

ATTACHMENT A

NIAGARA MOHAWK POWER CORPORATION  
LICENSE NO. NPF-69  
DOCKET NO. 50-410

Proposed Change to Technical Specifications

Replace existing pages 3/4 3-68, 3/4 3-70 and 3/4 7-11 with the attached revised pages. These pages have been retyped in their entirety with marginal markings to indicate the changes.

TABLE 3.3.7.1-1

RADIATION MONITORING INSTRUMENTATION

<u>INSTRUMENTATION</u>		<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE CONDITIONS</u>	<u>ALARM/TRIP SETPOINT (a)</u>	<u>ACTION</u>
1.	Main Control Room Ventilation Radiation Monitors	2/System(b)(e)	1, 2, 3 and *	$\leq 5.92 \times 10^{-6} \mu\text{Ci/cc(c)}$	74
2.	Area Monitors				
a.	Criticality Monitor (New Fuel Storage Vault)	1	**	$\leq 1.0 \times 10^2 \text{ mR/hr(d)}$	76
b.	Control Room Direct Radiation Monitor	1	At all times	$\leq 2.5 \times 10^{-1} \text{ mR/hr(d)}$	76

TABLE 4.3.7.1-1

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENTATION</u>		<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
1.	Main Control Room Ventilation Radiation Monitors	S	NA	Q	R	1, 2, 3 and *
2.	Area Monitors					
a.	Criticality Monitors (New Fuel Storage Vault)	S	M	SA	R	**
b.	Control Room Direct Radiation Monitor	S	M	SA	R	At all times

\* When handling irradiated fuel in the reactor building and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

\*\* With fuel in the new fuel storage vault.

## PLANT SYSTEMS

### 3/4.7.3 CONTROL ROOM OUTDOOR AIR SPECIAL FILTER TRAIN SYSTEM

#### LIMITING CONDITIONS FOR OPERATION

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3.7.3 Two independent control room outdoor air special filter trains\* shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3 and \*\*.

#### ACTION:

- a. In OPERATIONAL CONDITION 1, 2, or 3 with one control room filter train inoperable, restore the inoperable filter train to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. In OPERATIONAL CONDITION \*\*:
  1. With one control room filter train inoperable, restore the inoperable filter train to OPERABLE status within 7 days or initiate and maintain operation of the OPERABLE filter train in the emergency pressurization mode of operation. The provisions of Specification 3.0.4 are not applicable provided an operable control room filter train is in the emergency pressurization mode of operation.
  2. With both control room filter trains inoperable, suspend CORE ALTERATIONS, handling of irradiated fuel in the reactor building and operations with a potential for draining the reactor vessel.
- c. The provisions of Specification 3.0.3 are not applicable in OPERATIONAL CONDITION \*\*.

#### SURVEILLANCE REQUIREMENTS

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4.7.3 Each control room outdoor air special filter train shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 90°F.
- b. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the filter train operates for at least 10 hours with the heaters OPERABLE.

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\* This includes the control room chiller subsystem.

\*\* When irradiated fuel is being handled in the reactor building and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel and uncovering irradiated fuel.

## ATTACHMENT B

### **NIAGARA MOHAWK POWER CORPORATION LICENSE NO. NPF-69 DOCKET NO. 50-410**

#### Supporting Information and No Significant Hazards Consideration Analysis

#### INTRODUCTION

The Control Room Outdoor Air Special Filter Train System ensures the control room will remain habitable for Operations personnel during and following all design basis accident (DBA) conditions. The operability of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to within the requirements of General Design Criterion (GDC) 19 of Appendix A to 10 CFR 50.

The Control Room Outdoor Air Special Filter Train System is composed of two 100% capacity, safety-related emergency filter trains. Each train contains an activated charcoal adsorber for removal of radioactive iodine and other contaminants. The Control Room Outdoor Air Special Filter Train System is single active failure proof.

Each filter train is provided with a filter booster fan which is located immediately downstream of the filter train. Air leaving a special filter train enters a filter booster fan, which discharges to the common duct supplying air to the air conditioning units. During normal plant operation the filter booster fan is not operating.

The control room is normally maintained at a slightly positive pressure relative to the outdoors by operation of one of two safety-related, 100% capacity air conditioning units. Chilled water is supplied to each air conditioning unit from a chiller subsystem.

The air supply for either unit can be taken from either one of two outside intakes. Redundant seismic Category I radiation detectors are provided to monitor the outdoor makeup air. This arrangement prevents the undetected infiltration of radioactivity into the control room.

