

ATTACHMENT D

NIAGARA MOHAWK POWER CORPORATION  
LICENSE NO. DPR-63  
DOCKET NO. 50-220

Mark-Up Copy of the Proposed Changes to the Current Technical Specifications

Pages 180, 246, 247, and 247a have been marked up by hand to reflect the proposed changes. The hand mark-up pages include the proposed changes to the TSs, as well as the associated changes to the Bases. In accordance with 10 CFR 50.36(a), the Bases are not considered part of the TSs and are, therefore, not subject to NRC Staff approval in connection with this license amendment application.

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## 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 automatically start upon receipt of a high radiation signal from one of the two radiation monitors located on the ventilation intake and to maintain the control room pressure to the design positive pressure (one-sixteenth inch water) 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 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 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 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. In addition, air intake radiation monitors will be calibrated and functionally tested each operating cycle, not to exceed 24 months, to verify system performance.

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 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 5-1 of ANSI 509-1980. 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.

*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 initiated manually.*

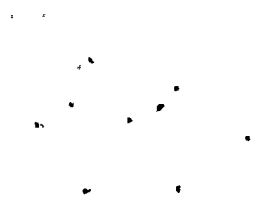


TABLE 3.6.2I

CONTROL ROOM AIR TREATMENT SYSTEM INITIATION

Limiting Condition for Operation

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
(1) High Radiation Ventilation Intake	1	1	≤ 1000 CPM		x	x	x
(1) Low-Low Reactor Water Level	2	2	≥ 5 inches (Indicator Scale)			x	x
(2) High Steam Flow Main-Steam Line	2	2	≤ 105 psid			x	x
(3) High Temperature Main-Steam Line Tunnel	2	2	≤ 260°F			x	x
(4) High Drywell Pressure	2	2	≤ 3.5 psig			(a)	(a)

