

ATTACHMENT A  
NIAGARA MOHAWK POWER CORPORATION  
LICENSE NO. DPR-63

Proposed Changes to Technical Specifications (Appendix A)

Replace existing pages 205 and 235 with the attached revised pages. These pages have been retyped in their entirety with marginal markings to indicate the changes.

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Table 3.6.2c

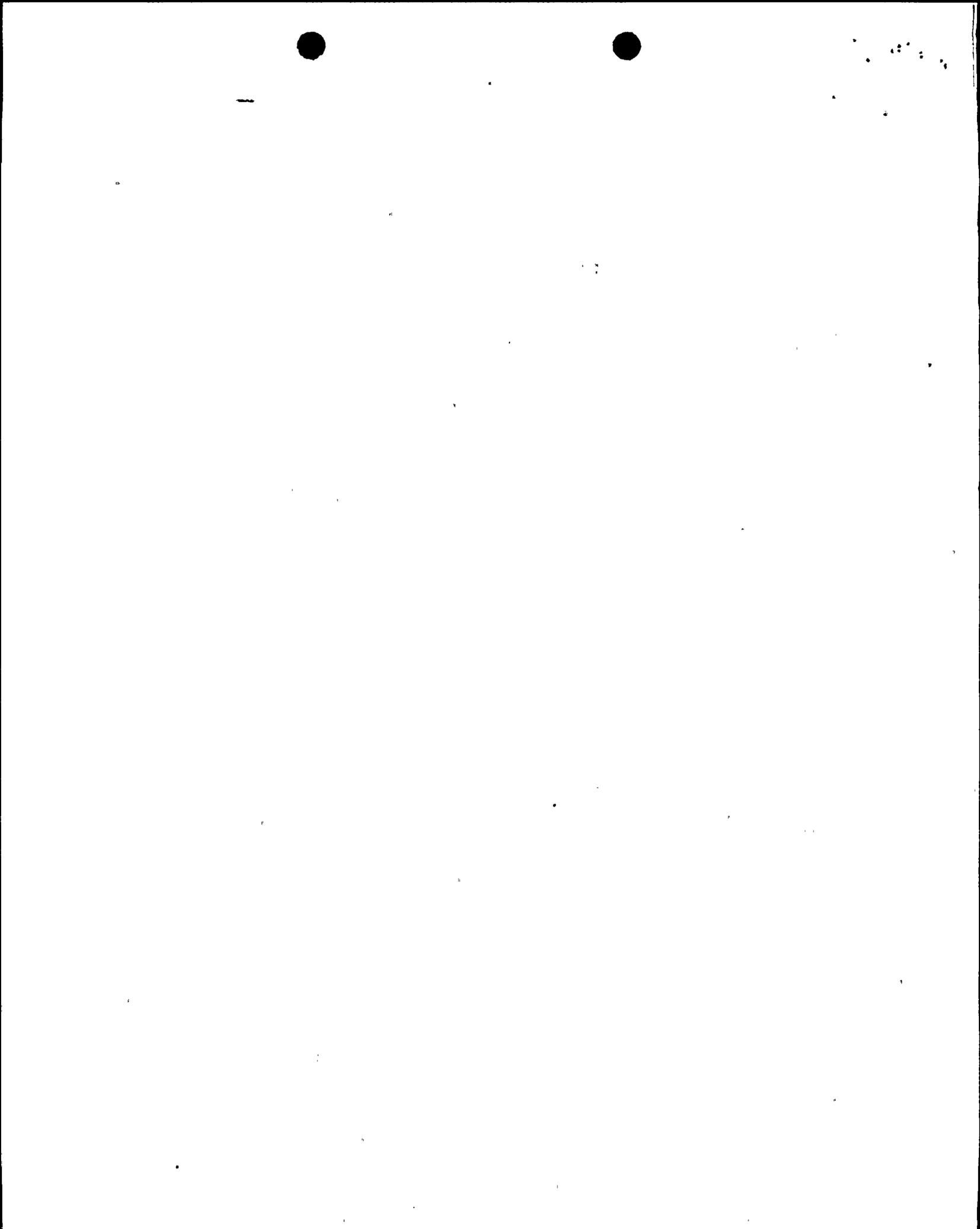
INSTRUMENTATION THAT INITIATES OR ISOLATES EMERGENCY COOLING

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>
<u>EMERGENCY COOLING INITIATION</u>							
(1) High-Reactor Pressure	2	2	≤1080 psig	(b)		x	x
(2) Low-Low Reactor Water Level	2	2	≥5 inches (Indicator Scale)	(b)		x	x
<u>EMERGENCY COOLING ISOLATION</u> (for each of two systems)							
(3) High Steam Flow Emergency Cooling System	2	2(a)	≤ 11.5 psid			x	x

