

May 19, 1981

Docket No. 50-220

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Mr. Donald P. Dise
 Vice President - Engineering
 Niagara Mohawk Power Corporation
 300 Erie Boulevard West
 Syracuse, New York 13202

Dear Mr. Dise:

The Commission has issued the enclosed Amendment No. 44 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station, Unit 1. The amendment is in response to your letter of March 2, 1981, whereby you requested approval of modifications to the Core Spray System.

Prior to this time, it was necessary to reduce reactor power in order to conduct quarterly inservice testing of the Core Spray isolation valves. This modification will allow testing during normal power plant operation.

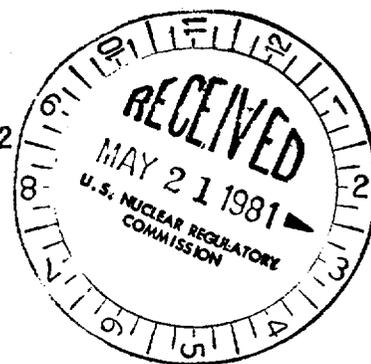
Please find enclosed Technical Specifications which preclude inadvertent water hammer in the Core Spray System. These specifications were agreed to by members of your staff. Please also note that by Order dated April 20, 1981, additional Technical Specifications were forwarded. These specifications require check valve leak testing in order to reduce the probability of an intersystem LOCA.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Original Signed by
 T. A. Ippolito

Thomas A. Ippolito, Chief
 Operating Reactors Branch #2
 Division of Licensing



Enclosures:

1. Amendment No. 44 to DPR-63
2. Safety Evaluation
3. Notice

cc w/encl:
 See next page

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P

*No objection to request
 concurrence is as requested
 limited to form of
 amendment and FR
 notice only*

OFFICE	DL:ORB#2	DL:ORB#2	DL:ORB#2	DL:ORB#2	OELD	ORR/ONP	ORR/ONP
SURNAME	S. Norris	P. Polk	T. Ippolito	T. Novak	B. Scharf	D. Pickett	J. Wetmore
DATE	5/15/81	5/15/81	5/18/81	5/19/81	5/18/81	5/16/81	5/7/81



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

Docket file

May 19, 1981

Docket No. 50-220

Mr. Donald P. Dise
Vice President - Engineering
Niagara Mohawk Power Corporation
300 Erie Boulevard West
Syracuse, New York 13202

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Sincerely,

Thomas A. Ippolito
Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing

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cc w/encl:
See next page

Mr. Donald P. Dise
Niagara Mohawk Power Corporation

cc:

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Energy Office
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Mr. Robert P. Jones, Supervisor
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Oswego, New York 13126

Niagara Mohawk Power Corporation
ATTN: Mr. Thomas Perkins
Plant Superintendent
Nine Mile Point Plant
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Syracuse, New York 13202

U.S. Environmental Protection Agency
Region II Office
ATTN: EIS COORDINATOR
26 Federal Plaza
New York, New York 10007

State University at Oswego
Penfield Library - Documents
Oswego, New York 13126

Resident Inspector
c/o U.S. NRC
P. O. Box 126
Lycoming, New York 13093



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. 44
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 2, 1981, 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. 44, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 19, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 44

FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

Revise Appendix A by removing pages 53 and 119 and replacing with revised pages 53 and 119. Marginal lines indicate area of change.

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

- f. Work may be performed on control rod drives at times when water is not in the suppression chamber and the core spray system shall be considered operable provided that the following are met:
1. No more than one control rod drive housing or LPRM penetration will be opened at any time.
 2. A blind flange will be installed on the control rod drive housing whenever a control rod drive has been removed for maintenance.
 3. Work will not be performed in the reactor vessel while a control rod drive housing is open.
 4. A control rod drive will not be removed if the backseat seal does not function.
- g. 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.

- g. At least once per month verification that the piping system between valves 40-03, 13 and 40-01, 09, 10, 11 is filled with water.

