ATTACHMENT A

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

PROPOSED CHANGE TO TECHNICAL SPECIFICATIONS

Replace existing pages 191-193, 196a, 197-200, 204, 205, 207, 208, 210, 211, 212a, 213, 215, 224, 225a, 226, 227, 231, and 232a with revised pages with the same corresponding page numbers. The revised pages have been retyped with marginal markings to indicate the proposed changes.

Table 3.6.2a

INSTRUMENTATION THAT INITIATES SCRAM

Limiting Condition for Operation

	Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System (o)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable			
					Shutdown	Refuel	Startup	Run
(1)	Manual Scram	2	1			x	x	x
(2)	High Reactor Pressure	2	2	≤ 1080 psig		x	x	x
(3)	High Drywell Pressure	2	2	≤ 3.5 psig		x	(a)	(a)
(4)	Low Reactor Water Level	2	2(m)	≥ 53 inches (Indicator Scale)		x	x	x
(5)	High Water Level Scram Discharge Volume	2	2	≤ 45 gal.		(b)	x	x

Table 3.6.2a (cont'd)

INSTRUMENTATION THAT INITIATES SCRAM

Limiting Condition for Operation

	Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System (o)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable			
					Shutdown	Refuel	Startup	Run
(6)	Main-Steam-Line Isolation Valve Position	2	4(h)	≤ 10 percent valve closure from full open		(c)	(c)	x
(7)	High Radiation Main-Steam-Line	2	2	≤ 5 times normal background at rated power(n)		x	x	x
(8)	Shutdown Position of Reactor Mode Switch	2	1	- -		(k)	x	x
(9)	Neutron Flux (a) IRM (i)	2	3(d)	≤ 96 percent of full scale		(g)	(g)	(g)

Table 3.6.2a (cont'd)

INSTRUMENTATION THAT INITIATES SCRAM

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System (o)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable			
				Shutdown	Refuel	Startup	Run
(ii) Inoperative	2	3(d)	--		x	x	
(b) APRM							
(i) Upscale	2	3(e)	Figure 2.1.1		x	x	x
(ii) Inoperative	2	3(e)	--		x	x	x
(iii) Downscale	2	3(e)	≥ 5 percent of full scale		(g)	(g)	(g)
(10) Turbine Stop Valve Closure	2	4	≤ 10% valve closure				(i)
(11) Generator Load Rejection	2	2	(j)				(i)

(n) Within 24 hours prior to the planned start of the hydrogen injection test with the reactor power at greater than 20% rated power, the normal full-power radiation background level and associated trip and alarm setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip and alarm setpoints may be adjusted during the test program based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and associated trip and alarm setpoints shall be reset within 24 hours of re-establishing normal radiation levels after completion of the hydrogen injection or within 12 hours of establishing reactor power levels below 20% rated power, while these functions are required to be operable. At reactor power levels below 20% rated power, hydrogen injection shall be terminated and the injection system secured.

(o) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same trip system is monitoring that parameter. This time interval is extended up to 5 hours for the High Radiation Main-Steam Line Instrument Channel Calibration surveillance.

Table 3.6.2b

INSTRUMENTATION THAT INITIATES
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System (f)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable			
				Shutdown	Refuel	Startup	Run
PRIMARY COOLANT ISOLATION							
(Main Steam, Cleanup, and Shutdown)							
(1) Low-Low Reactor Water Level	2	2	≥ 5 inches (Indicator Scale)			x	x
(2) Manual	2	1	- -	x	x	x	x
MAIN-STEAM-LINE ISOLATION							
(3) High Steam Flow Main-Steam Line	2	2	≤ 105 psid			x	x

Table 3.6.2b (cont'd)

INSTRUMENTATION THAT INITIATES
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION

Limiting Condition for Operation

	Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System (f)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable			
					Shutdown	Refuel	Startup	Run
(4)	High Radiation Main Steam Line	2	2	≤ 5 times normal background at rated power (e)			x	x
(5)	Low Reactor Pressure	2	2	≥ 850 psig				x
(6)	Low-Low-Low Condenser Vacuum	2	2	≥ 7 in. mercury vacuum			(a)	x
(7)	High Temperature Main Steam Line Tunnel	2	2	≤ 200F			x	x

Table 3.6.2b (cont'd)

INSTRUMENTATION THAT INITIATES
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System (f)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable			
				Shutdown	Refuel	Startup	Run
CLEANUP SYSTEM ISOLATION							
(8) High Area Temperature	1	2	≤ 190	x	x	x	x
SHUTDOWN COOLING SYSTEM ISOLATION							
(9) High Area Temperature	1	1	≤ 170	x	x	x	x
CONTAINMENT ISOLATION							
(10) Low-Low Reactor Water	2	2	≥ 5 inches (Indicator Scale)	(c)		x	x