When the supply air radiation levels are high or a loss of coolant accident (LOCA) signal exists, the supply air is automatically diverted to the intake of the Control Room Outdoor Air Special Filter Train System and both filter booster fans are automatically started, thereby placing each control room filter train in the emergency pressurization mode of operation. This ensures that unacceptable levels of radioactive contaminants will be removed from the control room supply air during any postulated accident concurrent with any single active failure.

All accidents which take credit for operation of the Control Room Outdoor Air Special Filter Train System in the emergency pressurization mode of operation are analyzed and presented in Chapter 15 of the USAR. These accidents are:

<u>Item Number</u>	<u>USAR Section</u>	<u>Accident</u>
(1)	15.4.9	Control Rod Drop Accident
(2)	15.6.2	Instrument Line Pipe Break
(3)	15.6.4	Steam System Piping Break Outside Containment
(4)	15.6.5	Loss-of-Coolant Accidents (LOCA) (Resulting from Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary) Inside Primary Containment
(5)	15.7.4	Fuel Handling Accident
(6)	15.7.5	Spent Fuel Cask Drop Accident

The accidents evaluated under items (1), (2), (3) and (4), above, could only occur during operational conditions 1, 2 and 3. Likewise, the accidents evaluated under items (5) and (6) could only occur during operational conditions 1, 2, 3 and \*\*. The double asterisk condition applies when irradiated fuel is being handled in the reactor building and during core alterations and operations with a potential for draining the reactor vessel and uncovering irradiated fuel. The analyses of these above six accidents demonstrate that doses to control room personnel remain within the limits of GDC-19.

Consistent with the above USAR analyses, Technical Specification LCO 3.7.3 need only require the Control Room Outdoor Air Special Filter Train System to be operable in operational conditions 1, 2, 3, and \*\*. However, presently, this LCO requires the Control Room Outdoor Air Special Filter Train System to be operable in all operational conditions and \*\*.

With one control room filter train inoperable in operational conditions 4, 5 and \*\*, action statement b.1 of LCO 3.7.3 states:

"...restore the inoperable filter train to OPERABLE status within 7 days or initiate and maintain operation of the OPERABLE filter train in the emergency pressurization mode of operation."



By placing the operable control room filter train in operation, active single failures associated with its startup have been eliminated. These eliminated single failures include automatic initiation instrumentation, relaying logic, breaker, fan and damper operation. With an operable control room filter train in the emergency pressurization mode of operation, its safety function is being performed. In addition, the status of the running control room filter train is indicated in the control room. Therefore, this action ensures that the remaining subsystem is operable, that no failures that would prevent automatic actuation will occur, and that any active failure will be readily detected. Accordingly, the Technical Specifications permit operation in this configuration since the running, operable control room filter train provides a level of safety comparable to two non-running, operable control room filter trains. This provision of the NMP2 Technical Specifications is consistent with the Improved Standard Technical Specifications, NUREG-1433.

As previously stated, when the supply air radiation levels are high, the supply air is automatically diverted to the intake of the Control Room Outdoor Air Special Filter Train System and both filter booster fans are automatically started. Consistent with this assumption of the accident analysis, Technical Specification Tables 3.3.7.1-1 and 4.3.7.1-1, item 1, require the "Main Control Room Ventilation Radiation Monitors" to be operable in operational conditions 1, 2, 3, 5 and \*, where the single asterisk for these tables is comparable to the double asterisk of LCO 3.7.3.

The proposed Technical Specification changes represent revision to the applicability, action statement b and action statement b.1 of Limiting Condition for Operation (LCO) 3.7.3, "Control Room Outdoor Air Special Filter Train System," and to Tables 3.3.7.1-1, "Radiation Monitoring Instrumentation," and 4.3.7.1-1, "Radiation Monitoring Instrumentation Surveillance Requirements," of LCO 3.3.7.1, "Radiation Monitoring Instrumentation." LCO 3.7.3 is presently applicable in all operational conditions including \*\*. The proposed change to the applicability of LCO 3.7.3 would make this LCO applicable during operational conditions 1,2,3 and \*\*.

In addition, to be consistent with the above proposed changes, a revision is proposed to action statement b of LCO 3.7.3. This action statement is presently applicable in operational conditions 4,5 and \*\*. The change to action statement b would make this action statement applicable during the \*\* operational condition.

The change to action statement b.1 of LCO 3.7.3 would also exclude this action statement from the requirements of LCO 3.0.4. LCO 3.0.4 states:

"Entry into an OPERATIONAL CONDITION or other specified conditions shall not be made unless the conditions for Limiting Condition for Operation are met without reliance on provisions contained in the ACTION requirements. This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual specifications."

The proposed change would allow entry into the \*\* operational condition with one control room special filter train inoperable provided the operable filter train is in the emergency

pressurization mode of operation.

The change to Tables 3.3.7.1-1 and 4.3.7.1-1 of LCO 3.3.7.1 is made to be consistent with the change to the applicability of LCO 3.7.3. The required operational conditions for the "Main Control Room Ventilation Radiation Monitors," item 1 of each table, are changed from 1, 2, 3, 5 and \* to 1, 2, 3 and \*. The single asterisk for these tables is comparable to the double asterisk of LCO 3.7.3.

#### **DESCRIPTION OF PROPOSED TECHNICAL SPECIFICATION CHANGE**

NMPC proposes a change to the applicability, action statement b and action statement b.1 of LCO 3.7.3, "Control Room Outdoor Air Special Filter Train System," and to Tables 3.3.7.1-1 and 4.3.7.1-1 of LCO 3.3.7.1, "Radiation Monitoring Instrumentation." The current version and the proposed change are:

##### **Current Version of Applicability for LCO 3.7.3**

ALL OPERATIONAL CONDITIONS AND \*\*

##### **Proposed Change to Applicability for LCO 3.7.3**

OPERATIONAL CONDITIONS 1, 2, 3 and \*\*

##### **Current Version of Action Statement b of LCO 3.7.3**

In OPERATIONAL CONDITION 4, 5, or \*\*

##### **Proposed Change to Action Statement b of LCO 3.7.3**

In OPERATIONAL CONDITION \*\*

##### **Current Version of Action Statement b.1 of LCO 3.7.3**

With one control room filter train inoperable, restore the inoperable filter train to OPERABLE status within 7 days or initiate and maintain operation of the OPERABLE filter train in the emergency pressurization mode of operation.

##### **Proposed Change to Action Statement b.1 of LCO 3.7.3**

With one control room filter train inoperable, restore the inoperable filter train to OPERABLE status within 7 days or initiate and maintain operation of the OPERABLE filter train in the emergency pressurization mode of operation. The provisions of Specification 3.0.4 are not applicable provided an operable control room filter train is in the emergency pressurization mode of operation.



Current Version of Item 1 of Table 3.3.7.1-1

INSTRUMENTATION

APPLICABLE  
CONDITIONS

Main Control Room  
Ventilation Radiation  
Monitors

1, 2, 3, 5, and \*

Proposed Change to Item 1 of Table 3.3.7.1-1

INSTRUMENTATION

APPLICABLE  
CONDITIONS

Main Control Room  
Ventilation Radiation  
Monitors

1, 2, 3 and \*

Current Version of Item 1 of Table 4.3.7.1-1

INSTRUMENTATION

OPERATIONAL  
CONDITIONS FOR  
WHICH SURVEILLANCE  
REQUIRED

Main Control Room  
Ventilation Radiation  
Monitors

1, 2, 3, 5, and \*

Proposed Change to Item 1 of Table 4.3.7.1-1

INSTRUMENTATION

OPERATIONAL  
CONDITIONS FOR  
WHICH SURVEILLANCE  
REQUIRED

Main Control Room  
Ventilation Radiation  
Monitors

1, 2, 3 and \*

EVALUATION

All accidents which take credit for operation of the Control Room Outdoor Air Special Filter Train System in the emergency pressurization mode of operation are analyzed and presented in Chapter 15 of the USAR. These accidents can only occur in operational conditions 1, 2, 3 and \*\*.

In operational conditions 4 and 5, the probability and consequences of a DBA are reduced due to the pressure and temperature limitations in these operational conditions. Therefore, maintaining the chiller subsystem operable is not required in operational conditions 4 and 5, except for the \*\* operational condition. Accordingly, the proposed change in the applicability of LCO 3.7.3 from all operational conditions (i.e., 1, 2, 3, 4, 5 and \*\*) to operational conditions 1, 2, 3 and \*\* is consistent with the safety analysis contained in the USAR.

To be consistent with the above proposed change, a revision is proposed to action statement b of LCO 3.7.3. This action statement is presently applicable in operational conditions 4,5 and \*\*. The change to action statement b would make this action statement applicable during the \*\* operational condition.