205  
Amendment No. 60

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## BASES FOR 3.6.2 AND 4.6.2 PROTECTIVE INSTRUMENTATION

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- a. The set points included in the tables are those used in the transient analysis and the accident analysis. The high flow set point for the main steam line is 105 psi differential. This represents a flow of approximately  $4.4 \times 10^6$  lb/hr. The high flow set point for the emergency cooling system supply line is 11.5 psi differential. This represents a flow of approximately  $9.8 \times 10^5$  lb/hr at rated conditions.

Normal background for the main steam line radiation monitors is defined as the radiation level which exists in the vicinity of main steam lines after 1 hour or more of sustained full rated power. The dose rate at the monitor due to activity from the control rod drop accident of Appendix E or from gross failure of one rod with complete fission product release from the rod would exceed the normal background at the monitor. The automatic initiation signals for the emergency cooling systems have to be sustained for more than 10 seconds to cause opening of the return valves. If the signals last for less than 10 seconds, the emergency cooling system operating will not be automatically initiated.

The high level in the scram discharge volume is provided to assure that there is still sufficient free volume in the discharge system to receive the control rod drives discharge. Following a scram, bypassing is permitted to allow draining of the discharge volume and resetting of the reactor protection system relays. Since all control rods are completely inserted following a scram and since the bypass of this particular scram initiates a control rod block, it is permissible to bypass this scram function. The scram trip associated with the shutdown position of the mode switch can be reset after 10 seconds.

The condenser low vacuum, low-low vacuum and the main steam line isolation valve position signals are bypassed in the startup and refuel positions of the reactor mode switch when the reactor pressure is less than 600 psig. These are bypassed to allow warmup of the main steam lines and a heat sink during startup.



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

Supporting Information and No Significant Hazards Consideration  
Analysis

The proposed change to Section 3.6.2 revises the setpoint for Isolation of the Emergency Cooling System (ECS) on High Steam Flow. The current setpoint of 19 psid was originally provided by General Electric, and was based on design calculations. In November, 1988, General Electric issued Revision 2 to their SIL-475, which stated they had discovered an error in an equation used to calculate the 19 psid, and suggested that licensees recalculate the setpoint and confirm the calculation by system test.

