

March 12, 1991

Docket No. 50-410

Mr. B. Ralph Sylvia
Executive Vice President, Nuclear
Niagara Mohawk Power Corporation
301 Plainfield Road
Syracuse, New York 13212

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Dear Mr. Sylvia:

SUBJECT: ISSUANCE OF AMENDMENT FOR NINE MILE POINT NUCLEAR STATION,
UNIT NO. 2 ON TECHNICAL SPECIFICATIONS 4.0.3 AND 4.0.4
(TAC NO. 79136)

The Commission has issued the enclosed Amendment No. 27 to Facility Operating License No. NPF-69 for the Nine Mile Point Nuclear Station, Unit No. 2 (NMP-2). The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated June 14, 1988, as supplemented September 29, 1988, and as superseded November 20, 1990.

This amendment revises Technical Specifications 4.0.3 and 4.0.4 and updates the Bases for Sections 3.0 and 4.0 in accordance with the guidance provided in Generic Letter 87-09. In addition, this amendment includes several editorial changes.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY:

D. Oudinot

Donald S. Brinkman, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 27 to NPF-69
- 2. Safety Evaluation

cc: w/enclosures
See next page

PDI-1:LA CVogan *W 3/17* 2/12/91 *113*
PDI-1:PE DOudinot:avl *DO* 2/12/91
PDI-1:PM DBrinkman *DB* 2/13/91
OTSB JCalvo *RC* 2/28/91
OGC *BMB* 3/6/91
PDI-1:D RACapra *ROE* 3/12/91

DOCUMENT NAME: AMENDMENT TAC NO. 79136

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

March 12, 1991

Docket No. 50-410

Mr. B. Ralph Sylvia
Executive Vice President, Nuclear
Niagara Mohawk Power Corporation
301 Plainfield Road
Syracuse, New York 13212

Dear Mr. Sylvia:

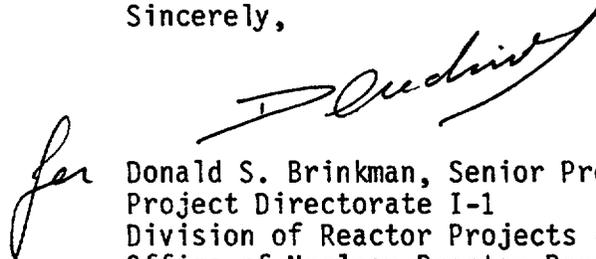
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Sincerely,

A handwritten signature in cursive script, appearing to read "D. Brinkman".

for Donald S. Brinkman, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 27 to NPF-69
2. Safety Evaluation

cc: w/enclosures
See next page

Mr. B. Ralph Sylvia
Niagara Mohawk Power Corporation

Nine Mile Point Nuclear Station
Unit 2

cc:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 27
License No. NPF-69

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated June 14, 1988, as supplemented September 29, 1988, and as superseded November 20, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter 1;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;
and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-69 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 27 are hereby incorporated into this license. Niagara Mohawk Power Corporation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert A. Capra, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 12, 1991

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 27 TO FACILITY OPERATING LICENSE NO. NPF-69

DOCKET NO. 50-410

Revise Appendix A as follows:

Remove Pages

3/4 0-2
3/4 3-51
3/4 3-78
3/4 3-80
3/4 6-33
3/4 7-15
3/4 8-26
3/4 9-3
3/4 11-2
3/4 11-11
B3/4 0-1
B3/4 0-2
B3/4 0-3
-
-
-
6-13

Insert Pages

3/4 0-2
3/4 3-51
3/4 3-78
3/4 3-80
3/4 6-33
3/4 7-15
3/4 8-26
3/4 9-3
3/4 11-2
3/4 11-11
B3/4 0-1
B3/4 0-2
B3/4 0-3
B3/4 0-4
B3/4 0-5
B3/4 0-6
6-13

SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance Requirements shall be met during the OPERATIONAL CONDITIONS or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with:

- a. A maximum allowable extension not to exceed 25% of the surveillance interval, but
- b. The combined time interval for any three consecutive surveillance intervals shall not exceed 3.25 times the specified surveillance interval.
- c. For the purpose of the first refueling outage, those Surveillance Requirements listed on Tables 4.0.2-1 and 4.0.2-2 are exempted from the provisions of a and b above and their surveillance intervals are extended to the date specified in the table.

4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours. Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.4 Entry into an OPERATIONAL CONDITION or other specified applicable condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the applicable surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2 and 3 components shall be applicable as follows:

- a. Inservice inspection of ASME Code Class 1, 2 and 3 components and inservice testing of ASME Code Class 1, 2 and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i).
- b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable addenda for the inservice inspection and testing activities required by the ASME Boiler and Pressure Vessel Code and applicable addenda shall be applicable as follows in these Technical Specifications:

INSTRUMENTATION

RECIRCULATION PUMP TRIP ACTUATION INSTRUMENTATION

END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

4.3.4.2.1 Each end-of-cycle recirculation pump Trip System instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3.4.2-1.

4.3.4.2.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.4.2.3 The END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM RESPONSE TIME of each Trip Function shown in Table 3.3.4.2-3 shall be demonstrated to be within its limit at least once per 18 months. Each test shall include at least the logic of one type of channel input, turbine control valve fast closure or turbine stop valve closure, so that both types of channel inputs are tested at least once per 36 months.

TABLE 3.3.7.4-1

REMOTE SHUTDOWN MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>READOUT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE</u>
1. Service Water Pump Disch Flow	2CES*PNL405	2/Division
2. Reactor Vessel Pressure	2CES*PNL405	1/Division
3. RX Vessel Water Level Wide Range	2CES*PNL405	1/Division
4. RX Vessel Water Level Narrow Range	2CES*PNL405	1/Division
5. RCIC Turbine Speed	2CES*PNL405	1
6. Suppression Pool Water Level	2CES*PNL405	1/Division
7. RHR Loop "A" Flow	2CES*PNL405	1
8. RHR Ht. Ex. Service Water "A" Flow	2CES*PNL405	1
9. Suppression Pool Temperature	2CES*PNL405	1/Division
10. RHR Loop "B" Flow	2CES*PNL405	1
11. RHR Ht. Ex. Service Water "B" Flow	2CES*PNL405	1
12. Safety/Relief Valve Position	2CES*PNL405	1/Valve
13. RCIC Flow Indicator/Controller	2CES*PNL405	1

TABLE 4.3.7.4-1

REMOTE SHUTDOWN MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CALIBRATION</u>	<u>READOUT LOCATION</u>
1. Service Water Pump Discharge Flow	M	R	2CES*PNL405
2. Reactor Vessel Pressure	M	R	2CES*PNL405
3. RX Vessel Water Level Wide Range	M	R	2CES*PNL405
4. RX Vessel Water Level Narrow Range	M	R	2CES*PNL405
5. RCIC Turbine Speed	R	R	2CES*PNL405
6. Suppression Pool Water Level	M	R	2CES*PNL405
7. RHR Loop "A" Flow	M	R	2CES*PNL405
8. RHR Ht. Ex. Service Water "A" Flow	M	R	2CES*PNL405
9. Suppression Pool Temp.	M	R**	2CES*PNL405
10. RHR Loop "B" Flow	M	R	2CES*PNL405
11. RHR Ht. Ex. Service Water "B" Flow	M	R	2CES*PNL405
12. Safety/Relief Valve Position (4 Valves)	M	R*	2CES*PNL405
13. RCIC Flow Indicator/Controller	R	R	2CES*PNL405

* CHANNEL calibration is performed per Specification 4.4.2.

** CHANNEL calibration excludes sensors; sensor comparison shall be done in lieu of sensor calibration.

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

ISOLATION VALVE NO.	VALVE FUNCTION	VALVE GROUP	ISOLATION SIGNAL(a)	MAXIMUM CLOSING TIME (SECONDS)
2ICS*EFV3	To 2ICS*PDT168			
2ICS*EFV4	To 2ICS*PDT168			
2IAS*EFV200	To 2IAS*PT230 off ADS Accum.			
2IAS*EFV201	To 2IAS*PT231 off ADS Accum.			
2IAS*EFV202	To 2IAS*PT232 off ADS Accum.			
2IAS*EFV203	To 2IAS*PT235 off ADS Accum.			
2IAS*EFV204	To 2IAS*PT234 off ADS Accum.			
2IAS*EFV205	To 2IAS*PT233 off ADS Accum.			
2IAS*EFV206	To 2IAS*PT236 off ADS Accum.			
2RHS*EFV 5, 6	To 2RHS*PDT18B			
2RHS*EFV7	To 2RHS*PDT18A			
2MSS*EFV 1A,B,C,D	To Flow elements A,B,C,D steamlines			
2MSS*EFV 2A,B,C,D	To Flow elements A,B,C,D steamlines			
2MSS*EFV 3A,B,C,D	To Flow elements A,B,C,D steamlines			
2MSS*EFV 4A,B,C,D	To Flow elements A,B,C,D steamlines			
2RCS*EFV44 A,B	To 2RCS*PT 84 A/B			
2RCS*EFV45 A,B	To 2RCS*FT 7A/B, FT 9 A/B			
2RCS*EFV46 A,B	To 2RCS*FT 7A/B, FT 9 A/B			
2RCS*EFV47 A,B	To 2RCS*FT 6A/B, FT 8 A/B			
2RCS*EFV48 A,B	To 2RCS*FT 6A/B, FT 8 A/B			
2RCS*EFV52 A,B	To 2RCS*PDT 15 A/B			
2RCS*EFV53 A,B	To 2RCS*PDT 15 A/B			
2RCS*EFV62 A,B	To 2RCS*PT44 A/B			
2RCS*EFV63 A,B	To 2RCS*PT42 A/B			

PLANT SYSTEMS

REACTOR CORE ISOLATION COOLING SYSTEM

SURVEILLANCE REQUIREMENTS

4.7.4 (Continued)

c. At least once per 18 months by:

1. Performing a system functional test which includes simulated automatic actuation and restart and verifying that each automatic valve in the flow path actuates to its correct position. Actual injection of coolant into the reactor vessel may be excluded.
2. Verifying that the system will develop a flow of 600 gpm or more in the test flow path when steam is supplied to the turbine at a pressure of 150 + 15, -0 psig.*
3. Verifying that the suction for the RCIC system is automatically transferred from the condensate storage tank to the suppression pool on a condensate storage tank water level-low signal.

* The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the tests.

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT AC CIRCUITS DEENERGIZED

<u>CIRCUIT NO.</u>	<u>POWER SOURCE</u>	<u>SECT.</u>	<u>EQUIPMENT POWERED</u>
2DERA03	2NHS-MCC012	7B	2DER*MOV128 - Reactor Drain Isol Valve
NA	2NHS-MCC005	7B	2MHR-CRN3 - Recirc Mtr Hndlg Crane - 2MHR PNL101
NA	2NHS-MCC005	7C	2MHR-CRN4 - Recirc Mtr Hndlg Crane - 2MHR PNL102
NA	2NHS-MCC005	7D	2MHR-CRN65 - Monorail 2 Ton for 2MSS*PSV
NA	2NHS-MCC005	7E	2MHR-CRN67 - Monorail 2 Ton for 2MSS*AOV Valves
NA	2NHS-MCC005	7F	2MHR-CRN66 - Monorail 2 Ton for RDS Cart

REFUELING OPERATION

3/4.9.2 INSTRUMENTATION

LIMITING CONDITIONS FOR OPERATION

3.9.2 At least 2 source range monitor* (SRM) channels shall be OPERABLE and inserted to the normal operating level with:

- a. Continuous visual indication of the required count rate in the control room,**
- b. Audible annunciation in the control room,
- c. One of the required SRM detectors located in the quadrant where CORE ALTERATIONS are being performed and the other required SRM detector located in an adjacent quadrant, and
- d. Unless adequate shutdown margin has been demonstrated per Specification 3.1.1 and the "one rod out" interlock is OPERABLE per Specification 3.9.1, the shorting links shall be removed from the RPS circuitry prior to and any time one control rod is withdrawn.***

APPLICABILITY: OPERATIONAL CONDITION 5.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS and insert all insertable control rods.

SURVEILLANCE REQUIREMENTS

4.9.2 Each of the above required SRM channels shall be demonstrated OPERABLE by:

- a. At least once per 12 hours:
 1. Performing a CHANNEL CHECK,
 2. Verifying the detectors are inserted to the normal operating level, and
 3. During CORE ALTERATIONS, verifying that the detector of an OPERABLE SRM channel is located in the core quadrant where CORE ALTERATIONS are being performed and another is located in an adjacent quadrant.

* The use of special movable detectors during CORE ALTERATIONS in place of the normal SRM nuclear detectors is permissible as long as these special detectors are connected to the normal SRM circuits.

** During complete core spiral offload and reload, only one of the required SRM channels must have continuous visual indication in the control room. No visual indication is required until after the first four fuel bundles have been placed in the core, and no visual indication is required when all but four bundles have been removed from the core.

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

TABLE 4.11.1-1

RADIOACTIVE LIQUID WASTE SAMPLING AND ANALYSIS PROGRAM

LIQUID RELEASE TYPE	SAMPLING FREQUENCY	MINIMUM ANALYSIS FREQUENCY	TYPE OF ACTIVITY ANALYSIS	LOWER LIMIT OF DETECTION (LLD)(a) (µCi/ml)
1. Batch Waste Release Tanks(b) a. 2LWS-TK4A b. 2LWS-TK4B c. 2LWS-TK5A d. 2LWS-TK5B	P Each Batch	P Each Batch	Principal Gamma Emitters(c)	5x10 ⁻⁷
			I-131	1x10 ⁻⁶
	P One Batch/M	One Batch/M	Dissolved and Entrained Gases (Gamma Emitters)	1x10 ⁻⁵
	P Each Batch	M Composite(d)	H-3	1x10 ⁻⁵
			Gross Alpha	1x10 ⁻⁷
	P Each Batch	Q Composite(d)	Sr-89, Sr-90	5x10 ⁻⁸
		Fe-55	1x10 ⁻⁶	
2. Continuous Releases a. Service Water Effluent A b. Service Water Effluent B c. Cooling Tower Blowdown d. Auxiliary Boiler Pump Seal and Sample Cooling Discharge (Service Water)	Grab Sample M(e)	Grab Sample M(e)	Principal Gamma Emitters(c)	5x10 ⁻⁷
			I-131	1x10 ⁻⁶
			Dissolved and Entrained Gases (Gamma Emitters)	1x10 ⁻⁵
			H-3	1x10 ⁻⁵
			Gross Alpha	1x10 ⁻⁷
	Grab Sample Q(e)	Grab Sample Q(e)	Sr-89, Sr-90	5x10 ⁻⁸
			Fe-55	1x10 ⁻⁶
	Grab Sample M(f)	Grab Sample M(f)	Principal Gamma Emitters(c)	5x10 ⁻⁷
			H-3	1x10 ⁻⁵
	Grab Sample Q(f)	Grab Sample Q(f)		

TABLE 4.11.2-1 (Continued)

RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS PROGRAM

TABLE NOTATIONS

- (b) Sample and analysis before PURGE is used to determine permissible PURGE rates. Sample and analysis during actual PURGE is used for offsite dose calculations.
- (c) The principal gamma emitters for which the LLD specification applies include the following radionuclides: Kr-87, Kr-88, Xe-133, Xe-133m, Xe-135, and Xe-138 in noble gas releases and Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, I-131, Cs-134, Cs-137, Ce-141, and Ce-144 in iodine and particulate releases. This list does not mean that only these nuclides are to be considered. Other gamma peaks that are identifiable, together with those of the above nuclides, shall also be analyzed and reported in the Semiannual Radioactive Effluent Release Report pursuant to Specification 6.9.1.8 in the format outlined in RG 1.21, Appendix B, Revision 1, June 1974.
- (d) If the main stack or reactor/radwaste building isotopic monitor is not OPERABLE, sampling and analysis shall also be performed following shutdown, startup, or when there is an alarm on the offgas pretreatment monitor.
- (e) Tritium grab samples shall be taken weekly from the reactor/radwaste ventilation system when fuel is offloaded until stable tritium release levels can be demonstrated.
- (f) The ratio of the sample flow rate to the sampled stream flow rate shall be known for the time period covered by each dose or dose rate calculation made in accordance with Specifications 3.11.2.1.b and 3.11.2.3.
- (g) When the release rate of the main stack or reactor/radwaste building vent exceeds its alarm setpoint, the iodine and particulate device shall be removed and analyzed to determine the changes in iodine and particulate release rates. The analysis shall be done daily until the release no longer exceeds the alarm setpoint. When samples collected for 24 hours are analyzed, the corresponding LLDs may be increased by a factor of 10.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY

BASES

Specifications 3.0.1 through 3.0.4 establish the general requirements applicable to Limiting Conditions for Operation. These requirements are based on the requirements for Limiting Conditions for Operation stated in the Code of Federal Regulations, 10 CFR 50.36(c)(2):

"Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification until the condition can be met."

Specification 3.0.1 establishes the Applicability statement within each individual specification as the requirement for when (i.e., in which OPERATIONAL CONDITIONS or other specified conditions) conformance to the Limiting Conditions for Operation is required for safe operation of the facility. The ACTION requirements establish those remedial measures that must be taken within specified time limits when the requirements of a Limiting Condition for Operation are not met. It is not intended that the shutdown ACTION requirements be used as an operational convenience which permits (routine) voluntary removal of a system(s) or component(s) from service in lieu of other alternatives that would not result in redundant systems or components being inoperable.

There are two basic types of ACTION requirements. The first specifies the remedial measures that permit continued operation of the facility which is not further restricted by the time limits of the ACTION requirements. In this case, conformance to the ACTION requirements provides an acceptable level of safety for unlimited continued operation as long as the ACTION requirements continue to be met. The second type of ACTION requirement specifies a time limit in which conformance to the conditions of the Limiting Condition for Operation must be met. This time limit is the allowable outage time to restore an inoperable system or component to OPERABLE status or for restoring parameters within specified limits. If these actions are not completed within the allowable outage time limits, a shutdown is required to place the facility in an OPERATIONAL CONDITION or other specified condition in which the specification no longer applies.

The specified time limits of the ACTION requirements are applicable from the point in time it is identified that a Limiting Condition for Operation is not met. The time limits of the Action requirements are also applicable when a system or component is removed from service for surveillance testing or investigation of operational problems. Individual specifications may include a specified time limit for the completion of a Surveillance Requirement when equipment is removed from service. In this case, the allowable outage time limits of the ACTION requirements are applicable when this limit expires if the surveillance has not been completed. When a shutdown is required to comply with ACTION requirements, the plant may have entered an OPERATIONAL CONDITION in which a new specification becomes applicable. In this case, the time limits of the ACTION requirements would apply from the point in time that the new specification becomes applicable if the requirements of the Limiting Condition for Operation are not met.

APPLICABILITY

BASES

Specification 3.0.2 establishes that noncompliance with a specification exists when the requirements of the Limiting Condition for Operation are not met and the associated ACTION requirements have not been implemented within the specified time interval. The purpose of this specification is to clarify that (1) implementation of the ACTION requirements within the specified time interval constitutes compliance with a specification and (2) completion of the remedial measures of the ACTION requirements is not required when compliance with a Limiting Condition of Operation is restored within the time interval specified in the associated ACTION requirements.

Specification 3.0.3 establishes the shutdown ACTION requirements that must be implemented when a Limiting Condition for Operation is not met and the condition is not specifically addressed by the associated ACTION requirements. The purpose of this specification is to delineate the time limits for placing the unit in a safe shutdown CONDITION when plant operation cannot be maintained within the limits for safe operation defined by the Limiting Conditions for Operation and its ACTION requirements. It is not intended to be used as an operational convenience which permits (routine) voluntary removal of redundant systems or components from service in lieu of other alternatives that would not result in redundant systems or components being inoperable. One hour is allowed to prepare for an orderly shutdown before initiating a change in plant operation. This time permits the operator to coordinate the reduction in electrical generation with the load dispatchers to ensure the stability and availability of the electrical grid. The time limits specified to reach lower CONDITIONS of operation permit the shutdown to proceed in a controlled and orderly manner that is well within the specified maximum cooldown rate and within the cooldown capabilities of the facility assuming only the minimum required equipment is OPERABLE. This reduces thermal stresses on components of the primary coolant system and the potential for a plant upset that could challenge safety systems under conditions for which this specification applies.

If remedial measures permitting limited continued operation of the facility under the provisions of the ACTION requirements are completed, the shutdown may be terminated. The time limits of the ACTION requirements are applicable from the point in time there was a failure to meet a Limiting Condition for Operation. Therefore, the shutdown may be terminated if the ACTION requirements have been met or the time limits of the ACTION requirements have not expired, thus providing an allowance for the completion of the required actions.

The time limits of Specification 3.0.3 allow 37 hours for the plant to be in COLD SHUTDOWN when a shutdown is required during POWER operation. If the plant is in a lower CONDITION of operation when a shutdown is required, the time limit for reaching the next lower CONDITION of operation applies. However, if a lower CONDITION of operation is reached in less time than allowed, the total allowable time to reach COLD SHUTDOWN, or other OPERATIONAL CONDITION, is not reduced. For example, if STARTUP is reached in 2 hours, the time allowed to reach HOT SHUTDOWN is not reduced from the allowable limit of 13 hours. Therefore, if remedial measures are completed that would permit a return to POWER operation, a penalty is not incurred by having to reach a lower CONDITION of operation in less than the total time allowed.

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The same principle applies with regard to the allowable outage time limits of the ACTION requirements, if compliance with the ACTION requirements for one specification results in entry into an OPERATIONAL CONDITION or condition of operation for another specification in which the requirements of the Limiting Condition for Operation are not met. If the new specification becomes applicable in less time than specified, the difference may be added to the allowable outage time limits of the second specification. However, the allowable outage time limits of ACTION requirements for a higher CONDITION of operation may not be used to extend the allowable outage time that is applicable when a Limiting Condition for Operation is not met in a lower CONDITION of operation.

The shutdown requirements of Specification 3.0.3 do not apply in CONDITIONS 4 and 5, because the ACTION requirements of individual specifications define the remedial measures to be taken.

3.0.4 This specification establishes limitations on a change in OPERATIONAL CONDITIONS when a Limiting Condition for Operation is not met. It precludes placing the facility in a higher CONDITION of operation when the requirements for a Limiting Condition for Operation are not met and continued noncompliance to these conditions would result in a shutdown to comply with the ACTION requirements if a change in CONDITIONS were permitted. The purpose of this specification is to ensure that facility operation is not initiated or that higher CONDITIONS of operation are not entered when corrective action is being taken to obtain compliance with a specification by restoring equipment to OPERABLE status or parameters to specified limits.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 3.0.4 do not apply because they would delay placing the facility in a lower CONDITION of operation.

Exceptions to this provision have been provided for a limited number of specifications where startup with inoperable equipment would not affect plant safety. These exceptions are stated in the ACTION statements of the appropriate specifications.

Specifications 4.0.1 through 4.0.5 establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

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"Surveillance requirements are requirements relating to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

Specification 4.0.1 establishes the requirement that surveillances must be performed during the OPERATIONAL CONDITIONS or other conditions for which the requirements of the Limiting Conditions for Operation apply unless otherwise stated in an individual Surveillance Requirement. The purpose of this specification is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits to ensure safe operation of the facility when the plant is in an OPERATIONAL CONDITION or other specified condition for which the individual Limiting Conditions for Operation are applicable. Surveillance Requirements do not have to be performed when the facility is in an OPERATIONAL CONDITION for which the requirements of the associated Limiting Condition for Operation do not apply unless otherwise specified. The Surveillance Requirements associated with a Special Test Exception are only applicable when the Special Test Exception is used as an allowable exception to the requirements of a specification.

Specification 4.0.2 establishes the conditions under which the specified time interval for Surveillance Requirements may be extended. Item a. permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance; e.g., transient conditions or other ongoing surveillance or maintenance activities. Item b. limits the use of the provisions of item a. to ensure that it is not used repeatedly to extend the surveillance interval beyond that specified. The limits of Specification 4.0.2 are based on engineering judgment and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. These provisions are sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

Specification 4.0.3 establishes the failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, as a condition that constitutes a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. Under the provisions of this specification, systems and components are assumed to be OPERABLE when Surveillance Requirements have been satisfactorily performed within the specified time interval. However, nothing in this provision is to be construed as implying that systems or components are OPERABLE when they are found or known to be inoperable although still meeting the Surveillance Requirements. This specification also clarifies that the ACTION requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the ACTION requirements apply from the point in time it is identified that a surveillance has not been performed and not at the time that the allowed surveillance interval was exceeded. Completion of the Surveillance Requirement within the allowable outage time limits of the ACTION requirements restores compliance with

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the requirements of Specification 4.0.3. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, was a violation of the OPERABILITY requirements of a Limiting Condition for Operation that is subject to enforcement action. Further, the failure to perform a surveillance within the provisions of Specification 4.0.2 is a violation of a Technical Specification requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plant's Technical Specifications.

If the allowable outage time limits of the ACTION requirements are less than 24 hours or a shutdown is required to comply with ACTION requirements, e.g., Specification 3.0.3, a 24-hour allowance is provided to permit a delay in implementing the ACTION requirements. This provides an adequate time limit to complete Surveillance Requirements that have not been performed. The purpose of this allowance is to permit the completion of a surveillance before a shutdown would be required to comply with ACTION requirements or before other remedial measures would be required that may preclude the completion of a surveillance. The basis for this allowance includes consideration for plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in completing the required surveillance. This provision also provides a time limit for the completion of Surveillance Requirements that become applicable as a consequence of CONDITION changes imposed by ACTION requirements and for completing Surveillance Requirements that are applicable when an exception to the requirements of Specification 4.0.4 is allowed. If a surveillance is not completed within the 24-hour allowance, the time limits of the Action requirements are applicable at that time. If a surveillance is performed within the 24-hour allowance and the Surveillance Requirements are not met, the time limits of the ACTION requirements are applicable at the time that the surveillance is terminated.

Surveillance Requirements do not have to be performed on inoperable equipment because the ACTION requirements define the remedial measures that apply. However, the Surveillance Requirements have to be met to demonstrate that inoperable equipment has been restored to OPERABLE status.

Specification 4.0.4 establishes the requirement that all applicable surveillances must be met before entry into an OPERATIONAL CONDITION or other condition of operation specified in the Applicability statement. The purpose of this specification is to ensure that system and component OPERABILITY requirements or parameter limits are met before entry into an OPERATIONAL CONDITION or other specified condition for which these systems and components ensure safe operation of the facility. This provision applies to changes in OPERATIONAL CONDITIONS or other specified conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable Surveillance Requirements must be performed within the specified surveillance interval to assure that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

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When a shutdown is required to comply with ACTION requirements, the provisions of Specification 4.0.4 do not apply because this would delay placing the facility in a lower CONDITION of operation.

4.0.5 This specification ensures that inservice inspection of ASME Code Class 1, 2 and 3 components and inservice testing of ASME Code Class 1, 2 and 3 pumps and valves will be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and addenda as required by 10 CFR 50.55a. Relief from any of the above requirements has been provided in writing by the Commission and is not a part of these Technical Specifications.

This specification includes a clarification of the frequencies of performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable addenda. This clarification is provided to ensure consistency in surveillance intervals throughout these Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable addenda. For example, the requirements of Specification 4.0.4 to perform surveillance activities prior to entry into an OPERATIONAL CONDITION or other specified applicability condition takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows pumps to be tested up to 1 week after return to normal operation. And for example, the Technical Specification definition of OPERABLE does not grant a grace period before a device that is not capable of performing its specified function is declared inoperable, and takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

ADMINISTRATIVE CONTROLS

REVIEW AND AUDIT

SAFETY REVIEW AND AUDIT BOARD

REVIEW

6.5.3.7 (Continued)

- g. All REPORTABLE EVENTS;
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety; and
- i. Reports and meeting minutes of the SORC.

AUDITS

6.5.3.8 Audits of unit activities shall be performed under the cognizance of the SRAB. These audits shall encompass:

- a. The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions at least once every 12 months;
- b. The performance, training, and qualifications of the entire unit staff at least once every 12 months;
- c. The results of actions taken to correct deficiencies occurring in unit equipment, structures, systems, or method of operation that affect nuclear safety, at least once every 6 months;
- d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10 CFR 50, at least once every 24 months;
- e. The facility Emergency Plan and implementing procedures at least once every 12 months.
- f. The facility Security Plan and implementing procedures at least once every 12 months.
- g. The Radiological Environmental Monitoring Program and the results thereof at least once every 12 months;
- h. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once every 24 months;
- i. The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes at least once every 24 months;



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 27 TO FACILITY OPERATING LICENSE NO. NPF-69
NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION UNIT NO. 2
DOCKET NO. 50-410

1.0 INTRODUCTION

By letter dated June 14, 1988, as supplemented September 29, 1988, and as superseded November 20, 1990, Niagara Mohawk Power Corporation, the licensee, requested an amendment to Facility Operating License No. NPF-69 for Nine Mile Point Nuclear Station, Unit No. 2. The proposed amendment would change the plant Technical Specifications (TSs) based on the recommendations provided by the staff in Generic Letter (GL) 87-09 related to the Surveillance Requirements of TS 4.0. Specifically, the licensee has requested the following revisions to TSs 4.0.3 and 4.0.4 as follows:

Specification 4.0.3 would be revised to incorporate a 24-hour delay in implementing ACTION requirements due to a missed surveillance when the ACTION requirements provide a restoration time that is less than 24 hours.

Specification 4.0.4 would be revised to clarify that, "This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements."

Additionally, this amendment would update the Bases for TS Sections 3.0 and 4.0 in accordance with the guidance provided in GL 87-09 and make several editorial changes.

2.0 EVALUATION

The changes proposed by the licensee have been reviewed considering the limitations set forth in GL 87-09 for TSs 4.0.3 and 4.0.4 as follows.

Specification 4.0.3

In GL 87-09 the staff stated that it is overly conservative to assume that systems or components are inoperable when a Surveillance Requirement has not been performed, because the vast majority of surveillances demonstrate that systems or components are in fact operable. Because the allowable outage time limits of some ACTION requirements do not provide an appropriate time limit for performing a missed surveillance before shutdown requirements apply, the TS should include a time limit that would allow a delay of the required actions to permit the performance of the missed surveillance.

This time limit should be based on considerations of plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, as well as the safety significance of the delay in completion of the surveillance. After reviewing possible limits, the staff concluded that, based on these considerations, 24 hours would be an acceptable time limit for completing a missed surveillance when the allowable outage times of the ACTION requirements are less than this time limit or when shutdown ACTION requirements apply. The 24-hour time limit would balance the risks associated with an allowance for completing the surveillance within this period against the risks associated with the potential for a plant upset and challenge to safety systems when the alternative is a shutdown to comply with ACTION requirements before the surveillance can be completed.

This limit does not waive compliance with Specification 4.0.3. Under Specification 4.0.3, the failure to perform a Surveillance Requirement will continue to constitute noncompliance with the OPERABILITY requirements of an LCO and to bring into play the applicable ACTION requirements.

Based on the above, the following change to Specification 4.0.3 is acceptable:

Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is identified that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours.

Specification 4.0.4

TS 4.0.4 prohibits entry into an OPERATIONAL CONDITION or other specified condition until all required surveillances have been performed. This could cause an interpretation problem when OPERATIONAL CONDITION changes are required in order to comply with ACTION requirements. Specifically, two possible conflicts between TSs 4.0.3 and 4.0.4 could exist. The first conflict arises because TS 4.0.4 prohibits entry into an operational mode or other specified condition when Surveillance Requirements have not been performed within the specified surveillance interval. The proposed modification to resolve this conflict involves the revision to TS 4.0.3 to permit a delay of up to 24 hours in the application of the ACTION requirements, as explained above, and a clarification of TS 4.0.4 to allow passage through or to operational modes as required to comply with ACTION requirements. The second potential conflict between TSs 4.0.3 and 4.0.4 arises because an exception to the requirements of 4.0.4 is allowed when Surveillance Requirements can only be completed after entry into a mode or condition. However, after entry into

this mode or condition, the requirements of TS 4.0.3 may not be met because the Surveillance Requirements may not have been performed within the allowable surveillance interval.

The licensee proposes to resolve these conflicts by providing the following clarifying statement to TS 4.0.4:

"This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements."

The NRC staff has provided in GL 87-09 a clarification that: (a) it is not the intent of TS 4.0.3 that the ACTION requirements preclude the performance of surveillances allowed under any exception to TS 4.0.4; and (b) that the delay of up to 24 hours in TS 4.0.3 for the applicability of ACTION requirements provides an appropriate time limit for the completion of Surveillance Requirements that become applicable as a consequence of any exception to TS 4.0.4.

Consequently, the NRC staff finds the proposed changes to TS 4.0.4 acceptable.

Bases For Sections 3.0 and 4.0

GL 87-09 provides guidance regarding the Bases applicable to Sections 3.0 and 4.0. The licensee proposed to update the Bases applicable to Sections 3.0 and 4.0 in accordance with this guidance. The staff finds the proposed changes to the Bases for Sections 3.0 and 4.0 acceptable.

Editorial Changes

The following editorial changes have been proposed by the licensee.

Specification 4.3.4.2.1 would reference Table 4.3.4.2-1 instead of Table 4.3.4.2.1-1 to correct an error.

In Table 3.3.7.4-1, Remote Shutdown Monitoring Instrumentation, the word "outlet" would be deleted from 8. and 11. in the instrument column. The remote shutdown panel monitors the service water flow to the RHR heat exchangers, not the outlet flow.

In Table 4.3.7.4-1, Remote Shutdown Monitoring Instrumentation Surveillance Requirements, the word "outlet" would be deleted from 11. in the instrument column. The remote shutdown panel monitors the service water flow to the RHR heat exchangers, not the outlet flow.

In Table 3.6.3-1, Primary Containment Isolation Valves, the valve functions for Isolation Valves 2IAS*EFV203 and 2IAS*EFV205 would be reversed to correct an error.

In Specification 4.7.4. title the spelling of "Isolation" would be corrected.

In Table 3.8.4.1-1, the listings of equipment powered in Sections 7B, 7E, and 7F were revised to correct errors and to reflect a valve replacement.

In Specification 3.9.2b, "Audible Annunciation" would replace "Audible Indication" to be consistent with boiling water reactor terminology for source range monitoring.

In Table 4.11.1-1, the line between 2.c. and 2.d. would be extended to the left margin to properly delineate the requirements which apply to 2.d.

In Table 4.11.2-1, the word "alert" would be deleted from "alert alarm" in (d) and (g) to reflect the current terminology used for the main stack and reactor/radwaste building radiation monitors.

Specifications 6.5.3.8e and 6.5.3f would refer to "Facility" instead of "Unit" for the emergency plan and the security plan. There is only one emergency plan and one security plan for Nine Mile Point Units 1 and 2.

The staff has reviewed the editorial changes discussed above, and has found these changes acceptable.

3.0 SUMMARY

The staff has reviewed the proposed changes to the Technical Specifications and to the Bases and the proposed editorial changes, and finds these changes to be acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in a requirement with respect to the installation or use of the facility components located within the restricted areas as defined in 10 CFR Part 20. The staff has determined that this amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: March 12, 1991

PRINCIPAL CONTRIBUTOR:

T. Dunning