ATTACHMENT A

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. NPF-69

DOCKET NO. 50-410

Proposed Changes to Technical Specifications

The existing pages 3/4 3-2, 3/4 3-4, 3/4 3-7, and 3/4 3-9, will be replaced with the attached revised pages. These pages have been retyped in their entirety with marginal markings to indicate changes to the text.

TABLE 3.3.1-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION

	FUNCTIONAL UNIT	APPLICABLE OPERATIONAL CONDITIONS	MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (a)	ACTION
1.	Intermediate Range Monitors:			
	a. Neutron Flux - High	2	3	1
		3, 4	3	2
		5(b)	3	3
	b. Inoperative	2	3	1
		3, 4	3	2
		5	3	3
2.	Average Power Range Monitor(c):			
	a. Neutron Flux - Upscale, Setdown	2	2	1
		5(b)(k)	2	3
	b. Flow Biased Simulated Thermal Power - Upscale	1	2	4
	c. Fixed Neutron Flux - Upscale	1	2	4
	d. Inoperative	1, 2	2	1
		5(k)	2	3
3.	Reactor Vessel Steam Dome Pressure - High	1, 2(d)	2	1
4.	Reactor Vessel Water Level - Low, Level 3	1, 2	2	1

TABLE NOTATIONS

(a) A channel may be placed in an inoperable status for up to 6 hours for required surveillance without placing the Trip System in the tripped condition provided at least one OPERABLE channel in the same Trip System is monitoring that parameter.

(b) Unless adequate shutdown margin has been demonstrated per Specification 3.1.1, and the Refuel position one-rod-out interlock is OPERABLE per Specification 3.9.1, the shorting links shall be removed from the RPS circuitry prior to and during the time any control rod is withdrawn.*

(c) An APRM channel is inoperable if there are less than 2 LPRM inputs per level or less than 14 LPRM inputs to an APRM channel.

(d) This function is not required to be OPERABLE when the reactor pressure vessel head is removed per Specification 3.10.1.

(e) This function shall be automatically bypassed when the reactor mode switch is not in the Run position.

(f) This function is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required.

(g) Also actuates the standby gas treatment system.

(h) With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.

(i) This function shall be automatically bypassed when turbine first stage pressure is less than or equal to 136.4** psig, equivalent to THERMAL POWER less than 30% of RATED THERMAL POWER.

(j) Also actuates the EOC-RPT system.

(k) Required to be OPERABLE only during shutdown margin demonstrations performed per Specification 3.10.3.

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* Not required for control rods removed per Specification 3.9.10.1 or 3.9.10.2.

** To allow for instrument accuracy, calibration and drift, a setpoint of less than or equal to 125.8 psig turbine first stage pressure shall be used.

TABLE 4.3.1.1-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION(a)	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
1. Intermediate Range Monitors:				
a. Neutron Flux - High	S/U, S,(b) S	S/U(c), W, R(d) W	R R	2 3, 4, 5
b. Inoperative	NA	W	NA	2, 3, 4, 5
2. Average Power Range Monitor(e):				
a. Neutron Flux - Upscale, Setdown	S/U, S,(b) S	S/U(c), W W	SA SA	2 5(n)
b. Flow-Biased Simulated Thermal Power - Upscale	S, D(f)	S/U(c), Q	W(g)(h), SA, R(i)	1
c. Fixed Neutron Flux - Upscale	S	S/U(c), Q	W(g), SA	1
d. Inoperative	NA	Q	NA	1, 2, 5(n)
3. Reactor Vessel Steam Dome Pressure - High	S	Q	R(k)	1, 2
4. Reactor Vessel Water Level - Low, Level 3	S	Q	R(k)	1, 2
5. Main Steam Line Isolation Valve - Closure	NA	Q	R	1
6. Main Steam Line Radiation - High	S	Q	R	1, 2(j)
7. Drywell Pressure - High	S	Q	R(k)	1, 2(l)

REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

TABLE NOTATIONS

(a) Neutron detectors may be excluded from CHANNEL CALIBRATION.

(b) The IRM and SRM channels shall be determined to overlap for at least 1/2 decade during each startup after entering OPERATIONAL CONDITION 2, and the IRM and APRM channels shall be determined to overlap for at least 1/2 decade during each controlled shutdown, if not performed within the previous 7 days.

(c) Within 24 hours before startup, if not performed within the previous 7 days.

(d) Perform a CHANNEL FUNCTIONAL TEST with the mode switch in Startup/Hot Standby and the plant in the COLD SHUTDOWN or REFUEL Condition.