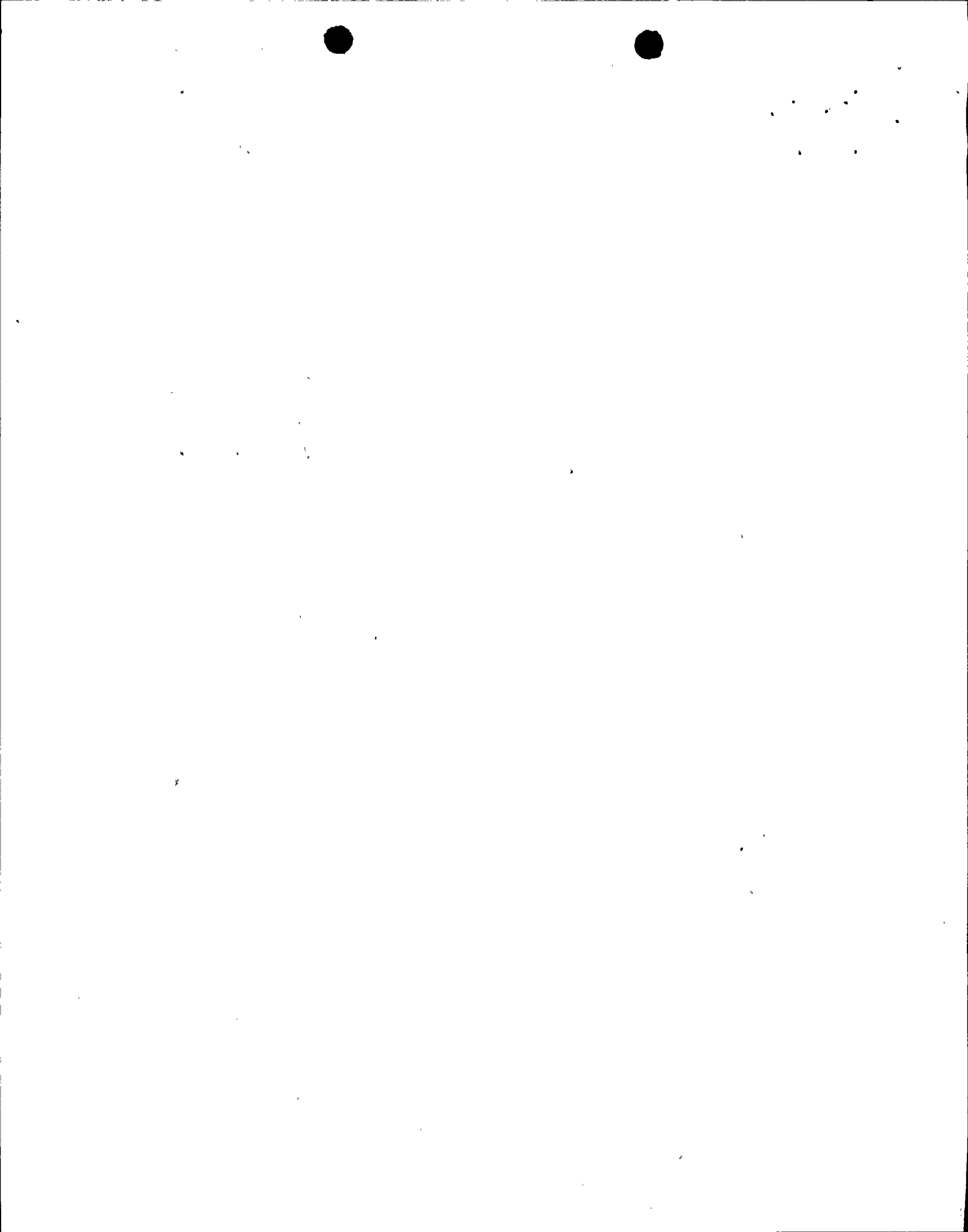


TABLE 4.6.2I

CONTROL ROOM AIR TREATMENT SYSTEM INITIATION

Surveillance Requirement

<u>Parameter</u>	<u>Sensor Check</u>	<u>Instrument Channel Test</u>	<u>Instrument Channel Calibration</u>
(1) High Radiation Ventilation Intake	Once/shift	Once per quarter	Once each operating cycle not to exceed 24 months
(1) Low-Low Reactor Water Level	Once/day	Once per quarter (b)	Once per quarter (b)
(2) High Steam Flow Main- Steam Line	Once/day	Once per quarter (b)	Once per quarter (b)
(3) High Temperature Main- Steam Line Tunnel	—	Once each operating cycle not to exceed 24 months	Once each operating cycle not to exceed 24 months
(4) High Drywell Pressure	Once/day	Once per quarter (b)	Once per quarter (b)





NOTES FOR TABLES 3.6.2*l* AND 4.6.2*l*

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- (a) May be bypassed when necessary for containment inerting.
- (b) Only the trip circuit will be calibrated and tested at the frequencies specified; the primary sensor will be calibrated and tested once per operating cycle.



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## ATTACHMENT E

### NIAGARA MOHAWK POWER CORPORATION LICENSE NO. DPR-63 DOCKET NO. 50-220

#### Rationale for Support of Emergency Change

Niagara Mohawk Power Corporation (NMPC) requests that this license amendment be processed on an emergency basis, as allowed by 10CFR50.91(a)(5). 10CFR50.91(a)(5) requires that license amendments requested on an emergency basis be submitted in a timely manner. It also requires that the licensee explain why the emergency situation occurred and why it could not be avoided. The justification for this emergency request is provided below.

Currently, Nine Mile Point Unit 1 (NMP1) is in a shutdown condition due to the inoperability of the Control Room Air Treatment System. The events that led to the current emergency situation on NMP1 began during a design review of the NMP1 control room emergency ventilation system due to recent operations experience information provided by Nine Mile Point Unit 2 (NMP2). On March 28, 1998, following a partial loss of offsite power at NMP2, it was discovered that the design of the NMP2 ventilation filters actuation scheme incorporates a time delay feature that was not previously recognized. To determine whether a similar condition existed at NMP1, the design of the NMP1 control room emergency ventilation system was reviewed. As a result of this review, the following two findings were made concerning NMP1:

1. Contrary to a 1984 commitment, the Control Room Air Treatment System would not automatically initiate during a Main Steam Line Break (MSLB).
2. Initiation of the Control Room Air Treatment System at the current radiation monitor setpoint of less than or equal to 1000 counts per minute (CPM), as stated in Technical Specifications (TS) Table 3.6.21, is not sufficient for compliance with General Design Criterion (GDC) 19 limits for radiological protection of the control room operators.

As a result of these findings, the Control Room Air Treatment System was declared inoperable at 1500 hours on April 21, 1998 and NMP1 TS 3.4.5 was entered. TS 3.4.5 requires that the system be restored to operable status within seven days or initiate a reactor shutdown and achieve cold shutdown conditions within 36 hours. Subsequent to April 21, 1998 it was determined that the current radiation monitor setpoint also would not meet the GDC 19 limits for protection of Control Room operators for a Loss of Coolant Accident (LOCA).

During the seven-day period, intensive efforts took place to identify possible analytical solutions or hardware modifications necessary to restore the Control Room Air Treatment System to operable status. Based upon a design engineering review, it was concluded that hardware modifications would be necessary that would affect the Reactor Protection System. Due to the potential plant impact associated with performing such modifications during plant operation, it was decided that it was appropriate to shutdown NMP1 and perform the



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modification while in a shutdown condition. As a result, a plant shutdown was initiated at 0505 on April 28, 1998. The proposed design for addressing the Control Room Air Treatment design deficiency will require that the ventilation system actuate at the onset of either a Main Steam Line Break (MSLB) or a LOCA. Since the required Control Room Air Treatment System initiation parameters are listed in TS Table 3.6.21 (currently only the "High Radiation Ventilation Intake" parameter is listed), a TS Amendment to revise this list is required prior to declaring the system operable. As such, NMP1 is prevented from resuming operation without issuance of this proposed TS change. This amendment request is being submitted in a timely manner since the design deficiency and need for the proposed amendment were only recently discovered.

The above description and evaluation of events demonstrates that the criteria stated in 10CFR50.91(a)(5) have been met and that the emergency condition that exists could not have been avoided. Furthermore, resumption of operation cannot occur until NRC approval of the proposed change.