Additionally, to be consistent with the proposed change to the applicability of LCO 3.7.3, a change is proposed to Tables 3.3.7.1-1 and 4.3.7.1-1. The operational conditions for which the "Main Control Room Ventilation Radiation Monitors," item 1 of each table, is required to be operable is changed from 1, 2, 3, 5, and \* to 1, 2, 3 and \*.

The proposed change to action statement b.1 of LCO 3.7.3 would exclude this action statement from the requirements of LCO 3.0.4. This proposed change would allow entry into the \*\* operational condition with one control room special filter train inoperable provided the operable filter train is in the emergency pressurization mode of operation. Since action statement b.1 would be applicable during the \*\* operational condition, the subsequent discussion evaluates safety concerns during this operational condition.

A fuel handling accident or a spent fuel cask drop accident could release radioactivity to the outside environment. Unfiltered radioactivity could be drawn into the control room prior to automatic operation of Control Room Outdoor Air Special Filter Train System in the emergency pressurization mode. The radiological evaluation of these accidents, as discussed in USAR sections 15.7.4 and 15.7.5, considers the unfiltered radioactivity that enters the control room.

With one control room filter train inoperable and prior to entering the \*\* operational condition, the proposed change would require that an operable control room filter train be placed in the emergency pressurization mode of operation. During an accident involving the release of radioactivity to the environment an operable control room filter train would already be running in the emergency pressurization mode and performing its safety function, thereby preventing the entry of unfiltered radioactivity into the control room. Furthermore, a running control room filter train would be unaffected by the receipt of an automatic start signal due to high radiation in either air intake to the Control Room Outdoor Air Special Filter Train System. Therefore, if a fuel handling accident or a spent fuel cask drop accident were to occur and release radioactivity, the control room personnel radiological doses would be less than the doses depicted in the USAR.

Accordingly, the remedial measure prescribed by Technical Specification action statement b.1 (placing an operable control room filter train in the emergency pressurization mode of operation) for which the exception to LCO 3.0.4 is proposed provides a sufficient level of

protection to permit operational mode changes and safe long-term operation of NMP2 consistent with the licensing basis described in the USAR. Therefore, the proposed change to action statement b.1 is consistent with Generic Letter 87-09, "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements." In addition, this proposed amendment is consistent with the Improved Technical Specifications, NUREG-1433.

## **CONCLUSION**

LCO 3.7.3, "Control Room Outdoor Air Special Filter Train System," ensures the control room will remain habitable for Operations personnel during and following all DBA conditions. The operability of this system in conjunction with control room design provisions is based on limiting the radiation exposure to personnel occupying the control room to within the requirements of GDC-19 of Appendix A to 10 CFR 50.

The proposed change in the applicability of LCO 3.7.3 from all operational conditions (i.e., 1, 2, 3, 4, 5 and \*\*) to operational conditions 1, 2, 3 and \*\* is consistent with the safety analysis contained in the USAR. The proposed change to action statement b of LCO 3.7.3 and to Tables 3.3.7.1-1 and 4.3.7.1-1 of LCO 3.3.7.1 is consistent with the above change.

The proposed change to action statement b.1 of LCO 3.7.3 would exclude this action statement from the requirements of LCO 3.0.4. This would allow entry into the \*\* operational condition for LCO 3.7.3 with one control room filter train inoperable provided the operable filter train is in the emergency pressurization mode of operation. The remedial measure prescribed by Technical Specification action statement b.1 (placing an operable control room filter train in the emergency pressurization mode of operation) for which the exception to LCO 3.0.4 is proposed provides a sufficient level of protection to permit operational mode changes and safe long-term operation of NMP2 consistent with the licensing basis described in the USAR. Therefore, the proposed change to action statement b.1 is consistent with Generic Letter 87-09, "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements."

The proposed Technical Specification changes to the applicability, action statement b and action statement b.1 of LCO 3.7.3 are consistent with the Improved Standard Technical Specifications, NUREG-1433.

For these reasons, there is reasonable assurance that the changes that would be authorized by the proposed amendment can be implemented without endangering the health and safety of the public and are consistent with common defense and security.

## **NO SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS**

10 CFR 50.91 requires that at the time a licensee requests an amendment, it must provide to the Commission its analysis using the standards in 10 CFR 50.92 concerning the issue of no significant hazards consideration. Therefore, in accordance with 10 CFR 50.91, the following analysis has been performed:

The operation of Nine Mile Point Unit 2, in accordance with the proposed amendment, will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The Control Room Outdoor Air Special Filter Train System is not an initiator or precursor to an accident. The Control Room Outdoor Air Special Filter Train System responds to a release of radioactivity to the outside environment as detected in the air supply to the control room by providing a radiologically controlled environment within the control room. In operational conditions 4 and 5, the probability and consequences of a design basis accident are reduced due to the pressure and temperature limitations in these operational conditions. Therefore, maintaining the chiller subsystem operable is not required in operational conditions 4 and 5, except for the \*\* operational condition. Therefore, a change to applicability and action statements of LCO 3.7.3 cannot affect the probability of a previously evaluated accident.

All accidents which take credit for operation of the Control Room Outdoor Air Special Filter Train System in the emergency pressurization mode of operation are analyzed and presented in Chapter 15 of the USAR. These accidents can only occur in operational conditions 1, 2, 3 and \*\*.

Accordingly, the proposed change in the applicability of LCO 3.7.3 from all operational conditions (i.e., 1, 2, 3, 4, 5 and \*\*) to operational conditions 1, 2, 3 and \*\* does not significantly increase the consequences of an accident previously evaluated. The proposed change to action statement b of LCO 3.7.3 and to Tables 3.3.7.1-1 and 4.3.7.1-1 of LCO 3.3.7.1 is consistent with the above change.

Sections 15.7.4 and 15.7.5 of the USAR evaluate a fuel handling accident and a spent fuel cask drop accident, respectively. The radiological evaluation of these accidents considers the unfiltered radioactivity that enters the control room prior to the automatic operation of the Control Room Outdoor Special Filter Train System in the emergency pressurization mode of operation. The radiological consequences of these accidents are within the limits of GDC-19.

With one control room filter train inoperable and prior to entering the \*\* operational condition, the proposed change to action statement b.1 of LCO 3.7.3 would require an operable control room filter train be placed in the emergency pressurization mode of operation. During an accident involving the release of radioactivity to the environment, an operable control room filter train would already be running in the emergency pressurization mode and performing its safety function, thereby preventing the entry of unfiltered radioactivity into the control room. Therefore, if a fuel handling accident or a spent fuel cask drop accident were to occur and release radioactivity, the control room personnel radiological doses would be less than the doses depicted in the USAR. Accordingly, the Technical Specification change to action statement b.1 does not significantly increase the consequences of a previously evaluated accident.

The operation of Nine Mile Point Unit 2, in accordance with the proposed amendment, will not create the possibility of a new or different kind of accident from any accident previously evaluated.

This amendment does not involve any accident precursors or initiators. In addition, this amendment does not require any changes to plant equipment.

During an accident involving the release of radioactivity to the environment an operable control room filter train would already be running in the emergency pressurization mode and performing its safety function. Furthermore, the operating status of a running control room filter train would be unaffected by the receipt of an automatic start signal due to high radiation in either air intake to the Control Room Outdoor Air Special Filter Train System. Therefore, the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The operation of Nine Mile Point Unit 2, in accordance with the proposed amendment, will not involve a significant reduction in a margin of safety.

The proposed change in the applicability of LCO 3.7.3 from all operational conditions (i.e., 1, 2, 3, 4, 5 and \*\*) to operational conditions 1, 2, 3 and \*\* is consistent with the safety analysis contained in the USAR. The proposed changes to action statement b of LCO 3.7.3 and to Tables 3.3.7.1-1 and 4.3.7.1-1 of LCO 3.3.7.1 is consistent with the above change.

Entry into the \*\* operational condition for LCO 3.7.3 with one control room filter train inoperable and the other control room filter train operable and operating in the emergency pressurization mode provides a comparable level of safety to two operable non-running control room filter trains. The remedial measure prescribed by Technical Specification action statement b.1 (placing an operable control room filter train in the emergency pressurization mode of operation) for which the exception to LCO 3.0.4 is proposed provides a sufficient level of protection to permit operational mode changes and safe long-term operation of NMP2 consistent with the licensing basis described in the USAR. Therefore, the proposed change to action statement b.1 is consistent with Generic Letter 87-09, "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements." Accordingly, this change will not significantly reduce the margin of safety.

This proposed amendment is consistent with the Improved Standard Technical Specifications, NUREG-1433. Accordingly, as determined by the analysis above, this proposed amendment involves no significant hazards consideration.