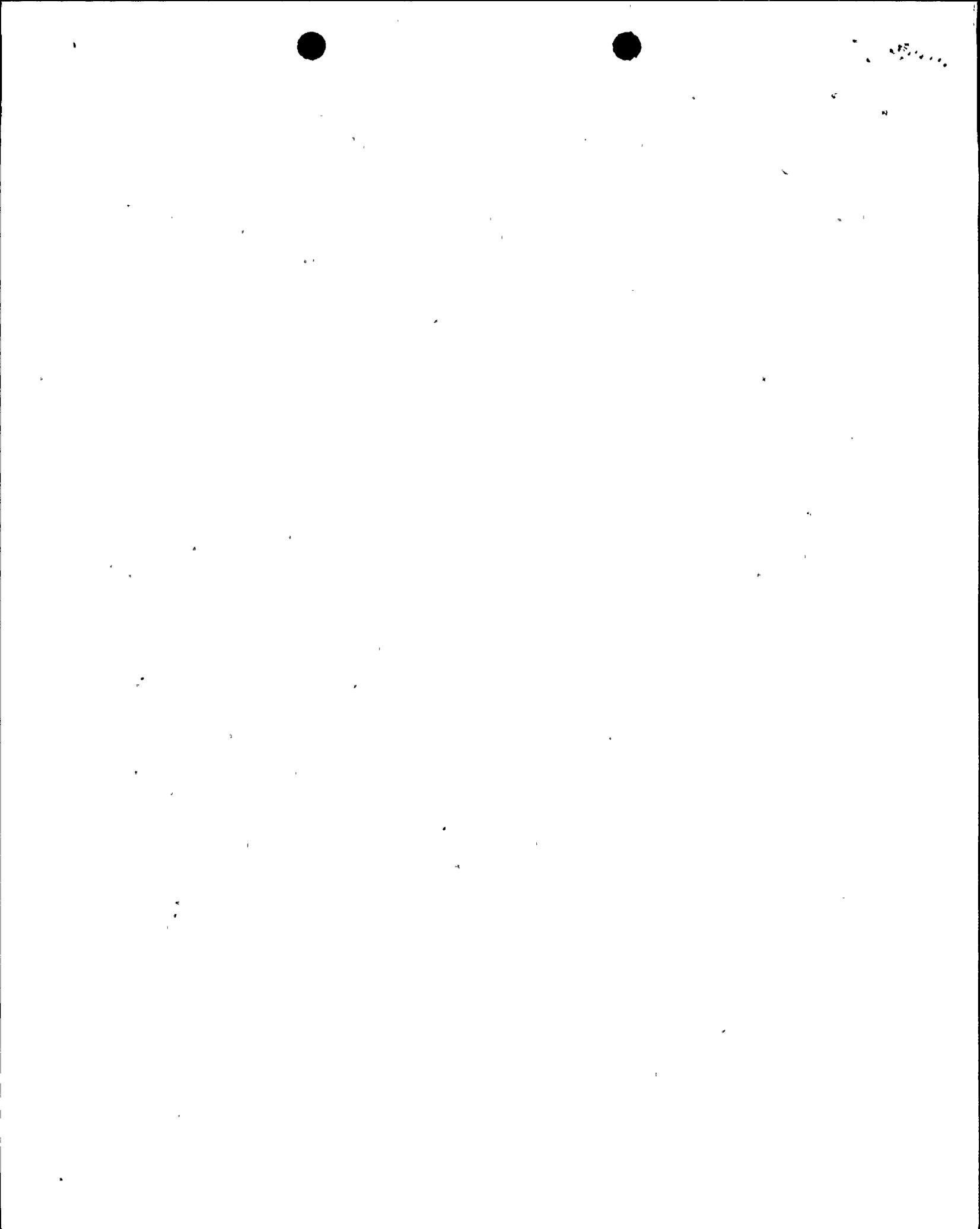
In response to Revision 2 to SIL-475, Niagara Mohawk determined through calculation that the 19 psid setpoint may be non-conservative. Niagara Mohawk further determined that the setpoint value should be 12.5 psid, which corresponds to 300% of normal steam flow. The 300% of maximum normal steam flow term represents a point below the choke flow limit and above normal system start up pressure spikes. This term is an industry standard used by GE to determine isolation setpoints in Emergency Cooling Systems. Niagara Mohawk specified in the calculation that the new, proposed setpoint should be confirmed by system test, as recommended by GE in Revision 2 to their SIL-475.

Verification of the ECS isolation setpoint required a test to be performed at operating conditions. Therefore, this test was performed after startup from the extended outage (July 1990). This test verified that a setpoint of 12.5 psid will allow ECS isolation at 300% steam flow without causing unwanted isolations from normal system startup pressure spikes.

Based upon the above information, Niagara Mohawk has determined that the ECS isolation setpoint value contained in NMP1 Technical Specification Table 3.6.2c should correspond to a value of 12.5 psid. As discussed in the bases to Technical Specification 3.6.2, the allowable deviation for this setpoint is  $\pm 1$  psid. Therefore, Niagara Mohawk is requesting that this setpoint be changed to  $\leq 11.5$  psid. (The addition of the " $\leq$ " notation is being made to indicate the conservative direction for setpoint adjustment and to be consistent with other setpoints presented in the Technical Specifications).

10C.F.R. 50.91 requires that at the time a Licensee requests an amendment, it must provide to the Commission its analysis, using the standards in 10C.F.R. 50.92, about the issue of no

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significant hazards consideration. Therefore, in accordance with 10C.F.R. 50.91, the following analysis has 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 amendment provides a conservative setpoint value for the Isolation on High Steam Flow of the Emergency Cooling System (ECS). The value currently in the Technical Specifications is non-conservative because it corresponds to a value for steam flow which is higher than that which would be attained due to a pipe rupture. Changing the setpoint to the proposed value will assure the ECS isolation function required by Technical Specifications. Thus, this change will not increase the probability or 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 amendment assures the isolation function required by Technical Specifications for the ECS Isolation on High Steam Flow. This is accomplished by lowering the current setpoint to a value corresponding to a value of steam flow which would be attained following a pipe rupture. There are no design or other equipment changes involved and this change will enable the Isolation function to initiate as originally intended. Consequently, there is no probability of a new or different kind of accident from any accident 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.

This proposed amendment will ensure that the ECS will isolate on High Steam flow as intended and as analyzed in the USAR. Thus, there will be no reduction in any margin of safety as a result of this amendment.

As determined by the analysis above, this proposed amendment involves no significant hazards consideration.

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