Table 3.6.2b (cont'd)

INSTRUMENTATION THAT INITIATES
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION

Limiting Condition for Operation

	Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System (f)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable			
					Shutdown	Refuel	Startup	Run
(11)	High Drywell Pressure	2	2	≤ 3.5 psig	(c)		(b)	(b)
(12)	Manual	2	1	- -	x	x	x	x

NOTES FOR TABLES 3.6.2b and 4.6.2b

(a) May be bypassed in the refuel and startup positions of the reactor mode switch when reactor pressure is less than 600 psi.

(b) May be bypassed when necessary for containment inerting.

(c) May be bypassed in the shutdown mode whenever the reactor coolant system temperature is less than 215°F.

(d) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2b, the primary sensor will be calibrated and tested once per operating cycle.

(e) Within 24 hours prior to the planned start of the hydrogen injection test with the reactor power at greater than 20% rated power, the normal full-power radiation background level and associated trip and alarm setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip and alarm setpoints may be adjusted during the test program based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and associated trip and alarm setpoints shall be reset within 24 hours of re-establishing normal radiation levels after completion of the hydrogen injection or within 12 hours of establishing reactor power levels below 20% rated power, while these functions are required to be operable. At reactor power levels below 20% rated power hydrogen injection shall be terminated and the injection system secured.

(f) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter. This time interval is extended up to 5 hours for the High Radiation Main-Steam Line Instrument Channel Calibration Surveillance.

Table 3.6.2c

INSTRUMENTATION THAT INITIATES OR ISOLATES EMERGENCY COOLING

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System (d)	Set-Point	Reactor Mode Switch Position in Which Function Must Be Operable			
				Shutdown	Refuel	Startup	Run
EMERGENCY COOLING INITIATION							
(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
EMERGENCY COOLING ISOLATION (for each of two systems)							
(3) High Steam Flow Emergency Cooling System	2	2 (a)	19 psid			x	x

NOTES FOR TABLES 3.6.2c AND 4.6.2c

(a) Each of two differential pressure switches provide inputs to one instrument channel in each trip system.

(b) May be bypassed in the cold shutdown condition.

(c) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2c, the primary sensor will be calibrated and tested once per operating cycle.

(d) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.

Table 3.6.2d

INSTRUMENTATION THAT INITIATES CORE SPRAY[•]

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels Per Operable Trip System (g)	Setpoint	Reactor Mode Switch Position in Which Function Must Be Operable			
				Shutdown	Refuel	Startup	Run
START CORE SPRAY PUMPS							
(1) High Drywell Pressure	2	2	≤ 3.5 psig	(d)	x	(a)	(a)
(2) Low-Low Reactor Water Level	2	2 [f]	≥ 5 inches (Indicator Scale)	(b)	x	x	x
OPEN CORE SPRAY DISCHARGE VALVES							
(3) Reactor Pressure and either (1) or (2) above.	2	2	≥ 365 psig	x	x	x	x

NOTES FOR TABLES 3.6.2d AND 4.6.2d

(a) May be bypassed when necessary for containment inerting.

(b) May be bypassed when necessary for performing major maintenance as specified in Specification 2.1.1.e.

(c) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2d, the primary sensor will be calibrated and tested once per operating cycle.

(d) May be bypassed when necessary for integrated leak rate testing.

(e) The instrumentation that initiates the Core Spray System is not required to be operable, if there is no fuel in the reactor vessel.

(f) One instrument channel in each trip system may be bypassed in the cold shutdown and refuel conditions during the Spring 1986 refueling outage to perform the emergency condenser piping replacement.

(g) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.

Table 3.6.2e

INSTRUMENTATION THAT INITIATES CONTAINMENT SPRAY

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels per Operable Trip System (c)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable			
				Shutdown	Refuel	Startup	Run
(1)a. High Drywell Pressure	2	2	$\leq$ 3.5 psig	(a)		x	x
and							
b. Low-Low Reactor Water Level	2	2	$\geq$ 5 inches (Indicator Scale)	(a)		x	x

NOTES FOR TABLES 3.6.2e AND 4.6.2e

(a) May be bypassed in the shutdown mode whenever the reactor coolant temperature is less than 215°F.

(b) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2e, the primary sensor will be calibrated and tested once per operating cycle.

(c) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.