(e) The LPRMs shall be calibrated at least once per 1000 effective full-power hours (EFPH) using the TIP system.

(f) Verify measured core flow (total core flow) to be in the range of established core flow at the existing loop flow (APRM%).

(g) This calibration shall consist of the adjustment of the APRM channel to conform to the power values calculated by a heat balance during OPERATIONAL CONDITION 1 when THERMAL POWER $\geq$25% of RATED THERMAL POWER. Adjust the APRM channel if the absolute difference is greater than 2% of RATED THERMAL POWER. Any APRM channel gain adjustment made in compliance with Specification 3.2.2 shall not be included in determining the absolute difference.

(h) This calibration shall consist of the adjustment of the APRM flow-biased channel to conform to a calibrated flow signal.

(i) This calibration shall consist of verifying the 6 $\pm$ 0.6 seconds simulated thermal power time constant.

(j) This function is not required to be OPERABLE when the reactor pressure vessel head is removed per Specification 3.10.1.

(k) Perform the calibration procedure for the trip unit setpoint at least once per 92 days.

(l) This function is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required to be OPERABLE per Special Test Exception 3.10.1.

(m) With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.

(n) Required to be OPERABLE only during shutdown margin demonstrations performed per Specification 3.10.3.

ATTACHMENT B

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. NPF-69

DOCKET NO. 50-410

Supporting Information and No Significant Hazards Consideration Analysis

INTRODUCTION

The Reactor Protection System (RPS) initiates a reactor scram when one or more monitored parameters exceed their specified limits to preserve the integrity of the fuel cladding and the Reactor Coolant System and minimize the energy that must be absorbed following a loss of coolant accident. Operability of the RPS is dependent on the operability of the individual instrumentation channel functions specified in Technical Specification (TS) Table 3.3.1-1, Reactor Protection System Instrumentation. Each function must have a required number of operable channels per RPS trip system with their setpoints within the specified allowable values, where appropriate. The individual functions are required to be operable in the Operational Conditions (OCs) specified in Table 3.3.1-1. A comparison of the Neutron Flux-Upscale, Setdown and Inoperative Average Power Range Monitor (APRM) functions listed in Nine Mile Point Unit 2 (NMP2) TS Table 3.3.1-1 versus the same functions in the Improved Technical Specification (ITS), NUREG-1433, indicated inconsistencies. Specifically, the existing NMP2 TSs require that the subject APRM functions be operable in OCs 3, 4, and 5. The ITS does not require that the Neutron Flux-Upscale, Setdown and Inoperative functions be operable in OCs 3 and 4 and only require operability in OC 5 during shutdown margin demonstrations. Accordingly, the enclosed TS Amendment Application has proposed changes to the Applicable Operational Condition requirements listed in Table 3.3.1-1 and Table 4.3.1.1-1 that are consistent with the ITS (i.e., delete operability requirements in OC 3 and 4 and maintain operability requirements in OC 5 only during shutdown margin demonstrations).

By letter dated July 11, 1994, the Commission issued Generic Letter 94-02, "Long-Term Solutions and Upgrade of Interim Operating Recommendations for Thermal-Hydraulic Instabilities in Boiling Water Reactors." Generic Letter 94-02, in part, requested that licensees submit a plan describing the long-term stability solution option selected and the associated implementation schedule. As indicated in our letter dated November 8, 1994, Niagara Mohawk selected Option III, as delineated in NEDO-31960, BWR Owners' Group Long-Term Solutions Licensing Methodology, to address the thermal-hydraulic stability issue at Nine Mile Point Unit 2. NEDO-31960 was approved by the Commission by letter dated July 12, 1993 to the Boiling Water Reactor Owner's Group (BWROG). Specifically, Niagara Mohawk elected to replace the current Power Range Monitor with the General Electric Nuclear Measurement Analysis and Control (NUMAC) Power Range Neutron Monitor (PRNM) with core stability monitoring function. The NUMAC-PRNM monitors groups of Local Power Range Monitor signals and initiates a reactor SCRAM upon identification of neutron flux oscillations characteristic of thermal-hydraulic instability. Accordingly, the NUMAC-PRNM meets the detection and suppression criteria of General Design Criteria-12, Suppression of Reactor Power Oscillations. In support of this modification, General Electric issued General Electric Licensing Topical Report, NEDC-32410P-A, "Nuclear Measurement Analysis and Control Power Range Neutron Monitor (NUMAC-PRNM) Retrofit Plus Option III Stability Trip Function." NEDC-32410P-A provides guidance to licensees

