Niagara Mohawk®

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August 15, 2000
NMP1L 1527

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

RE: Nine Mile Point Unit 1
Docket No. 50-220
DPR-63

References: ***Nine Mile Point Unit 1 Letter Dated November 30, 1999 (NMP1L 1485), TAC No. MA5815***

Gentlemen:

Niagara Mohawk Power Corporation (NMPC) hereby transmits an application for amendment to Nine Mile Point Unit 1 (NMP1) Operating License DPR-63. Enclosed are proposed changes to the Technical Specifications (TS) set forth in Appendix A to the above mentioned license. Attachment A replaces, in its entirety, the Attachment A previously submitted by NMPC's letter dated November 30, 1999. The conclusion that the proposed change to TS 3.4.4 involves no significant hazards consideration pursuant to 10CFR50.92 is based on the analysis that was included as Attachment B to the referenced letter for a previous change to TS 3.4.4 to address the requirements of Generic Letter (GL) 99-02. Supporting information and analyses demonstrating that the proposed change to TS 4.4.5.a involves no significant hazards consideration pursuant to 10CFR50.92 are included in Attachment B to this letter. Attachment C provides a "marked-up" copy of the revised TS pages and the Bases pages. NMPC's determination that the proposed change to TS 3.4.4 meets the criteria for categorical exclusion from performing an environmental assessment is based on the evaluation that was included as Attachment D to the referenced letter. Additionally, the determination that the proposed change to TS 4.4.5.a meets the criteria for categorical exclusion from performing an environmental assessment is included in Attachment D to this letter.

On June 3, 1999, the NRC issued GL 99-02, Laboratory Testing of Nuclear-Grade Activated Charcoal. GL 99-02 was issued to alert addressees that testing nuclear-grade activated charcoal to standards other than American Society for Testing and Materials (ASTM) D3803-1989, "Standard Test Method for Nuclear-Grade Activated Carbon," does not provide assurance for complying with the current licensing basis as it relates to the dose limits of General Design Criteria 19 of Appendix A to 10CFR Part 50 and Subpart A of 10CFR Part 100. The GL also requested that all addressees determine whether their TS reference ASTM D3803-1989 for charcoal filter laboratory testing. Addressees whose TS do not reference ASTM D3803-1989 should either amend their TS to reference ASTM D3803-1989 or propose an alternative test protocol.

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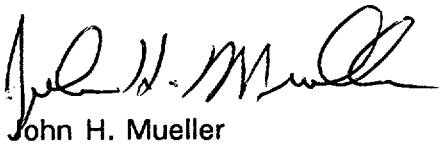
TS 4.4.5.a requires the pressure drop across the Control Room Air Treatment (CRAT) System combined high efficiency particulate absolute (HEPA) filters and charcoal adsorber banks to be demonstrated to be less than 6 inches of water at system design flow rate (± 10%). Based on revised CRAT System fan resistance curves, 1.5 inches of water is the maximum pressure drop across the combined HEPA filters and charcoal adsorber banks that will maintain the minimum required positive pressure in the control room.

The purpose of this submittal is to (1) provide supplemental information in support of the previously submitted Technical Specification amendment request, (2) revise the previously submitted change to NMP1 TS 3.4.4 to require testing results of laboratory carbon sample analysis in accordance with ASTM D3803-1989, and (3) submit a change to NMP1 TS 4.4.5.a to require the pressure drop across the CRAT System HEPA filters and charcoal adsorber banks to be demonstrated to be less than 1.5 inches of water. The associated Bases changes are also included.

Pursuant to 10CFR50.91(b)(1), NMPC has provided a copy of this license amendment request and the associated analysis regarding no significant hazards consideration to the appropriate state representative.

Very truly yours,



John H. Mueller
Senior Vice President and
Chief Nuclear Officer

JHM/SHC/kcm
Attachments

xc: Mr. H. J. Miller, NRC Regional Administrator, Region I
Ms. M. K. Gamberoni, Acting Section Chief PD-I, Section 1, NRR
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UNITED STATES NUCLEAR REGULATORY COMMISSION

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

SUPPLEMENTAL INFORMATION AND APPLICATION FOR AMENDMENT TO OPERATING LICENSE

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 and 4.4.5 set forth in Appendix A to that license be amended. The proposed changes have been reviewed in accordance with Section 6.5 of the Technical Specifications (TS).

On June 3, 1999, the NRC issued Generic Letter (GL) 99-02, Laboratory Testing of Nuclear-Grade Activated Charcoal. GL 99-02 was issued to alert addressees that testing nuclear-grade activated charcoal to standards other than American Standard for Testing and Materials (ASTM) D3803-1989, "Standard Test Method for Nuclear-Grade Activated Carbon," does not provide assurance for complying with the current licensing basis as it relates to the dose limits of General Design Criterion 19 of Appendix A to 10CFR Part 50 and Subpart A of 10CFR Part 100. The GL also requested that all addressees determine whether their TS reference ASTM D3803-1989 for charcoal filter laboratory testing. Addressees whose TS do not reference ASTM D3803-1989 should either amend their TS to reference ASTM D3803-1989 or propose an alternative test protocol. By letter dated November 30, 1999 (NMP1L 1485), NMP1 submitted a Technical Specification amendment request consistent with the requirements of GL 99-02.

TS 4.4.5.a requires the pressure drop across the Control Room Air Treatment System combined high efficiency particulate absolute (HEPA) filters and charcoal adsorber banks to be demonstrated to be less than 6 inches of water at system design flow rate (± 10%). Based on revised Control Room Air Treatment System fan resistance curves, 1.5 inches of water is the maximum pressure drop across the combined HEPA filters and charcoal adsorber banks that will maintain the minimum required positive pressure in the control room.

The purpose of this submittal is to (1) provide supplemental information in support of the previously submitted Technical Specification amendment request, (2) revise the previously submitted change to NMP1 TS 3.4.4 to require testing results of laboratory carbon sample analysis in accordance with ASTM D3803-1989, and 3) submit a change to NMP1 TS 4.4.5.a to require the pressure drop across the Control Room Air Treatment System HEPA filters and charcoal adsorber banks to be demonstrated to be less than 1.5 inches of water. The associated Bases changes are also included.

The proposed changes will not authorize any change in the type of effluents or in the authorized power level of the facility. The conclusion that the proposed change to TS 3.4.4 involves no significant hazards consideration pursuant to 10CFR50.92 is based on the analysis that was included as Attachment B in NMPC's submittal letter dated November 30, 1999 (NMP1L 1485). Additionally, supporting information and analyses demonstrating that the proposed change to TS 4.4.5.a involves no significant hazards consideration pursuant to 10CFR50.92 are included as Attachment B to this letter.

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

NIAGARA MOHAWK POWER CORPORATION

By _____
John H. Mueller
Senior Vice President and
Chief Nuclear Officer

Subscribed and sworn to before me
on this 15th day of August, 2000.

_____
NOTARY PUBLIC

SANDRA A. OSWALD
Notary Public, State of New York
No. 01OS6032276
Qualified In Oswego County
Commission Expires 10/25/01

ATTACHMENT A

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. DPR-63

DOCKET NO. 50-220

Proposed Changes to Technical Specifications and Bases

Replace the following Technical Specifications and Bases pages listed below with the attached revised pages. The revised pages have been retyped in their entirety with marginal markings to indicate changes to the text.

Remove	Insert
174	174
176	176
178	178
179	179
180	180

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
c. The results of laboratory carbon sample analysis shall show ≥99.5% radioactive methyl iodide removal when tested in accordance with ASTM D3803-1989 at 30°C and 95% R.H.	b. The tests and sample analysis of Specification 3.4.4b, c and d shall be performed at least once per operating cycle or once every 24 months, or after 720 hours of system operation, whichever occurs first or 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. During reactor operation, 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 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. During refueling, from and after the date that one circuit of the emergency ventilation system is made or found to be inoperable for any reason, fuel handling is permissible 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. Fuel handling may continue beyond seven days provided the operable emergency ventilation circuit is in operation.	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. Each circuit shall be operated with the inlet heater 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.
f. If these conditions cannot be met, within 36 hours, the reactor shall be placed in a condition for which the emergency ventilation system is not required.	