LIMITING CONDITION FOR OPERATION

Table 3.2.7 (Continued)

REACTOR COOLANT SYSTEM ISOLATION VALVES

<u>Line or System</u>	<u>No. of Valves (Each Line)</u>	<u>Location Relative to Primary Containment</u>	<u>Normal Position</u>	<u>Motive Power</u>	<u>Maximum Oper. Time (Sec.)</u>	<u>Action on Initiating Signal</u>	<u>Initiating Signal (All Valves Have Remote Manual Backup)</u>
<u>Reactor Head Spray (One Line)</u>	1	Inside	-	Self Act. Ck.	--	-	-
	1	Outside	Closed	R.M.P.O.	30	-	-
<u>Liquid Poison (One Line)</u>	1	Inside	-	Self Act. Ck.	--	-	-
	1	Outside	-	Self Act. Ck.	--	-	-
<u>Control Rod Drive Hydraulic (One Line)</u>	1	Inside	-	Self Act. Ck.	--	-	-
	1	Outside	-	Self Act. Ck.	--	-	-
<u>Core Spray High Point Vent (Two Lines)</u>	1	Inside	Closed	A.C. Motor	30	Closed	} Reactor Water Level Low-Low or High Drywell Pressure
	1	Outside	Closed	Air/D.C. Solenoid	30	Closed	

*A.I.P.O. - Automatically Initiated Power Operated

*R.M.P.O. - Remote Manual Power Operated



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 44 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 2, 1981, Niagara Mohawk Power Corporation (licensee) proposed changes to the Technical Specifications to modify the Core Spray System. The Nine Mile Point Core Spray/High Point Vent System is shown on the attached figure. The proposed modifications are shown by the dashed lines.

Prior to the modifications, the core spray line had a stop check valve and a locked open motor operated valve (MOV) outside containment and two normally closed MOVs in parallel inside containment. ASME Section XI (Inservice Testing) requires periodic testing of the core spray pump and exercising of the motor operated valves. The licensee's operational experience showed that due to elevation differences, the core spray piping outside the drywell would drain. Whenever the core spray pump was started or the inside MOVs were exercised, a water hammer would develop as water filled the drained pipe.

Due to the drainage and potential water hammer problem, the licensee would have to shutdown before performing the quarterly valve operability test. Primary system pressure would have to be lowered sufficiently so that the inside MOVs could be exercised without causing water hammer in the core spray piping.

The licensee's letter of March 2, 1981 (reference 1) proposed installing a keep-fill system, a high point vent, and associated containment piping, valves and control circuitry. The keep-fill system maintains a water inventory in the core spray piping during normal operation. This system should prevent any water hammer if the core spray system were actuated. The high point vent penetrates the primary containment and leads to the equipment drain tank. The two valves of the high point vent are containment isolation valves and are normally closed. Prior to any ASME Section XI testing, the valves are opened until water comes out the equipment drain. When water comes out the drain, this signifies that any air in the piping has been purged. The valves are then closed and Section XI testing begins.

2.0 Evaluation

The keep-fill system uses water from the condensate supply to maintain a water inventory in the core spray piping. The stop check valves and downstream piping were designed to ASME Section III, Safety Class 2. The pressure rating of the check valves is equivalent to system pressure (1200 psig). The keep-fill system will be beneficial in that it will provide a constant head on the core spray pump discharge check valve thus preventing movement of its disk.

The high point vent system will also be designed to ASME Section III, Safety Class 2. Both the inside motor operated valve and the outside air operated valve are normally closed and receive automatic isolation signals upon low-low reactor water level or high drywell pressure. Both valves will be subject to local leak rate testing per Appendix J to 10 CFR Part 50 and periodic exercising per ASME Section XI.

The licensee has agreed to Technical Specifications to periodically (at least monthly) open the high point vent valves and verify that the keep-fill system is maintaining the piping volume full of water. This will provide additional assurance that the operability of the core spray system will not be degraded due to water hammer. The licensee has also implemented Technical Specifications governing Reactor Coolant System Isolation Valves. (Reference 2).

The addition of the keep-fill system and the high point vent should prevent water hammer and permit ASME Section XI testing without shutting the facility down. We have reviewed the design criteria of the systems and find them acceptable. Based upon our review of the licensee's submittal we find both the proposed modifications and the associated revision to the Technical Specifications to be acceptable.

3.0 Environmental Considerations

We have determined that this amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that this amendment involves an action which is insignificant from the standpoint of environmental impact, and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

4.0 Conclusion

We have concluded based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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 security or to the health and safety of the public.

Dated: May 19, 1981

Reference

- (1) Letter from LeBoeuf, Lamb, Leiby & MacRae (Counsel for Niagara Mohawk Power Corporation) to U. S. NRC (Eugene B. Thomas to Harold R. Denton), dated March 2, 1981.
- (2) Order to Modify License dated April 20, 1981.

