NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 1122

FILE:

FROM: Le Boeuf, Lamb, Leiby & MacRae Washington, D.C. Le Boeuf, Lamb, Leiby, & MacRae	DATE OF DOC 1-31-75	DATE REC'D 1-31-75	LTR xxx	TWX	RPT	OTHER
TO: Mr. Edson G. Case	ORIG 1-signed	CC	OTHER	SENT AEC PDR xxxxx SENT LOCAL PDR xxxx		

CLASS	UNCLASS	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO:
	xxxx		xxx	1	50-220

DESCRIPTION:

Ltr submitted on behalf of Niagara Mohawk Power Corporation, Trans the following:

ENCLOSURES:

Appl for Amdt to OL DPR-63/change to Tech-Specs notarized 1-30-75 ... 40 cys of enc'l' rec'd

Certificate of Service: Showing service upon Mr. Robert P. Jones, Town of Scriba, Oswego, New York ....

ACKNOWLEDGED
DO NOT REMOVE

PLANT NAME: Nine Mile Pt #1

FOR ACTION/INFORMATION 2-1-75 JGB

BUTLER (L) W/ Copies	SCHWENCER (L) W/ Copies	ZIEMANN (L) W/ Copies	REGAN (E) W/ Copies
CLARK (L) W/ Copies	STOLZ (L) W/ Copies	DICKER (E) W/ Copies	✓LEAR (L) W/ Copies
PARR (L) W/ Copies	VASSALLO (L) W/ Copies	KNIGHTON (E) W/ Copies	SPELS W/ Copies
KNIEL (L) W/ Copies	PURPLE (L) W/ Copies	YOUNGBLOOD (E) W/ Copies	W/ Copies

INTERNAL DISTRIBUTION

✓REG FILE	TECH REVIEW	DENTON	LIC ASST	A/T IND
✓NRC PDR	SCHROEDER	GRIMES	R. DIGGS (L)	BRAITMAN
✓OGC, ROOM P-506A	MACCARY	GAMMILL	H. GEARIN (L)	SALTZMAN
✓GOSSICK/STAFF	KNIGHT	KASTNER	E. GOULBOURNE (L)	MELTZ
CASE	PAWLICKI	BALLARD	P. KREUTZER (E)	
GIAMBUSSO	SHAO	SPANGLER	J. LEE (L)	PLANS
BOYD	STELLO		M. MAIGRET (L)	MCDONALD
✓MOORE (L)	HOUSTON	ENVIRO	S. REED (E)	CHAPMAN
DEYOUNG (L)	NOVAK	MULLER	M. SERVICE (L)	✓DUBE (Ltr)
SKOVHOLT (L)	ROSS	DICKER	S. SHEPPARD (L)	✓E. COUPE
✓GOLLER (L) (Ltr)	IPPOLITO	KNIGHTON	M. SLATER (E)	PETERSON
P. COLLINS	TEDESCO	YOUNGBLOOD	H. SMITH (L)	HARTFIELD (2)
DENISE	LONG	REGAN	✓S. TEETS (L)	KLECKER
✓REG OPR	LAINAS	✓PROJECT LDR	G. WILLIAMS (E)	EISENHUT
FILE & REGION (2)	BENAROYA	DITMAN	V. WILSON (L)	WIGGINTON
T.R. WILSON	VOLLMER	HARLESS	R. INGRAM (L)	
STEELE				

EXTERNAL DISTRIBUTION

Regtr (2)

- ✓1 – LOCAL PDR Oswego, N.Y
- ✓1 – TIC (ABERNATHY)
- ✓1 – NSIC (BUCHANAN)
- 1 – ASLB
- 1 – Newton Anderson
- ✓12 – ACRS ~~HOLDING~~/SENT

(1)(2)(10) – NATIONAL LABS

- 1 – W. PENNINGTON, Rm E-201 GT
- 1 – CONSULTANTS NEWMARK/BLUME/AGBABIAN

- 1 – PDR-SAN/LA/NY
- 1 – BROOKHAVEN NAT LAB
- 1 – G. ULRIKSON, ORNL
- 1 – AGMED (RUTH GUSSMAN) Rm B-127 GT
- 1 – J. D. RUNKLES, Rm E-201 GT

to TEETS 2-1-75

Regulatory File Cy.