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 99.5 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 10CFR100 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 and 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. The charcoal adsorber efficiency test should allow for charcoal sampling to be conducted using an ASTM D3803-1989 approved method. If test results are unacceptable, all adsorbent in the system shall be replaced with an adsorbent that has been tested using an ASTM D3803-1989 approved method.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
3.4.5 CONTROL ROOM AIR TREATMENT SYSTEM	4.4.5 CONTROL ROOM AIR TREATMENT SYSTEM
Applicability:	Applicability:
Applies to the operating status of the control room air treatment system.	Applies to the testing of the control room air treatment system.
Objective:	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.	To assure the operability of the control room air treatment system.
Specification:	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 reactor building integrity is required.	a. At least once per operating cycle, or once every 24 months, whichever occurs first, the pressure drop across the combined HEPA filters and charcoal adsorber banks shall be demonstrated to be less than 1.5 inches of water at system design flow rate (±10%).
b. The results of the in-place cold DOP and halogenated hydrocarbon test design flows on HEPA filters and charcoal adsorber banks shall show ≥99% DOP removal and ≥99% halogenated hydrocarbon removal when tested in accordance with ANSI N.510-1980.	b. The tests and sample analysis of Specification 3.4.5b, c and d shall be performed at least once per operating cycle or once every 24 months, or after 720 hours of system operation, whichever occurs first or 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 ≥95% radioactive methyl iodide removal when tested in accordance with ASTM D3803-1989 at 30°C and 95% R.H.	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 absorber 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 36 hours for reactor operations and refueling operations shall be terminated within 2 hours.	f. At least once per operating cycle, not to exceed 24 months, automatic initiation of the control room air treatment system shall be demonstrated.
	g. At least once per operating cycle, not to exceed 24 months, the control room air treatment system shall be shown to maintain a positive pressure within the control room of greater than one sixteenth of an inch (water) relative to areas adjacent to the control room.

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 maintain the control room pressure to the design positive pressure (one-sixteenth inch water) so that all leakage should be out leakage. The control room air treatment system starts automatically upon receipt of a LOCA (high drywell pressure or low-low reactor water level) or Main Steam Line Break (MSLB) (high steam flow main-steam line or high temperature main-steam line tunnel) signal. The system can also be manually initiated.

High efficiency particulate absolute (HEPA) filters are installed before the charcoal adsorbers to prevent clogging of the iodine adsorber. 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 95 percent for expected accident conditions. If the efficiencies of the HEPA filter and charcoal adsorbers are as specified, adequate radiation protection will be provided such that 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 10CFR 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 36 hours or refueling operations are terminated.

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 1.5 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 the HEPA filters and charcoal adsorbers can perform as evaluated. The charcoal adsorber efficiency test should allow for charcoal sampling to be conducted using an ASTM D3803-1989 approved method. If test results are unacceptable, all adsorbent in the system shall be replaced with an adsorbent that has been tested using an ASTM D3803-1989 approved method. 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.

ATTACHMENT B

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. DPR-63

DOCKET NO. 50-220

Supporting Information

INTRODUCTION

As stated in the Nine Mile Point Unit 1 (NMP1) letter dated November 30, 1999 (NMP1L 1485), the Emergency Ventilation System (EVS) consists of a common supply header taking suction from the normal reactor building ventilation discharge, an electric heater (10kW) located on a common supply duct, a dual bank of filters for removal of particulates and halogens, a 1,000-W heater and motor-driven fan in each filter bank, and isolation valves at the supply and exhaust of each bank. Each EVS filter bank includes a charcoal filter, with activated and specially impregnated carbon, capable of removing 99.0 percent of radioactive methyl iodide and other iodine forms. The EVS is designed to limit the release of radioactive gases to the environment to within the guidelines of 10CFR100 for analyzed accidents.

Technical Specifications (TS) Surveillance Requirement (SR) 4.4.4 provides the testing requirements for the EVS, including the charcoal filters. SR 4.4.4.b requires that laboratory carbon sample analysis (as indicated in TS 3.4.4.c) be performed at least once per operating cycle or once every 24 months, or after 720 hours of system operation, whichever occurs first, or following significant painting, fire, or chemical release in any ventilation zone communicating with the system. TS 3.4.4.c references ANSI N510-1980 testing criteria.

On June 3, 1999, the NRC issued Generic Letter (GL) 99-02, Laboratory Testing of Nuclear-Grade Activated Charcoal. GL 99-02 was issued to alert addressees that testing nuclear-grade activated charcoal to standards other than American Society for Testing Materials (ASTM) D3803-1989, "Standard Test Method for Nuclear-Grade Activated Carbon," does not provide assurance for complying with the current licensing basis as it relates to the dose limits of General Design Criterion (GDC) 19 of Appendix A to 10CFR Part 50 and Subpart A of 10CFR Part 100. The GL also requested that all addressees determine whether their TS reference ASTM D3803-1989 for charcoal filter laboratory testing. Addressees whose TS do not reference ASTM D3803-1989 should either amend their TS to reference ASTM 3803-1989 or propose an alternative test protocol. By letter dated November 30, 1999 (NMP1L 1485), NMP1 submitted a Technical Specification amendment request consistent with the requirements of GL 99-02.

In addition, the NMP1 Control Room Air Treatment (CRAT) System consists of a 15 kW duct heater, two full-capacity ventilation fans, a high efficiency particulate absolute (HEPA) filter and an activated charcoal filter unit. Operability of the CRAT System assures that the control room will remain habitable for operations personnel during and following accident

conditions. Specifically, adequate radiation protection will be provided such that resulting doses will be less than allowable levels stated in GDC 19 of Appendix A to 10CFR Part 50.

SR 4.4.5 provides testing requirements for the CRAT System, including the HEPA filters and charcoal adsorber filter banks. SR 4.4.5.a requires the pressure drop across the combined HEPA filters and charcoal adsorber filter banks to be demonstrated to be less than 6 inches of water at system design flow rate (± 10%) at least once per operating cycle, or once every 24 months, whichever occurs first.

Based on revised CRAT System fan resistance curves, 1.5 inches of water is the maximum combined HEPA filter and charcoal adsorber filter differential pressure that will maintain the required minimum positive pressure in the control room.

The purpose of this Amendment application is to (1) submit additional information in support of the previously submitted Technical Specification amendment request, (2) revise the previously submitted change to NMP1 TS 3.4.4, and (3) submit a change to NMP1 TS 4.4.5.a. The associated Bases changes are also included.

EVALUATION

Supplemental information to support the previously submitted request

The testing requirements of the activated charcoal in the EVS and CRAT System are delineated in SR 4.4.4.b and 4.4.5.b, respectively. Both surveillances, by reference to TS 3.4.4.c and 3.4.5.c, require laboratory analysis of a representative carbon sample in accordance with ANSI N510-1980, which is the current test protocol for NMP1. The representative carbon samples, from the CRAT System and the EVS, are currently tested at 80°C (176°F) with a relative humidity of 95 percent. The CRAT System has a charcoal filter bed that is 2 inches deep with a face velocity of 26.8 ft./min at a maximum flow rate of 2500 scfm; the residence time is .25 seconds and the required efficiency is 90 percent. The EVS has a charcoal filter bed that is a minimum of 2 1/8 inches deep with a face velocity of 33 ft./min. at a design flow rate of 1600 scfm; the residence time is .3 seconds and the required efficiency is 99 percent. NMPC proposes to revise these TS to require testing in accordance with ASTM D3803-1989 to be consistent with the guidance provided in GL 99-02.

Revised change to the previously submitted TS 3.4.4.c

Analyses of design-basis accidents assume a particular charcoal filter adsorption efficiency when calculating offsite and control room operator doses. Charcoal filter samples are then tested to determine whether the filter adsorber efficiency is greater than that assumed in the design-basis accident analysis. The laboratory test acceptance criteria contain a safety factor to assure that the efficiency assumed in the accident analysis is still valid at the end of the operating cycle.

Niagara Mohawk Power Corporation (NMPC) is proposing an additional change to TS 3.4.4.c to test charcoal samples from the EVS to show a greater than or equal to 99.5 percent radioactive methyl iodide removal when tested in accordance with ASTM D3803-

1989 per GL 99-02. Testing in accordance with ASTM D3803-1989 is a conservative change, which will result in a more realistic prediction of the capability of the charcoal. The Bases associated with TS 3.4.4 have also been revised to reflect the new testing requirements.

Requested change to TS 4.4.5.a

The pressure drop testing requirements for the combined HEPA filter and charcoal adsorber banks in the CRAT System are delineated in SR 4.4.5.a. This surveillance requires the pressure drop across the combined HEPA filter and charcoal adsorber banks to be demonstrated to be less than 6 inches of water at system design flow rate (± 10%).

Analyses of design-basis accidents assume a minimum positive pressure in the control room to maintain habitability for operations personnel during and following accident conditions. An increase in the differential pressure across the HEPA filter / charcoal adsorber banks results in a reduction in control room pressure. With the current configuration of the CRAT System, the minimum air flow required to maintain 0.0625 inches of water corresponds to a maximum combined HEPA filter / charcoal adsorber bank differential pressure of 1.5 inches of water. Although the TS value of 6 inches of water is non-conservative, historically, this differential pressure has never reached 1.5 inches of water.

NMPC is proposing a change to TS 4.4.5.a to require the pressure drop across the combined HEPA filters and charcoal adsorber banks to be demonstrated to be less than 1.5 inches of water at system design flow rate (± 10%). The Bases associated with TS 4.4.5.a have been revised to reflect the new testing requirements.

CONCLUSION

This submittal provides additional supporting information for a previously submitted TS amendment request dated November 30, 1999, as requested by the NRC during a telephone conference call on March 15, 2000. This submittal also provides a revision to TS 3.4.4, by increasing the charcoal bed testing efficiency of the EVS from 95% to 99.5%, which was submitted by TS amendment request dated November 30, 1999 (NMP1L 1485). Additionally, this submittal provides a change to TS 4.4.5.a to require the pressure drop across the CRAT System HEPA filters and charcoal adsorber banks to be demonstrated to be less than 1.5 inches of water.

Charcoal filter samples are tested to determine whether the filter adsorber efficiency is greater than that assumed in the design-basis accident analysis. The proposed changes to the testing method provides a more realistic prediction of the capability of the charcoal and are consistent with the recommended changes proposed in GL 99-02. In addition, the proposed change to limit the filter pressure drop across the CRAT System HEPA filters and charcoal adsorber banks to 1.5 inches of water will assure system capability of maintaining the required minimum positive pressure in the Control Room complex with either emergency ventilation fan in service.

Consequently, the proposed TS changes will not adversely affect the health and safety of the public and will not be inimical to the common defense and security.

NO SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

10CFR50.91 requires that at the time a licensee requests an amendment, it must provide to the Commission its analysis using the standards in 10CFR50.92 concerning the issue of no significant hazards consideration. Therefore, in accordance with 10CFR50.91 and 10CFR50.92, an analysis which encompassed the change to TS 3.4.4 was performed and submitted by letter dated November 30, 1999 (NMP1L 1485). Additionally, the proposed change to TS 4.4.5.a involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or

2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or

3. Involve a significant reduction in a margin of safety.

NMPC has evaluated this proposed amendment pursuant to 10CFR50.91 and has determined that it involves no significant hazards consideration.

The following analyses have been performed.

The operation of Nine Mile Point Unit 1, in accordance with the proposed amendment, will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed TS change will require the demonstration that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 1.5 inches of water at system design flow rate (± 10%). The CRAT System does not involve initiators or precursors to an accident previously evaluated, as this system performs mitigative functions in response to an accident. Failure of this system would result in the inability to perform its mitigative function, but would not increase the probability of an accident. Therefore, the probability of an accident previously evaluated is not increased.

The NMP1 CRAT System is designed to limit doses to control room operators to less than the values allowed by General Design Criterion 19. This system contains HEPA filters and activated charcoal adsorber banks that are required by TS to have a combined pressure drop across them of less than 6 inches of water. The proposed TS change to require a combined pressure drop of less than 1.5 inches of water will assure the capability of the CRAT System to maintain the required minimum positive pressure in the Control Room complex. Therefore, the proposed change will not involve a significant increase in the consequences of an accident previously evaluated.

The operation of Nine Mile Point Unit 1, in accordance with the proposed amendment, will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed TS change will revise the allowable pressure drop across the CRAT System HEPA filters and charcoal adsorber banks to less than 1.5 inches of water at system design flow rate (± 10%). This change will not involve placing the system in a new configuration or operating the system in a different manner that could result in a new or different kind of accident. Maintaining a combined pressure drop across the HEPA filters and charcoal adsorber banks to less than 1.5 inches of water will assure system capability of maintaining the required minimum positive pressure in the Control Room complex. Therefore, the proposed change will not create the possibility of a new or different kind of accident from any previously evaluated.

The operation of Nine Mile Point Unit 1, in accordance with the proposed amendment, will not involve a significant reduction in a margin of safety.

The proposed TS change will not adversely affect the performance characteristics of the CRAT System, nor will it affect the ability of the system to perform its intended function. The combined pressure drop across the CRAT System HEPA filters and charcoal adsorber banks is demonstrated to determine whether sufficient flow exists to maintain the minimum positive pressure in the control room assumed in the design basis analysis. The proposed TS change will require the combined pressure drop across the HEPA filters and charcoal adsorber banks to be less than 1.5 inches of water. This will assure system capability to maintain the required minimum positive pressure in the Control Room complex. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

ATTACHMENT C

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. DPR-63

DOCKET NO. 50-220

"Marked-Up" Copy of Current Technical Specifications and Bases

LIMITING CONDITION FOR OPERATION

c. The results of laboratory carbon sample analysis shall show ≥ 95 (99.5) % radioactive methyl iodide removal when tested in accordance with ~~ANSI~~ ASTM ~~N.510-1980~~ D3803-1989 at ~~80~~ 30 °C and 95% R.H.

d. Fans shall be shown to operate within ± 10% design flow.

e. During reactor operation, 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 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.

During refueling, from and after the date that one circuit of the emergency ventilation system is made or found to be inoperable for any reason, fuel handling is permissible 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. Fuel handling may continue beyond seven days provided the operable emergency ventilation circuit is in operation.

f. If these conditions cannot be met, within 36 hours, the reactor shall be placed in a condition for which the emergency ventilation system is not required.

SURVEILLANCE REQUIREMENT

b. The tests and sample analysis of Specification 3.4.4b, c and d shall be performed at least once per operating cycle or once every 24 months, or after 720 hours of system operation, whichever occurs first or following significant painting, fire or chemical release in any ventilation zone communicating with the system.

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. 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. Each circuit shall be operated with the inlet heater 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.

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 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 10CFR100 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.

~~90~~ 99.5

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 and 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. The charcoal adsorber efficiency test should allow for charcoal sampling to be conducted using an ~~ANSI/ASME N510-1980~~ ASTM D3803-1989 approved method. If test results are unacceptable, all adsorbent in the system shall be replaced with an adsorbent ~~qualified in Table 5-1 of ANSI 509-1980.~~ that has been tested using an ASTM D3803-1989 approved method.

LIMITING CONDITION FOR OPERATION

:ONTROL ROOM AIR TREATMENT SYSTEM

\pplicability:

\pplies to the operating status of the control room air reatment system.

)bjective:

'o assure the capability of the control room air reatment system to minimize the amount of radio- ıctivity or other gases entering the control room in he event of an incident.

Specification:

1. 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 reactor building integrity is required.

). The results of the in-place cold DOP and halogenated hydrocarbon test design flows on HEPA filters and charcoal adsorber banks shall show ≥99% DOP removal and ≥99% halogenated hydrocarbon removal when tested in accordance with ANSI N.510-1980.

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, or once every 24 months, whichever occurs first, the pressure drop across the combined HEPA filters and charcoal adsorber banks shall be demonstrated to be less than 1.5 inches of water at system design flow rate (±10%).

b. The tests and sample analysis of Specification 3.4.5b, c and d shall be performed at least once per operating cycle or once every 24 months, or after 720 hours of system operation, whichever occurs first or following significant painting, fire or chemical release in any ventilation zone communicating with the 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 maintain the control room pressure to the design positive pressure (one-sixteenth inch water) so that all leakage should be out leakage. The control room air treatment system starts automatically upon receipt of a LOCA (high drywell pressure or low-low reactor water level) or Main Steam Line Break (MSLB) (high steam flow main-steam line or high temperature main-steam line tunnel) signal. The system can also be manually initiated.

High efficiency particulate absolute (HEPA) filters are installed before the charcoal adsorbers to prevent clogging of the iodine adsorber. 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~~ 95 * percent for expected accident conditions. If the efficiencies of the HEPA filter and charcoal adsorbers are as specified, adequate radiation protection will be provided such that 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 10CFR 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 36 hours or refueling operations are terminated.

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than ~~six~~ 1.5 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 the HEPA filters and charcoal adsorbers can perform as evaluated. The charcoal adsorber efficiency test should allow for charcoal sampling to be conducted using an ~~ANSI/ASME N510-1980~~ ASTM D3803-1989 * approved method. If test results are unacceptable, all adsorbent in the system shall be replaced with an adsorbent ~~qualified according to Table 5-1 of ANSI 509-1980.~~ that has been tested using an ASTM D3803-1989 approved method. * 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.

* CHANGES PREVIOUSLY SUBMITTED TO THE NRC BY LETTER DATED NOVEMBER 30, 1999.

ATTACHMENT D

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. DPR-63

DOCKET NO. 50-220

Eligibility for Categorical Exclusion from Performing an Environmental Assessment

10CFR51.22 provides criteria for, and identification of, licensing and regulatory actions eligible for exclusion from performing an environmental assessment. NMPC has reviewed the proposed amendment and determined that it does not involve a significant hazards consideration, and there will be no significant change in the types or a significant increase in the amounts of any effluents that may be released offsite; nor will there be any significant increase in individual or cumulative occupational radiation exposure. Therefore, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9) and, pursuant to 10CFR51.22(b), no environmental impact statement or environmental assessment is required to be prepared in connection with this license amendment application.