Table 3.6.2f

INSTRUMENTATION THAT INITIATES AUTO DEPRESSURIZATION

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels Per Operable Trip System (d)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable		
INITIATION						
(1)a. Low-Low-Low Reactor Water Level	2 (a)	2 (a)	$\geq$ -10 inches * (Indicator Scale)	(b)	(b)	x
and						
b. High Drywell Pressure	2 (a)	2 (a)	$\leq$ 3.5 psig	(b)	(b)	x

* greater than ($\geq$) means less negative

NOTES FOR TABLES 3.6.2f AND 4.6.2f

(a) Both instrument channels in either trip system are required to be energized to initiate auto depressurization. One trip system is powered from power board 102 and the other trip system from power board 103.

(b) May be bypassed when the reactor pressure is less than 110 psig and the reactor coolant temperature is less than the corresponding saturation temperature.

(c) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2f, the primary sensor will be calibrated and tested once per operating cycle.

(d) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.

Table 3.6.2h

VACUUM PUMP ISOLATION

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels Per Operable Trip System (b)	Set Point	Reactor Mode Switch Position in Which Function Must Be Operable		
MECHANICAL VACUUM PUMP						
High Radiation Main Steam Line	2	2	$\leq$ 5 times normal[a] background	x	x	x

NOTES FOR TABLES 3.6.2h and 4.6.2h

(a) Within 24 hours prior to the planned start of the hydrogen injection test with the reactor power at greater than 20% rated power, the normal full-power radiation background level and associated trip and alarm setpoints may be changed based on a calculated value of the radiation level expected during the test. The background radiation level and associated trip and alarm setpoints may be adjusted during the test program based on either calculations or measurements of actual radiation levels resulting from hydrogen injection. The background radiation level shall be determined and associated trip and alarm setpoints shall be reset within 24 hours of re-establishing normal radiation levels after completion of the hydrogen injection or within 12 hours of establishing reactor power levels below 20% rated power, while these functions are required to be operable. At reactor power levels below 20% rated power hydrogen injection shall be terminated and the injection system secured.

(b) A channel may be placed in an operable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip System is monitoring that parameter. This time interval is extended up to 5 hours for the High Radiation Main-Steam Line Instrument Channel Calibration surveillance.

Table 3.6.2i

DIESEL GENERATOR INITIATION

Limiting Condition for Operation

Parameter	Total No. of Channels	Channels to Trip[1]	Minimum Channels Operable (c)	Reactor Mode Switch Position in Which Function Must be Operable			
				Shutdown	Refuel	Startup	Run
Loss of Power							
a. 4.16kV PB 102/103 Emergency Bus Undervoltage (Loss of Voltage)	3 per Bus	2 per Bus	2 per Bus	x	x	x	x
b. 4.16kV PB 102/103 Emergency Bus Undervoltage (Degraded Voltage)	3 per Bus	2 per Bus	2 per Bus	x	x	x	x

(1) If one out of three channels becomes inoperable, the inoperable channel will be placed in the trip condition.

Table 4.6.2i

DIESEL GENERATOR INITIATION

Surveillance Requirements

Parameter	Sensor Check	Instrument[a] Channel Test	Instrument[b] Channel Calibration
Loss of Power			
a. 4.16kV PB 102/103 Emergency Bus Undervoltage (Loss of Voltage)	NA	Once per month	Once per refueling cycle
b. 4.16kV PB 102/103 Emergency Bus Undervoltage (Degraded Voltage)	NA	Once per month	Once per refueling cycle

(a) The instrument channel test demonstrate the operability of the instrument channel by simulating an undervoltage condition to verify that the tripping logic functions properly.

(b) The instrument channel calibration will demonstrate the operability of the instrument channel by simulating an undervoltage condition to verify that the tripping logic functions properly. In addition, a sensor calibration will be performed to verify the set points listed in Table 3.6.2.i.

(c) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip System is monitoring that parameter.

Table 3.6.2k

HIGH PRESSURE COOLANT INJECTION

Limiting Condition for Operation

Parameter	Minimum No. of Tripped or Operable Trip Systems	Minimum No. of Operable Instrument Channels Per Operable Trip System (c)	Set-Point	Reactor Mode Switch Position in Which Function Must Be Operable			
				Shutdown	Refuel	Startup	Run
(1) Low Reactor Water Level	2	2	$\geq$ 53 inches (Indicator Scale)	(a)		(a)	x
(2) Automatic Turbine Trip	1	1	- -	(a)		(a)	x

NOTES FOR TABLES 3.6.2k AND 4.6.2k

(a) May be bypassed when the reactor pressure is less than 110 psig and the reactor coolant temperature is less than the corresponding saturation temperature.

