

High Radiation-Reactor Building Vent, +100% and -50% of set point

High Radiation-Refueling Platform, +100% and -50% of set point

High Radiation-Offgas Line, ±50% of set point, (Appendix D)*

The test intervals for the trip systems result to calculated failure probabilities $\leq 10^{-4}$ which corresponds to the proposed IEEE Criteria for System Failure Probability. (IEEE SG-3, Information Docket #1 - Protection System Reliability, April 24, 1968).

The test intervals for the trip systems result in calculated failure probabilities ranging from 6.7×10^{-7} to 1.76×10^{-10} (Fifth Supplement, p. 115).* The more frequent sensor checks result in even less probability that the particular system will fail. Because of local high radiation, testing instrumentation in the area of the main steam line isolation valves can only be done during periods of Station shutdown. These functions include high area temperature isolation, high radiation isolation and isolation valve position scram.

Testing of the scram associated with the shutdown position of the mode switch can be done only during periods of Station shutdown since it always involves a scram.

*FSAR

Accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. This capability is consistent with the recommendations of NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations," and/or NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980 and NUREG 0661, "Safety Evaluation Report Mark I Containment Long Term Program.".

The maximum allowable setpoint deviation for the Suppression Chamber Water Level instrumentation is ± 1.8 inches.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 122 TO FACILITY OPERATING LICENSE NO. DPR-63

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-220

INTRODUCTION

By letter dated June 20, 1988, as supplemented October 19, 1989, Niagara Mohawk Power Corporation (the licensee) submitted a request for revision of the Technical Specifications, Appendix A, to Operating License No. DPR-63 for the Nine Mile Point Nuclear Station, Unit No. 1. The proposed changes would consolidate the requirements for suppression chamber level instrumentation into one Technical Specification.

The Technical Specifications currently require the use of suppression chamber water level instrumentation in Technical Specifications 3.6.2, 4.6.2, 3.6.11, and 4.6.11. Technical Specifications 3.6.2 and 4.6.2 apply to the operability of plant instrumentation that performs a safety function. Technical Specifications 3.6.11 and 4.6.11 apply to ensuring the availability of selected plant variables for monitoring the specified parameters following an accident.

EVALUATION

The proposed Technical Specification change would delete the requirements for suppression chamber water level from Technical Specifications 3.6.2 and 4.6.2, Tables 3.6.21 and 4.6.21, and Bases 3.6.2 and 4.6.2. The Technical Specifications would retain the requirements for suppression chamber water level in Technical Specifications 3.6.11 and 4.6.11, Tables 3.6.11, and 4.6.11, and Bases 3.6.11 and 4.6.11.

The licensee's rationale for this change is that the suppression chamber water level instrumentation does not automatically initiate any engineered safeguards system. It does ensure that sufficient information regarding the suppression chamber water level is available to the operator in order to monitor and assess this variable during and following an accident. Therefore, the suppression chamber water level need only be included in the Accident Monitoring Technical Specifications (Technical Specifications 3.6.11 and 4.6.11).

Technical Specification Table 4.6.21 requires the suppression chamber water level instrumentation to be calibrated once every six months. Technical Specification Table 4.6.11 requires the suppression chamber water level instrumentation to be calibrated once during each major refueling outage. The proposed change would only require the suppression chamber water level instrumentation to be calibrated once during each major refueling outage. The once per refueling outage calibration frequency is in agreement with the recommendations of Generic Letter 83-36, "NUREG-0737 Technical Specifications," and the General Electric Boiling Water Reactors Standard Technical Specifications. This calibration interval will provide adequate instrumentation performance. Therefore, the proposed Technical Specification change is acceptable.

In addition to the above noted changes, the licensee proposed the following editorial changes. Tables 3.6.2m and 4.6.2m, Control Room Air Treatment System Initiation, would be redesignated as Tables 3.6.21 and 4.6.21, respectively. Corresponding changes would also be made in Technical Specifications 3.6.2 and 4.6.2 where these Tables are referenced. Index pages ii and iii would be corrected to include the appropriate titles and page numbers for Technical Specifications 3.2.6, 4.2.6, 3.6.4, and 4.6.4. The staff has determined that these proposed changes are purely administrative, do not change any requirements and are, therefore, acceptable.

SUMMARY

Based on the above evaluation, the staff concludes that the licensee's request to revise the Nine Mile Point Nuclear Station, Unit No. 1 Technical Specifications to consolidate the suppression pool chamber water level instrumentation into one Technical Specification is acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in a requirement with respect to the installation or use of the facility components located within the restricted areas as defined in 10 CFR Part 20. The staff has determined that this 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 this amendment.

CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and securitv or to the health and safety of the public.

Dated: February 1, 1991

PRINCIPAL CONTRIBUTOR:

B. Marcus