for the review and evaluation of the NUMAC-PRNM modification as well as a "marked up" APRM TS to support the modification. The "marked up" TS recommended deleting OC's 3, 4, and 5 from the Neutron Flux-Upscale, Setdown, and Inoperative functions. As indicated above, the proposed changes will delete the OC 3 and 4 requirements but retain the OC 5 requirements during shutdown margin demonstrations as required by ITS. Therefore, except for the deviation concerning OC 5 operability requirements, the proposed changes are consistent with NEDC-32410P-A. NEDC-32410P-A was approved by the Commission by letter dated September 5, 1995 to the NUMAC Projects Manager.

Local Power Range Monitor (LPRM) replacement work is scheduled to begin during our next refueling outage (RFO-5) currently planned for the fall of 1996. The existing TS requires that the Neutron Flux-Upscale, Setdown and Inoperative functions be operable during an outage. If either function is inoperable, all operations involving core alterations (e.g., fuel movements) must be suspended. With the existing TSs, LPRM replacement, together with other inoperable LPRMs, could result in inoperable APRMs and suspension of core alterations. Therefore, Niagara Mohawk requests approval of this amendment by August 1, 1996, to support our outage schedule. Also, because the installation of the NUMAC-PRNM modification will render the APRMs inoperable for a period of time, the proposed change is necessary to support the modification.

DESCRIPTION OF CURRENT AND PROPOSED TECHNICAL SPECIFICATIONS

Current Version of Table 3.3.1-1, Item 2

		Applicable Operational Conditions	Minimum Operable Channels per Trip System (a)	Action
2.	Average Power Range Monitor(c):			
a.	Neutron Flux - Upscale Setdown	2	2	1
		3, 4	2	2
		5(b)	2	3
b.	Flow Biased Simulated Thermal Power - Upscale	1	2	4
c.	Fixed Neutron Flux - Upscale	1	2	4
d.	Inoperative	1, 2	2	1
		3, 4	2	2
		5	2	3

Proposed Version of Table 3.3.1-1, Item 2

2.	Average Power Range Monitor(c):			
a.	Neutron Flux - Upscale Setdown	2	2	1
		5(b)(k)	2	3

b.	Flow Biased Simulated Thermal Power - Upscale	1	2	4
c.	Fixed Neutron Flux - Upscale	1	2	4
d.	Inoperative	1, 2	2	1
		5(k)	2	3

Proposed Notation, Table 3.3.1-1

The following was added to Table 3.3.1-1, Table Notations:

(k) Required to be OPERABLE only during shutdown margin demonstrations performed per Specification 3.10.3.

Current Version of Table 4.3.1.1-1, Item 2

		Channel Check	Channel Functional Test	Channel Calibration (a)	Operational Conditions for Which Surveillance Required
2.	Average Power Range Monitor(e):				
a.	Neutron Flux - Upscale, Setdown	S/U, S,(b) S	S/U(c), W W	SA SA	2 3, 4, 5
b.	Flow-Biased Simulated Thermal Power - Upscale	S, D(f)	S/U(c), Q	W(g)(h), SA R(i)	1
c.	Fixed Neutron Flux - Upscale	S	S/U(c), Q	W(g), SA	1
d.	Inoperative	NA	Q	NA	1,2,3,4,5

Proposed Version of Table 4.3.1.1-1, Item 2

2.	Average Power Range Monitor(e):				
a.	Neutron Flux - Upscale, Setdown	S/U, S,(b) S	S/U(c), W W	SA SA	2 5(n)
b.	Flow-Biased Simulated Thermal Power - Upscale	S, D(f)	S/U(c), Q	W(g)(h), SA, R(i)	1
c.	Fixed Neutron Flux - Upscale	S	S/U(c), Q	W(g), SA	1
d.	Inoperative	NA	Q	NA	1, 2, 5(n)

Proposed Notation, Table 4.3.1.1-1

The following was added to Table 4.3.1.1-1, Table Notations:

(n) Required to be OPERABLE only during shutdown margin demonstrations performed per Specification 3.10.3.

EVALUATIONS

Table 3.3.1-1, Reactor Protection System Instrumentation

The Average Power Range Monitor (APRM) channels receive input signals from the Local Power Range Monitors (LPRMs) within the reactor core to provide an indication of the power distribution and local power changes. The APRM channels average these LPRM signals to provide a continuous indication of average reactor power from a few percent to greater than rated thermal power. For operation at low power (i.e., Operational Condition OC 2), the APRM Neutron Flux-Upscale, Setdown function is capable of generating a trip signal that prevents fuel damage resulting from abnormal operating transients in this power range. This is consistent with NEDC-32410P-A, Section 8.3.3.3, which states that the purpose of the APRM Neutron Flux-Upscale, Setdown function is to provide a secondary scram to the Intermediate Range Monitor (IRM) Neutron Flux-High function at this power level. Technical Specification Table 3.3.1-1, Reactor Protection System Instrumentation, Item 2.a, requires that the APRM-Neutron Flux-Upscale, Setdown function be operable in OCs 2, 3, 4, and 5. Item 2.d requires that the APRM Inoperative function be operable in OCs 1, 2, 3, 4, and 5.

Niagara Mohawk proposes to delete the operability requirements for the APRM Neutron Flux-Upscale, Setdown function in OCs 3 and 4 and in OC 5, except during performance of the shutdown margin demonstration performed per Specification 3.10.3. During normal operation in OCs 3 and 4, all control rods are fully inserted and the reactor mode switch position control rod withdrawal blocks do not allow any control rods to be withdrawn. Therefore, the RPS APRM functions are not required under these conditions. Specification 3.9.10, Control Rod Removal, does allow one control rod to be removed from the core in OC 4 by placing the mode switch in the refuel position. However, in the refuel position, the refueling interlocks are in place (i.e., one-rod out, etc.), which together with adequate shutdown margin, will preclude unacceptable reactivity excursions.

The proposed change would also delete the operability requirement for the APRM Neutron Flux-Upscale, Setdown in OC 5 except for during shutdown margin demonstrations. This proposed change is consistent with the ITS and Amendments 41 and 7 issued to the Limerick Nuclear Stations Units 1 and 2, respectively, on July 30, 1990. The Commission agreed with Limerick's conclusion that the APRMs are not necessary for safe operation of the plant while operating in OC 5 with the mode switch in "Refuel" for the following reasons:

- The IRMs are a safety-related subsystem of the neutron-monitoring system and are required by TS to be OPERABLE in OC 5. The IRMs will generate an RPS scram or control rod block if neutron flux increased to the applicable setpoint.

- The Source Range Monitors (SRMs) Control Rod Block Instrumentation are required to be OPERABLE in OC 5.

- The transient analysis discussed in the FSAR does not require the APRMs to be operational in OC 5 to mitigate an undesirable operational or transient condition.

- The IRMs and SRMs are designed and calibrated to be more sensitive to neutron flux than the APRMs. The SRMs/IRMs would detect and respond (control rod block or reactor scram) to an inadvertent criticality event before the APRMs would provide a trip function.

- The IRMs are designed to monitor local core events while the APRMs provide a measure of core average power conditions. The IRMs can monitor and react to the most probable reactivity events expected during refueling, (i.e., control rod withdrawal or fuel insertion).

- The withdrawal of only one control rod in OC 5 is permitted by the "one-rod-out" interlock while in "Refuel." The core is designed to be subcritical with one rod out.

- The withdrawal of a second control rod or inadvertent addition of a fuel bundle in OC 5 is precluded by refueling interlocks, refueling procedures, and administrative controls.

- The APRMs will still be required to be OPERABLE during a SDM demonstration performed in OC 5.

The Commission concluded that, should assumed operator errors occur, followed by postulated equipment malfunctions, there will be adequate systems and interlocks without the APRMs to preclude inadvertent criticality or violation of a safety limit. A review of the applicable NMP2 designs, FSAR sections, and other related information indicate that the above reasons justifying the Limerick amendments apply equally to NMP2 except as follows. Portions of the NMP2 IRM system are not safety-related but the RPS and control rod block functions are tested in accordance with TSs. Also, multiple control rod removals are permitted under TS 3.9.10.2. However, 3.9.10.2 imposes restrictions on multiple control rod removal; such as, the four fuel assemblies surrounding the control rod to be removed are removed from the core cell. As indicated in the ITS, control rods withdrawn from a core cell containing no fuel assemblies do not affect core reactivity and, therefore, are not required to scram.

Revising the Inoperative function to be available in Operational Conditions 1, 2, and 5 when performing shutdown margin demonstrations, is consistent with the proposed changes to the APRM trip functions (i.e., it includes all Operational Conditions for which the APRM has trip requirements). Also, for those applicable operational conditions that were deleted, the associated Minimum Operable Channel and Action requirements have also been deleted. This is an administrative change required for consistency and will not adversely affect plant safety.

Table 4.3.1.1-1, Reactor Protection Instrumentation Surveillance Requirements (Channel Check, Channel Functional Check, Channel Calibration)

Table 4.3.1.1-1, Reactor Protection System Instrumentation Surveillance Requirements, lists the Channel Check, Channel Functional Test, and Channel Calibration Surveillance requirements for the RPS functions and the OCs for which the surveillances are required. The Surveillance Tests specified in Table 4.3.1.1-1 assure continued operability of the RPS functions being tested. As discussed above, the OCs for which the APRM functions are required to be operable will be revised. Accordingly, Table 4.3.1.1-1 will be revised to delete those OCs in which the function is not required to be operable.

CONCLUSIONS

Niagara Mohawk proposes to revise Technical Specification Section 3/4.3.1, Reactor Protection System Instrumentation. The proposed revisions will delete the requirement to have the APRM Neutron Flux-Upscale, Setdown and Inoperative functions operable in OCs 3, 4, and 5 except during shutdown margin demonstrations. As discussed above, the subject APRM functions will be operable in the OCs in which they are required. Testing will continue to be performed to assure system reliability is maintained in the required OCs. The proposed changes will not impact the ability of the RPS to perform its intended function, and consequently, will not adversely effect the health and safety of the public. The proposed change will not be inimical to the common defense or safety of the public.

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 Section 50.92 about the issue of no significant hazards consideration. Therefore, in accordance with 10 CFR 50.91 and 10 CFR 50.92, 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 Reactor Protection System (RPS) initiates a reactor scram when one or more monitored parameters exceed their specified limits to preserve the integrity of the fuel cladding and the Reactor Coolant System and to minimize the energy that must be absorbed following a loss-of-coolant accident. The proposed changes will revise the OCs in which the APRM Neutron Flux-Upscale, Setdown and Inoperative RPS Instrumentation is required. These changes do not affect the probability of precursors of any accidents previously evaluated, and therefore, do not increase their probability.

During normal operation in OCs 3 and 4, all control rods are fully inserted and the reactor mode switch position control rod withdrawal blocks do not allow control rods to be withdrawn. Therefore, the RPS APRM functions are not required. Specification 3.9.10 does allow one control rod to be removed from the core in OC 4 by placing the mode switch in the refuel position. However, with the reactor mode switch in the refuel position, refueling interlocks are in place (i.e., one-rod out, etc.), which together with adequate shutdown margin will preclude unacceptable reactivity excursions. The APRM Neutron Flux-Upscale, Setdown function is not required during OC 5 except during shutdown margin demonstrations. The SRMs, IRMs, and refueling interlocks provide adequate protection from reactivity excursions during OC 5. The exception is during the SDM demonstration when more than one control rod will be withdrawn and the APRMs will continue to be required to be operable as a backup to the IRMs. Testing of the RPS APRM functions will continue to be performed in those OCs for which operability is required. Consequently, the reliability and performance of the RPS APRM functions in these OCs will not be adversely affected. Therefore, the proposed change will not result in a significant increase in the consequences of any accidents previously evaluated.

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.

The proposed changes will revise the applicable OCs in which the APRM Neutron Flux-Upscale, Setdown and Inoperative RPS instrumentation is required. Changes to OC requirements will not introduce any new accident precursors and will not involve any physical alterations to plant configurations which could initiate a new or different kind of accident. NMP2 is analyzed for a single control rod withdrawal error during refueling. Since the core is designed to meet shutdown requirements with the highest worth rod withdrawn, the core remains subcritical even with one rod withdrawn. The one-rod-out interlock which allows only one control rod to be withdrawn in OC 5 is not affected by the proposed changes. Consequently, the proposed changes do not create an accident different than the previously analyzed single control rod withdrawal error event. Surveillance testing will continue to be performed to assure reliability and maintain current performance levels. 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 2, in accordance with the proposed amendment, will not involve a significant reduction in a margin of safety.

The proposed changes to the RPS APRM function instrumentation Technical Specification requirements will not adversely affect the design or the performance characteristics of the RPS instrumentation nor will it affect the ability of the RPS APRM instrumentation to perform its intended function. As discussed above, the subject RPS instrumentation is not required in OC 3, 4, and 5 except for shutdown margin demonstrations. Accordingly, deletion of the requirement to have these functions operable in these OCs will not significantly reduce a margin of safety. Surveillance testing will continue to be performed for those OCs in which the instrumentation is required to assure reliability. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.