(b) Only the trip circuit will be calibrated and tested at the frequencies specified in Table 4.6.2k, the primary sensor will be calibrated and tested once per operating cycle.

(c) A channel may be placed in an inoperable status for up to 2 hours for required surveillances without placing the Trip System in the tripped condition provided at least one operable channel in the same Trip system is monitoring that parameter.

ATTACHMENT B

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

SUPPORTING INFORMATION AND NO SIGNIFICANT HAZARDS CONSIDERATION

Discussion

Surveillance testing of Protective Instrumentation, in accordance with Surveillance Requirement 4.6.2, is performed to assure reliability of safety function instrumentation. This testing causes the surveilled channel to become inoperable. Therefore, the channel cannot be relied upon to perform its safety function. Consequently, under current operational practice, the associated trip system must conservatively be tripped.

The changes submitted in Attachment A of this application obviate the need to place a channel's associated trip system in the tripped condition for a period of two hours (five hours for the High Radiation Main-Steam Line Instrument Channel Calibration) during required surveillances.

Tripping the channel in addition to making it inoperable during the surveillance will increase the probability of inadvertent trips, scrams, unnecessary transients, and challenges to safety systems. Moreover, due to the frequency of the operability verifications imposed by the surveillance requirements of Technical Specification 4.6.2, it is reasonable to believe that the associated channels in the same trip system are operable. This assures that the change in the coincidence logic that forces reliance on the operable channel within the same trip system will not prevent the required protection action from occurring if a safety setpoint is exceeded during the time interval that the surveilled channel is inoperable. The allowable out of service time intervals for instrumentation surveillance testing are small in comparison to a normal operating cycle so that the impact on the safety function of the affected trip system is relatively insignificant. Therefore, given the reliability, diversity, and redundancy of the Protective Instrumentation, not placing a trip system in the tripped condition for the requested allowable out of service time has a negligible effect on the reliable operation of a trip system.

The complexity and longer time requirements for the High Radiation Main-Steam Line Instrument Channel Calibration surveillance requirement necessitates a longer allowable out of service period of five hours.

The Standard Technical Specifications for General Electric Boiling Water Reactors (BWR STS), NUREG-0213, Revision 3 provides for a two hour limit on required TS surveillances for certain plant instrumentation. Specifically, the following instrumentation systems are provided for:

A. Reactor Protection System	footnote (a) Table 3.3.1-1
B. Isolation Actuation	footnote (a) Table 3.3.2-1
C. Emergency Core Cooling	footnote (a) Table 3.3.3-1
D. Reactor Core Isolation Cooling	footnote (a) Table 3.3.5-1

The proposed amendment for Nine Mile Point Unit 1 is in agreement with the above entries in the BWR Standard Technical Specifications.

The automatic feature of the containment spray system is unique to certain BWRs, including Nine Mile Point Unit 1, and is not provided for in the Standard Technical Specifications. However, the similarity of the instrumentation and the surveillance requirements justifies a two hour allowable out of service time.

Nine Mile Point can be safely operated with the incorporation of the changes in the proposed amendment. 10CFR50.91 requires that at the time a licensee requests an amendment, it must provide the Commission its analysis using the standards in 10CFR50.92 concerning the issue of no significant hazards consideration. Therefore, in accordance with 10CFR50.91, 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 changes do not involve a significant increase in the probability or consequences of an accident previously evaluated. The inherent redundancy and reliability of the protective instrumentation trip systems assure that the probability of an accident is not significantly increased. In addition, the restrictive time intervals that govern the trip system condition during the surveillance further limits the probability of an accident that would require the actuation of the instrument channel and associated trip system. The requirement that the associated channel within the same trip system be operable assures that the protective instrumentation response will occur such that the consequences of an accident are not different from that 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 previously evaluated.

The proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed changes do not introduce any new operational modes or physical modifications to the plant.

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 Technical Specification 4.6.2 surveillance requirements provide verification of the operability of all trip system instrumentation channels. In addition, the channel that monitors the identical parameter within the same trip system must be operable for the relatively short duration that the coincidence change is in effect. This assures that protective instrumentation reliability is maintained. The proposed change provides for a specific time period to perform required surveillances on instrument channels without trips present in associated trip systems. This time allotment tends to enhance the margin of safety by decreasing the probability of unnecessary challenges to safety systems and inadvertent plant transients. Therefore, the proposed amendment will not involve a significant reduction in a margin of safety.