LAW OFFICES OF
LEBOEUF, LAMB, LEIBY & MACRAE
1757 N STREET, N.W.
WASHINGTON, D.C. 20036

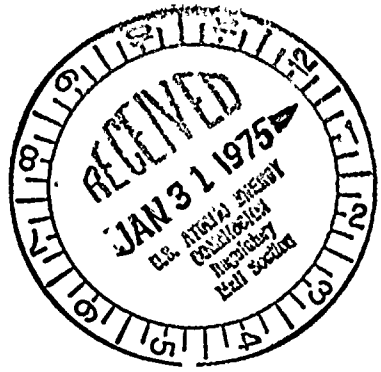
ARVIN E. UPTON
LEONARD M. TROSTEN
WILLIAM O. DOUB (ADM. MARYLAND)
EUGENE B. THOMAS, JR.
HARRY H. VOIGT
LEX K. LARSON
WASHINGTON PARTNERS

ONE CHASE MANHATTAN PLAZA
NEW YORK, N.Y. 10005

WASHINGTON TELEPHONE
202-872-8668

CABLE ADDRESS
LALALU, WASHINGTON D.C.

January 31, 1975



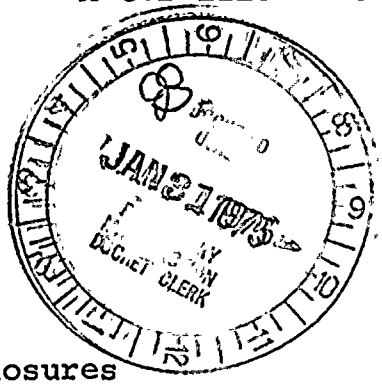
Mr. Edson G. Case
Acting Director
Office of Nuclear Reactor
Regulation
Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station Unit No. 1
Docket No. 50-220

Dear Mr. Case:

Transmitted herewith are three (3) signed originals and nineteen (19) copies of Niagara Mohawk Power Corporation's Application for Amendment to Technical Specifications and forty (40) copies of the proposed change. A safety evaluation of the proposed change is also transmitted. The proposed change will amend Sections 3.4.4, 4.4.4, 3.4.5, and 4.4.5 of the Technical Specifications set forth in Appendix A to Facility Operating License No. DPR-63 as requested by the Commission letter of December 10, 1974.

A Certificate of Service is also enclosed.



Very truly yours,

LeBoeuf, Lamb, Leiby & MacRae

LeBoeuf, Lamb, Leiby & MacRae
Attorneys for Niagara Mohawk
Power Corporation

Enclosures

1122

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Niagara Mohawk Power Corporation	)	Docket No. 50-220
(Nine Mile Point Nuclear Station	)	
Unit No. 1)	)	

CERTIFICATE OF SERVICE

I hereby certify that I have served a document entitled "Application for Amendment to Technical Specifications" by mailing a copy thereof first class, postage prepaid, to the following persons this 31st day of January, 1974.

Mr. Robert P. Jones
Supervisor
Town of Scriba
R. D. #4
Oswego, New York 13126

Miss Juanita Kersey
Librarian
Oswego City Library
120 E. Second Street
Oswego, New York 13126

Dr. William E. Seymour
Staff Coordinator
New York State Atomic
Energy Council
New York State Department
of Commerce
99 Washington Avenue
Albany, New York 12210

Hope M. Babcock

LeBoeuf, Lamb, Leiby & MacRae
Attorneys for Applicant

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
NIAGARA MOHAWK POWER CORPORATION	)	Docket No. 50-220
(Nine Mile Point Nuclear Station	)	
Unit No. 1)	)	

APPLICATION FOR AMENDMENT

TO

TECHNICAL SPECIFICATIONS

Pursuant to Section 50.90 of the regulations of the Nuclear Regulatory Commission, Niagara Mohawk Power Corporation, holder of Facility Operating License No. DPR-63, hereby requests that Sections 3.4.4, 4.4.4, 3.4.5, and 4.4.5 of the Technical Specifications set forth in Appendix A to that License be amended as requested by the Commission letter of December 10, 1974.

The proposed technical specification change is set forth in Attachment A to this application. A safety evaluation, which demonstrates that the proposed change does not involve a significant hazards consideration, is set forth in Attachment B. The proposed change would not authorize any change in the types or any increase in the amounts of effluents or any change in the authorized power level of the facility.

WHEREFORE, Applicant respectfully requests that Appendix A to Facility Operating License No. DPR-63 be amended in the form attached hereto as Attachment A.

NIAGARA MOHAWK POWER CORPORATION

By Philip D. Raymond

Philip D. Raymond
Vice President-Engineering

Subscribed and sworn to before
me on this 30th day of January, 1975.

Hazel J. Carrick

Notary Public

HAZEL J. CARRICK
Notary Public in the State of New York
Qualified in [illegible] County
My Commission Expires March 30, 1976

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
NIAGARA MOHAWK POWER CORPORATION	)	Docket No. 50-220
(Nine Mile Point Nuclear Station	)	
Unit No. 1)	)	

APPLICATION FOR AMENDMENT

TO

TECHNICAL SPECIFICATIONS

Pursuant to Section 50.90 of the regulations of the Nuclear Regulatory Commission, Niagara Mohawk Power Corporation, holder of Facility Operating License No. DPR-63, hereby requests that Sections 3.4.4, 4.4.4, 3.4.5, and 4.4.5 of the Technical Specifications set forth in Appendix A to that License be amended as requested by the Commission letter of December 10, 1974.

The proposed technical specification change is set forth in Attachment A to this application. A safety evaluation, which demonstrates that the proposed change does not involve a significant hazards consideration, is set forth in Attachment B. The proposed change would not authorize any change in the types or any increase in the amounts of effluents or any change in the authorized power level of the facility.

WHEREFORE, Applicant respectfully requests that Appendix A to Facility Operating License No. DPR-63 be amended in the form attached hereto as Attachment A.

NIAGARA MOHAWK POWER CORPORATION

By Philip D. Raymond

Philip D. Raymond
Vice President-Engineering

Subscribed and sworn to before
me on this 30th day of January, 1975.

Hazel C. L. Carrick

Notary Public

HAZEL J. CARRICK
Notary Public in the State of New York
Qualified in [illegible] County No. [illegible]
My commission expires March 30, 1976

LIMITING CONDITION FOR OPERATION

3.4.4 EMERGENCY VENTILATION SYSTEM

Applicability:

Applies to the operating status of the emergency ventilation system.

Objective:

To assure the capability of the emergency ventilation system to minimize the release of radioactivity to the environment in the event of an incident within the primary containment or reactor building.

Specification:

a. Except as specified in Specification 3.4.4e below, both circuits of the emergency ventilation system and the diesel generators required for operation of such circuits shall be operable at all times when secondary containment integrity is required.

b. The results of the in-place cold DOP and halogenated hydrocarbon tests at design flows on HEPA filters and charcoal adsorber banks shall show $\geq$ 99% DOP removal and $\geq$ 99% halogenated hydrocarbon removal.

SURVEILLANCE REQUIREMENT

4.4.4 EMERGENCY VENTILATION SYSTEM

Applicability:

Applies to the testing of the emergency ventilation system.

Objective:

To assure the operability of the emergency ventilation system.

Specification:

Emergency ventilation system surveillance shall be performed as indicated below:

a. At least once per operating cycle, the following conditions shall be demonstrated:

(1) Pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches of water at the system rated flow rate.

(2) Inlet heater input is capable of reducing relative humidity to $\leq$ 70% relative humidity.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
c. The results of laboratory carbon sample analysis shall show ≥ 95% radioactive methyl iodide removal at a velocity within 20 percent of actual system design, 0.5 to 1.5 mg/m^3 inlet methyl iodide concentration, ≥ 70% relative humidity and ≥ 190 F.	b. The tests and sample analysis of Specification 3.4.4b, c and d shall be performed initially and at least once per year for standby service or after every 720 hours of system operation and following significant painting, fire or chemical release in any ventilation zone communicating with the system.
d. Fans shall be shown to operate within ±10% design flow.	c. Cold DOP testing shall be performed after each complete or partial replacement of the HEPA filter bank or after any structural maintenance on the system housing.
e. From and after the date that one circuit of the emergency ventilation system is made or found to be inoperable for any reason, reactor operation and fuel handling is permissible only during the succeeding seven days unless such circuit is sooner made operable, provided that during such seven days all active components of the other emergency ventilation circuit shall be operable.	d. Halogenated hydrocarbon testing shall be performed after each complete or partial replacement of the charcoal adsorber bank or after any structural maintenance on the system housing.
f. If these conditions cannot be met, procedures shall be initiated immediately to establish reactor conditions for which the emergency ventilation system is not required.	e. Each circuit shall be operated with the heaters on at least 10 hours every month.
	f. Test sealing of gaskets for housing doors downstream of the HEPA filters and charcoal adsorbers shall be performed at and in conformance with each test performed for compliance with Specification 4.4.4b and Specification 3.4.4b.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
	g. At least once per operating cycle automatic initiation of each branch of the emergency ventilation system shall be demonstrated.
	h. At least once per operating cycle manual operability of the bypass valve for filter cooling shall be demonstrated.
	i. When one circuit of the emergency ventilation system becomes inoperable the other circuit shall be demonstrated to be operable immediately and daily thereafter.

BASES FOR 3.4.4 AND 4.4.4 EMERGENCY VENTILATION SYSTEM

The emergency ventilation system is designed to filter and exhaust the reactor building atmosphere to the stack during secondary containment isolation conditions. Both emergency ventilation system fans are designed to automatically start upon high radiation in the reactor building ventilation duct or at the refueling platform and to maintain the reactor building pressure to the design negative pressure so as to minimize in-leakage, Should one system fail to start, the redundant system is designed to start automatically. Each of the two fans has 100 percent capacity.

High efficiency particulate absolute (HEPA) filters are installed before and after the charcoal adsorbers to minimize potential release of particulates to the environment and to prevent clogging of the iodine adsorbers. The charcoal adsorbers are installed to reduce the potential release of radioiodine to the environment. The in-place test results should indicate a system leak tightness of less than 1 percent bypass leakage for the charcoal adsorbers and a HEPA efficiency of at least 99 percent removal of DOP particulates. The laboratory carbon sample test results should indicate a radioactive methyl iodide removal efficiency of at least 95 percent for expected accident conditions. If the efficiencies of the HEPA filters and charcoal adsorbers are as specified, the resulting doses will be less than the 10 CFR 100 guidelines for the accidents analyzed. Operation of the fans significantly different from the design flow will change the removal efficiency of the HEPA filters and charcoal adsorbers.

Only one of the two emergency ventilation systems is needed to cleanup the reactor building atmosphere upon containment isolation. If one system is found to be inoperable, there is no immediate threat to the containment system performance and reactor operation or refueling operation may continue while repairs are being made. If neither circuit is operable, the plant is brought to a condition where the emergency ventilation system is not required.

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. Heater capability, pressure drop and air distribution should be determined at least once per operating cycle to show system performance capability.

The frequency of tests and sample analysis are necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. Tests of the charcoal adsorbers with halogenated hydrocarbon refrigerant shall be performed in accordance with USAEC Report DP-1082. Iodine removal efficiency tests shall follow RDT Standard M-16-1T. The charcoal adsorber efficiency test procedures should allow for the removal of one adsorber tray, emptying of one bed from the tray, mixing the adsorbent thoroughly and obtaining at least two samples. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. If test results are unacceptable, all adsorbent in the system shall be replaced with an adsorbent qualified in Table 1

of Regulatory Guide 1.52. The replacement tray for the adsorber tray removed for the test should meet the same adsorbent quality. Tests of the HEPA filters with DOP aerosol shall be performed in accordance to ANSI N101.1-1972. Any HEPA filters found defective shall be replaced with filters qualified pursuant to Regulatory Position C.3.d of Regulatory Guide 1.52.

All elements of the heater should be demonstrated to be functional and operable during the test of heater capacity. Operation of the heaters 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 system drains are present in the filter/adsorber banks, loop-seals must be used with adequate water level to prevent by-pass leakage from the banks.

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 in inoperable, the other system must be tested daily. This substantiates the availability of the operable system and thus reactor operation or refueling operation may continue during this period of time.

LIMITING CONDITION FOR OPERATION

3.4.5 CONTROL ROOM AIR TREATMENT SYSTEM

Applicability:

Applies to the operating status of the control room air treatment system.

Objective:

To assure the capability of the control room air treatment system to minimize the amount of radioactivity or other gases entering the control room in the event of an incident.

Specification:

a. Except as specified in Specification 3.4.5e below, the control room air treatment system and the diesel generators required for operation of this system shall be operable at all times when containment integrity is required.

b. The results of the in-place cold DOP and halogenated hydrocarbon test design flows on HEPA filters and charcoal adsorber banks shall show $\geq$ 99% DOP removal and $\geq$ 99% halogenated hydrocarbon removal.

SURVEILLANCE REQUIREMENT

4.4.5 CONTROL ROOM AIR TREATMENT SYSTEM

Applicability:

Applies to the testing of the control room air treatment system.

Objective:

To assure the operability of the control room air treatment system.

Specification:

a. At least once per operating cycle, the pressure drop across the combined HEPA filters and charcoal adsorber banks shall be demonstrated to be less than 6 inches of water at system design flow rate.

b. The tests and sample analysis of Specification 3.4.5b, c, and d shall be performed initially and at least once per year for standby service or after every 720 hours of system operation and following significant painting, fire or chemical release in any ventilation zone communicating with the system.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
c. The results of laboratory carbon sample analysis shall show $\geq$ 90% radioactive methyl iodide removal at a velocity within 20% of system design, 0.05 to 0.15 mg/m^3 inlet iodide concentration, $\geq$ 95% relative humidity and $\geq$ 125 F.	c. Cold DOP testing shall be performed after each complete or partial replacement of the HEPA filter bank or after any structural maintenance on the system housing.
d. Fans shall be shown to operate within ± 10% design flow.	d. Halogenated hydrocarbon testing shall be performed after each complete or partial replacement of the charcoal adsorber bank or after any structural maintenance on the system housing.
e. From and after the date that the control room air treatment system is made or found to be inoperable for any reason, reactor operation or refueling operations is permissible only during the succeeding seven days unless the system is sooner made operable.	e. The system shall be operated at least 10 hours every month.
f. If these conditions cannot be met, reactor shutdown shall be initiated and the reactor shall be in cold shutdown within 24 hours for reactor operations and refueling operations shall be terminated immediately.	

BASES FOR 3.4.5 AND 4.4.5 CONTROL ROOM AIR TREATMENT SYSTEM

The control room air treatment system is designed to filter the control room atmosphere for intake air. A roughing filter is used for recirculation flow during normal control room air treatment operation. The control room air treatment system is designed to manually start upon control room isolation and to maintain the control room pressure to the design positive pressure so that all leakage should be out leakage.

High efficiency particulate absolute (HEPA) filters are installed before the charcoal adsorbers to prevent clogging of the iodine adsorbers. The charcoal adsorbers are installed to reduce the potential intake of radioiodine to the control room. The in-place test results should indicate a system leak tightness of less than 1 percent bypass leakage for the charcoal adsorbers and a HEPA efficiency of at least 99 percent removal of DOP particulates. The laboratory carbon sample test results should indicate a radioactive methyl iodide removal efficiency of at least 90 percent for expected accident conditions. If the efficiencies of the HEPA filters and charcoal adsorbers are as specified, the resulting doses will be less than the allowable levels stated in Criterion 19 of the General Design Criteria for Nuclear Power Plants, Appendix A to 10 CFR Part 50. Operation of the fans significantly different from the design flow will change the removal efficiency of the HEPA filters and charcoal adsorbers.

If the system is found to be inoperable, there is no immediate threat to the control room and reactor operation or refueling operation may continue for a limited period of time while repairs are being made. If the makeup system cannot be repaired within seven days, the reactor is shutdown and brought to cold shutdown within 24 hours or refueling operations are terminated.

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. Pressure drop should be determined at least once per operating cycle to show system performance capability.

The frequency of tests and sample analysis are necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. Tests of the charcoal adsorbers with halogenated hydrocarbon shall be performed in accordance with USAEC Report DP-1082. Iodine removal efficiency tests shall follow RDT Standard M-16-1T. The charcoal adsorber efficiency test procedures should allow for the removal of one adsorber tray, emptying of one bed from the tray, mixing the adsorbent thoroughly and obtaining at least two samples. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. If test results are unacceptable, all adsorbent in the system shall be replaced with an adsorbent qualified according to Table 1 of Regulatory Guide 1.52. The replacement tray for the adsorber tray removed for the test should

meet the same adsorbent quality. Tests of the HEPA filters with DOP aerosol shall be performed in accordance with ANSI N101.1-1972. Any HEPA filters found defective shall be replaced with filters qualified pursuant to Regulatory Position C.3.d or Regulatory Guide 1.52.

Operation of the system for 10 hours every month will demonstrate operability of the filters and adsorber system and remove excessive moisture built up on the adsorber.

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 materials, 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.

ATTACHMENT B

The proposed specifications described in Attachment A are intended to conform to the "model" Technical Specifications suggested by the Commission. Appropriate corrections have been made because of differences in terminology used, and design as noted below.

1. Emergency Ventilation System Specifications

a) The inlet heater specifications used are comparable to design specifications, which cite a reduction to $\leq$ 70% relative humidity as the design value.

b) The present design does not allow air distribution testing. Appropriate corrections to the model specification have been made.

c) The Emergency Ventilation System is designed to initiate on a high radiation signal in the reactor building ventilation exhaust duct.

d) The Emergency Ventilation is designed to maintain the reactor building at a negative pressure in order to minimize exfiltration. As described in the FSAR, Supplement 2 (page II-2), slight exfiltration can occur at high wind speeds.

e) No drains are installed on the Emergency Ventilation System. Therefore, no drain specification has been included.

2. Control Room Air Treatment System Specifications

a) The Control Room Air Treatment System is not redundant. Therefore, appropriate wording corrections for the Nine Mile Point Unit 1 design have been made.

b) There is no automatic initiation of the Control Room Air Treatment System. Manual initiation is specified.

The Safety Review and Audit Board and the Site Operations Review Committee have reviewed and approved these specifications.