CORE SPRAY
HIGH POINT VENT

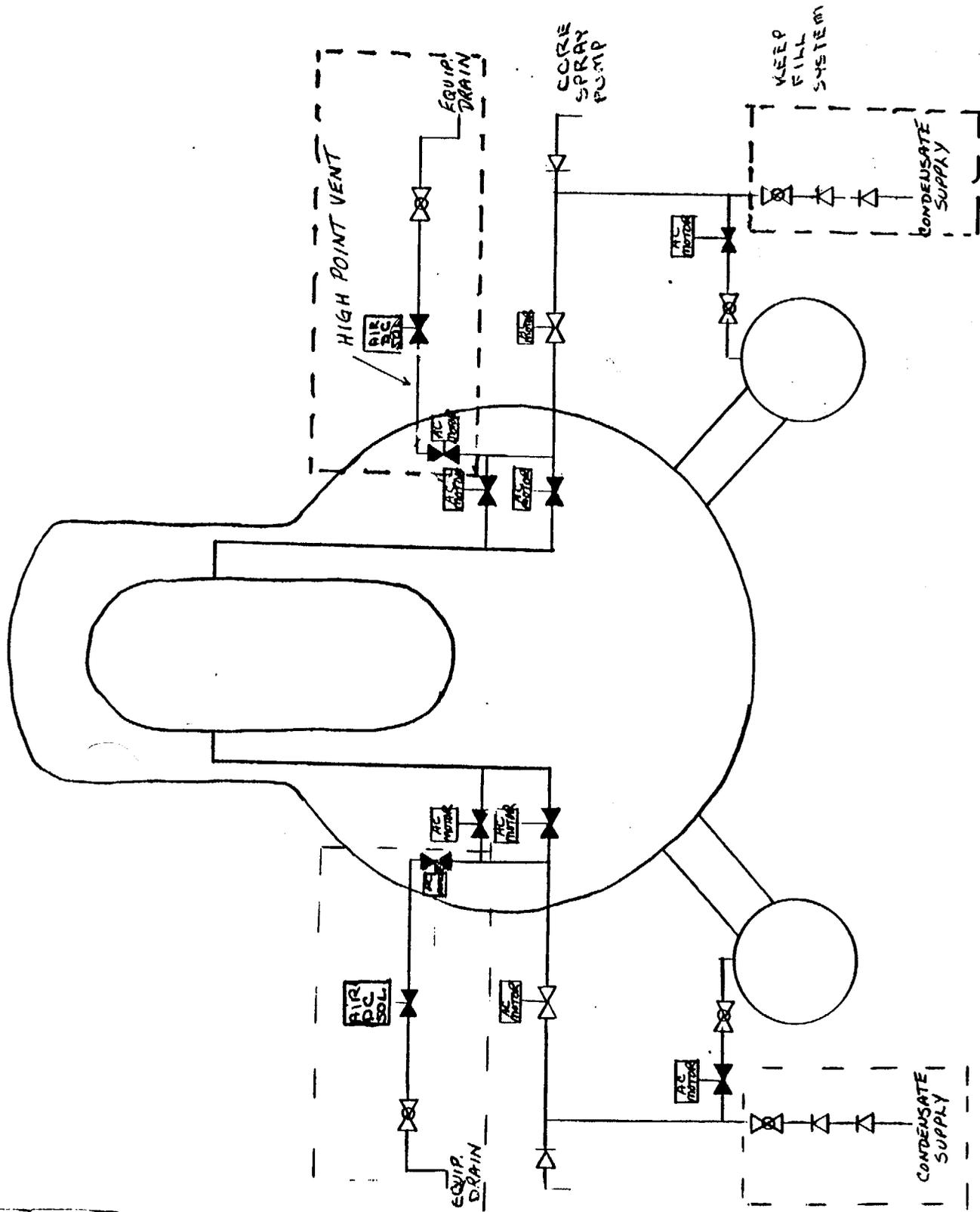


FIGURE 1

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-220NIAGARA MOHAWK POWER CORPORATIONNOTICE OF ISSUANCE OF FACILITY LICENSE AMENDMENT

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 44 to Facility Operating License No. DPR-63 to Niagara Mohawk Power Corporation (the licensee) which revised the Technical Specifications for operation of the Nine Mile Point Nuclear Station, Unit No. 1 (the facility) located in Oswego County, New York. The amendment is effective as of its date of issuance.

The amendment revises the Technical Specifications to allow modification of the Core Spray System.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §1.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated March 2, 1980, (2) Amendment No. 44 to License No. DPR-63, (3) the Commission's related Safety Evaluation, and (4) Order for Modification of License dated April 20, 1981. All of these items are available for public

inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D. C. and at the Oswego County Office Building, 46 E. Bridge Street, Oswego, New York 13126. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland this 19th day of May 1981.

FOR THE NUCLEAR REGULATORY COMMISSION


Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing