



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 24, 1993

Docket No. 50-220

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

Dear Mr. Sylvia:

SUBJECT: ISSUANCE OF AMENDMENT FOR NINE MILE POINT NUCLEAR STATION UNIT NO. 1  
(TAC NO. M85109)

The Commission has issued the enclosed Amendment No. 139 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station Unit No. 1 (NMP-1). The amendment consists of changes to the Technical Specifications (TS) in response to your application transmitted by letter dated December 4, 1992, as supplemented February 12, 1993, and February 17, 1993.

The amendment revises TS 3.6.2, 4.6.2, 3.6.11, and 4.6.11 and associated Bases to increase the surveillance test intervals and add allowable out-of-service times for various instruments. The changes are in accordance with General Electric Company Licensing Topical Reports which have been previously reviewed and approved by the NRC staff. The allowable out-of-service times are consistent with the provisions of NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4." The changes permit specified instrument channel functional tests to be performed once per 3 months rather than once per week or once per month. The amendment also makes editorial corrections on TS pages 192, 199, and 210.

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

Sincerely,

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. 139 to DPR-63
2. Safety Evaluation

cc w/enclosures:  
See next page

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PDR ADDCK 05000220  
P PDR

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11

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Niagara Mohawk Power Corporation

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DATED: February 24, 1993

AMENDMENT NO. 139 TO FACILITY OPERATING LICENSE NO. DPR-63-NINE MILE POINT  
UNIT 1

Docket File  
NRC & Local PDRs  
PDI-1 Reading  
S. Varga, 14/E/4  
J. Calvo, 14/A/4  
R. Capra  
C. Vogan  
D. Brinkman  
OGC-WF  
D. Hagan, 3302 MNBB  
G. Hill (4), P1-22  
Wanda Jones, P-370  
C. Grimes, 11/F/23  
J. Wermiel, 10/D/24  
C. Schulten, 11/E/22  
ACRS (10)  
OPA  
OC/LFMB  
PD Plant File  
C. Cowgill, Region I

cc: Plant Service list

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 139  
License No. DPR-63

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated December 4, 1992, as supplemented February 12, 1993, and February 17, 1993, 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 I;
  - 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. DPR-63 is hereby amended to read as follows:

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PDR ADOCK 05000220  
P PDR

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 139, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance to be implemented within 90 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*Robert A. Capra*

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: February 24, 1993

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 139 TO FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

Revise Appendix A as follows:

Remove Pages

191  
192  
193  
194  
195  
196a  
197  
198  
199  
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201  
203  
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237a  
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Insert Pages

191  
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204a (added page)  
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237b (added page)  
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Table 3.6.2a

**INSTRUMENTATION THAT INITIATES SCRAM**

**Limiting Condition for Operation**

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

Table 3.6.2a (cont'd)

**INSTRUMENTATION THAT INITIATES SCRAM**

**Limiting Condition for Operation**

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



Table 3.6.2a (cont'd)

**INSTRUMENTATION THAT INITIATES SCRAM**

**Limiting Condition for Operation**

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

Table 4.6.2a

**INSTRUMENTATION THAT INITIATES SCRAM**

**Surveillance Requirement**

<b><u>Parameter</u></b>	<b><u>Sensor Check</u></b>	<b><u>Instrument Channel Test</u></b>	<b><u>Instrument Channel Calibration</u></b>
(1) Manual Scram	None	Once per week	None
(2) High Reactor Pressure	None	Once per 3 months <sup>(1)</sup>	Once per 3 months <sup>(1)</sup>
(3) High Drywell Pressure	None	Once per 3 months <sup>(1)</sup>	Once per 3 months <sup>(1)</sup>
(4) Low Reactor Water Level	Once/day	Once per 3 months <sup>(1)</sup>	Once per 3 months <sup>(1)</sup>
(5) High Water Level Scram Discharge Volume	None	Once per 3 months	Once per 3 months
(6) Main-Steam-Line Isolation Valve Position	None	Once per 3 months	Once per operating cycle
(7) High Radiation Main-Steam Line	Once/shift	Once per 3 months	Once per 3 months

Table 4.6.2a (cont'd)

**INSTRUMENTATION THAT INITIATES SCRAM**

**Surveillance Requirement**

<b><u>Parameter</u></b>	<b><u>Sensor Check</u></b>	<b><u>Instrument Channel Test</u></b>	<b><u>Instrument Channel Calibration</u></b>
(8) Shutdown Position of Reactor Mode Switch	None	Once during each major refueling outage	None
(9) Neutron Flux			
(a) IRM			
(i) Upscale	(f)	(f)	(f)
(ii) Inoperative	(f)	(f)	(f)
(b) APRM			
(i) Upscale	None	Once per 3 months	Once per week <sup>(m)</sup> Once per 3 months
(ii) Inoperative	None	Once per 3 months	None
(iii) Downscale	None	Once per 3 months	Once per week <sup>(m)</sup> Once per 3 months
(10) Turbine Stop Valve Closure	None	Once per 3 months	Once per operating cycle
(11) Generator Load Rejection	None	Once per 3 months	Once per 3 months

**NOTES FOR TABLES 3.6.2a and 4.6.2a (cont'd)**

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(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 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same trip system is monitoring that parameter.

With one channel required by Table 3.6.2a inoperable in one or more Parameters, place the inoperable channel and/or that trip system in the tripped condition\* within 12 hours.

With two or more channels required by Table 3.6.2a inoperable in one or more Parameters:

1. Within one hour, verify sufficient channels remain Operable or tripped\* to maintain trip capability for the Parameter, and
2. Within 6 hours, place the inoperable channel(s) in one trip system and/or that trip system\*\* in the tripped condition\*, and
3. Within 12 hours, restore the inoperable channels in the other trip system to an Operable status or tripped\*.

Otherwise, take the ACTION required by Specification 3.6.2a for that Parameter.

\* An inoperable channel or trip system need not be placed in the tripped condition where this would cause the Trip Function to occur. In these cases, if the inoperable channel is not restored to Operable status within the required time, the ACTION required by Specification 3.6.2a for the parameter shall be taken.

\*\* This ACTION applies to that trip system with the most inoperable channels; if both trip systems have the same number of inoperable channels, the ACTION can be applied to either trip system.

(p) May be bypassed during reactor coolant system pressure testing and/or control rod scram time testing.

Table 3.6.2b

**INSTRUMENTATION THAT INITIATES  
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION**

**Limiting Condition for Operation**

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

Table 3.6.2b (cont'd)

**INSTRUMENTATION THAT INITIATES  
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION**

**Limiting Condition for Operation**

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

Table 3.6.2b (cont'd)

**INSTRUMENTATION THAT INITIATES  
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION**

**Limiting Condition for Operation**

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
<b><u>CLEANUP SYSTEM ISOLATION</u></b>							
(8) High Area Temperature	1	2(g)	≤ 190°F	x	x	x	x
<b><u>SHUTDOWN COOLING SYSTEM ISOLATION</u></b>							
(9) High Area Temperature	1	1	≤ 170°F	x	x	x	x
<b><u>CONTAINMENT ISOLATION</u></b>							
(10) Low-Low Reactor Water	2	2(f)	≥ 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**

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



Table 4.6.2b

**INSTRUMENTATION THAT INITIATES  
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION**

**Surveillance Requirement**

<b><u>Parameter</u></b>	<b><u>Sensor Check</u></b>	<b><u>Instrument Channel Test</u></b>	<b><u>Instrument Channel Calibration</u></b>
<b><u>PRIMARY COOLANT ISOLATION</u></b>			
(Main Steam, Cleanup and Shutdown)			
(1) Low-Low Reactor Water Level	Once/day	Once per 3 months <sup>(d)</sup>	Once per 3 months <sup>(d)</sup>
(2) Manual	---	Once during each major refueling outage	---
<b><u>MAIN-STEAM-LINE ISOLATION</u></b>			
(3) High Steam Flow Main-Steam Line	Once/day	Once per 3 months <sup>(d)</sup>	Once per 3 months <sup>(d)</sup>
(4) High Radiation Main-Steam Line	Once/shift	Once per 3 months	Once per 3 months
(5) Low Reactor Pressure	Once/day	Once per 3 months <sup>(d)</sup>	Once per 3 months <sup>(d)</sup>

Table 4.6.2b (cont'd)

**INSTRUMENTATION THAT INITIATES  
PRIMARY COOLANT SYSTEM OR CONTAINMENT ISOLATION**

**Surveillance Requirement**

<b><u>Parameter</u></b>	<b><u>Sensor Check</u></b>	<b><u>Instrument Channel Test</u></b>	<b><u>Instrument Channel Calibration</u></b>
<b><u>CONTAINMENT ISOLATION</u></b>			
(10) Low-Low Reactor Water Level	Once/day	Once per 3 months <sup>(d)</sup>	Once per 3 months <sup>(d)</sup>
(11) High Drywell Pressure	Once/day	Once per 3 months <sup>(d)</sup>	Once per 3 months <sup>(d)</sup>
(12) Manual	---	Once during each operating cycle	---

**NOTES FOR TABLES 3.6.2b and 4.6.2b**

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- (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 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same Trip System is monitoring that Parameter.

With the number of Operable Channels one less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for one trip system, either

1. Place the inoperable channel(s) in the tripped condition within
    - a. 12 hours for Parameters common to SCRAM Instrumentation, and
    - b. 24 hours for Parameters not common to SCRAM Instrumentation.
- or
2. Take the ACTION required by Specification 3.6.2a for that Parameter.

**NOTES FOR TABLES 3.6.2b and 4.6.2b (cont'd)**

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(f) (cont'd)

With the number of Operable Channels one less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for both trip systems,

1. Place the inoperable channel(s) in one trip system in the tripped condition within one hour, and
2. a. Place the inoperable channel(s) in the remaining trip system in the tripped condition within
  - (1) 12 hours for Parameters common to SCRAM Instrumentation, and
  - (2) 24 hours for Parameters not common to SCRAM Instrumentation.or  
b. take the ACTION required by Specification 3.6.2a for that Parameter.

(g) A channel may be placed in an inoperable status for up to 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same Trip System is monitoring that Parameter.

With the number of Operable channels one less than required by the Minimum Number of Operable Instrument Channels for the Operable Trip System, either

1. Place the inoperable channel(s) in the tripped condition within 24 hours.  
or
2. Take the ACTION required by Specification 3.6.2a for that Parameter.

Table 3.6.2c

**INSTRUMENTATION THAT INITIATES  
OR ISOLATES EMERGENCY COOLING**

**Limiting Condition for Operation**

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (d)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
<b><u>EMERGENCY COOLING INITIATION</u></b>							
(1) High-Reactor Pressure	2	2(e)	≤ 1080 psig	(b)		x	x
(2) Low-Low Reactor Water Level	2	2(e)	≥ 5 inches (Indicator Scale)	(b)		x	x
<b><u>EMERGENCY COOLING ISOLATION</u></b> (for each of two systems)							
(3) High Steam Flow Emergency Cooling System	2	2(a)(f)	≤ 11.5 psid			x	x

Table 4.6.2c

**INSTRUMENTATION THAT INITIATES  
OR ISOLATES EMERGENCY COOLING**

**Surveillance Requirement**

<b><u>Parameter</u></b>	<b><u>Sensor Check</u></b>	<b><u>Instrument Channel Test</u></b>	<b><u>Instrument Channel Calibration</u></b>
<b><u>EMERGENCY COOLING INITIATION</u></b>			
(1) High Reactor Pressure	None	Once per 3 months <sup>(c)</sup>	Once per 3 months <sup>(c)</sup>
(2) Low-Low Reactor Water Level	Once/day	Once per 3 months <sup>(c)</sup>	Once per 3 months <sup>(c)</sup>
<b><u>EMERGENCY COOLING ISOLATION</u></b> (for each of two systems)			
(3) High Steam Flow Emergency Cooling System	None	Once per 3 months <sup>(c)</sup>	Once per 3 months <sup>(c)</sup>

**NOTES FOR TABLES 3.6.2c and 4.6.2c**

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- (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 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same Trip System is monitoring that parameter.
- (e) With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:
  - 1. For one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the action required by Specification 3.6.2a for that Parameter.
  - 2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.
- (f) With the number of Operable channels one less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for one trip system, either
  - 1. Place the inoperable channel(s) in the tripped condition within 24 hours.
  - or
  - 2. Take the ACTION required by Specification 3.6.2a for that Parameter.

With the number of Operable channels one less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for both trip systems,

  - 1. Place the inoperable channel(s) in one trip system in the tripped condition within one hour and
  - 2. a. Place the inoperable channel(s) in the remaining trip system in the tripped condition within 24 hours.
  - or
  - b. Take the ACTION required by Specification 3.6.2a for that Parameter.

Table 3.6.2d

INSTRUMENTATION THAT INITIATES CORE SPRAY<sup>(e)</sup>

Limiting Condition for Operation

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



Table 4.6.2d

**INSTRUMENTATION THAT INITIATES CORE SPRAY**

**Surveillance Requirement**

<b><u>Parameter</u></b>	<b><u>Sensor Check</u></b>	<b><u>Instrument Channel Test</u></b>	<b><u>Instrument Channel Calibration</u></b>
<b><u>START CORE SPRAY PUMPS</u></b>			
(1) High Drywell Pressure	Once/day	Once per 3 months <sup>(c)</sup>	Once per 3 months <sup>(c)</sup>
(2) Low-Low Reactor Water Level	Once/day	Once per 3 months <sup>(c)</sup>	Once per 3 months <sup>(c)</sup>
<b><u>OPEN CORE SPRAY DISCHARGE VALVES</u></b>			
(3) Reactor Pressure and either (1) or (2) above	None	Once per 3 months <sup>(c)</sup>	Once per 3 months <sup>(c)</sup>

**NOTES FOR TABLES 3.6.2d and 4.6.2d**

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

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:

1. With one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the ACTION required by Specification 3.6.2a for that Parameter.
2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.

Table 4.6.2e

**INSTRUMENTATION THAT INITIATES CONTAINMENT SPRAY**

**Surveillance Requirement**

<b><u>Parameter</u></b>	<b><u>Sensor Check</u></b>	<b><u>Instrument Channel Test</u></b>	<b><u>Instrument Channel Calibration</u></b>
(1)a. High Drywell Pressure	Once/day	Once per 3 months <sup>(b)</sup>	Once per 3 months <sup>(b)</sup>
b. Low-Low Reactor Water Level	Once/day	Once per 3 months <sup>(b)</sup>	Once per 3 months <sup>(b)</sup>

**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 6 hours for required surveillances without placing the Trip system in the tripped condition provided at least one Operable Instrument Channel in the same Trip System is monitoring that parameter.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:

1. With one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the ACTION required by Specification 3.6.2a for that Parameter.
2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.

Table 4.6.2f

**INSTRUMENTATION THAT INITIATES AUTO DEPRESSURIZATION**

**Surveillance Requirement**

<b><u>Parameter</u></b>	<b><u>Sensor Check</u></b>	<b><u>Instrument Channel Test</u></b>	<b><u>Instrument Channel Calibration</u></b>
(1)a. Low-Low-Low Reactor Water	None	Once per 3 months <sup>(c)</sup>	Once per 3 months <sup>(c)</sup>
and			
b. High Drywell Pressure	Once/day	Once per 3 months <sup>(c)</sup>	Once per 3 months <sup>(c)</sup>

**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 6 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.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:

1. With one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the ACTION required by Specification 3.6.2a for that Parameter.
2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.

Table 3.6.2g

**INSTRUMENTATION THAT INITIATES CONTROL ROD WITHDRAWAL BLOCK**

**Limiting Condition for Operation**

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (i)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				Shutdown	Refuel	Startup	Run
(1) SRM							
a. Detector not in Startup Position	2	2(a)(e)	---		x	x	
b. Inoperative	2	2(a)	---		x	x	
c. Upscale	2	2(a)	$\leq 10^5$ counts/sec		x	x	
(2) IRM							
a. Detector not in Startup Position	2	3(b)	---		x	x	
b. Inoperative	2	3(b)	---		x	x	

Table 3.6.2g (cont'd)

**INSTRUMENTATION THAT INITIATES CONTROL ROD WITHDRAWAL BLOCK**

**Limiting Condition for Operation**

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System (i)</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				<u>Shutdown</u>	<u>Refuel</u>	<u>Startup</u>	<u>Run</u>
c. Downscale	2	3(b)	≤ 5 percent of full scale for each scale		x	x	
d. Upscale	2	3(b)	≤ 88 percent of full scale for each scale		x	x	
(3) APRM							
a. Inoperative	2(h)	3(c)	---		x	x	x
b. Upscale (Biased by Recirculation Flow)	2(h)	3(c)	Figure 2.1.1(h)		x	x	x
c. Downscale	2(h)	3(c)	≥ 2 percent of full scale		(d)	(d)	x



Table 4.6.2g (cont'd)

**INSTRUMENTATION THAT INITIATES CONTROL ROD WITHDRAWAL BLOCK**

**Surveillance Requirement**

<u>Parameter</u>	<u>Sensor Check</u>	<u>Instrument Channel Test</u>	<u>Instrument Channel Calibration</u>
(3) APRM			
a. Inoperative	None	Once per 3 months	None
b. Upscale (Biased by Recirculation Flow)	None	Once per 3 months	Once per 3 months
c. Downscale	None	Once per 3 months	Once per 3 months
(4) Recirculation Flow			
a. Comparator Off Normal	None	Once per 3 months	Once per 3 months
b. Flow Unit Inoperative	None	Once per 3 months	Once per 3 months
c. Flow Unit Upscale	None	Once per 3 months	Once per 3 months

**NOTES FOR TABLES 3.6.2g AND 4.6.2g**

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- (a) No more than one of the four SRM inputs to the single trip system shall be bypassed.
- (b) No more than one of the four IRM inputs to each instrument channel shall be bypassed. These signals may be bypassed when the APRM's are onscale.
- (c) No more than one of the four APRM inputs to each instrument channel shall be bypassed provided that the APRM in the other instrument channel in the same core quadrant is not bypassed. No more than two C or D level LPRM inputs to an APRM shall be bypassed and only four LPRM inputs to only one APRM shall be bypassed in order for the APRM to be considered operable. In the Run mode of operation, bypass of two chambers from one radial core location in any one APRM shall cause that APRM to be considered inoperative. A Travelling In-Core Probe (TIP) chamber may be used as a substitute APRM input if the TIP is positioned in close proximity to the failed LPRM it is replacing. If one APRM in a quadrant is bypassed and meets all requirements for operability with the exception of the requirement of at least one operable chamber at each radial location, it may be returned to service and the other APRM in that quadrant may be removed from service for test and/or calibration only if no control rod is withdrawn during the calibration and/or test.
- (d) May be bypassed in the startup and refuel positions of the reactor mode switch when the IRM's are onscale.
- (e) This function may be bypassed when the count rate is  $\geq 100$  cps.
- (f) One sensor provides input to each of two instrument channels. Each instrument channel is in a separate trip system.
- (g) Calibrate and/or test prior to startup and normal shutdown. Thereafter test once per week until no longer required.
- (h) The actuation of either or both trip systems will result in a rod block.
- (i) 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 other operable channel in the same Trip System is monitoring that Parameter.

Table 4.6.2h

VACUUM PUMP ISOLATION

Surveillance Requirement

<u>Parameter</u>	<u>Sensor Check</u>	<u>Instrument Channel Test</u>	<u>Instrument Channel Calibration</u>
<u>MECHANICAL VACUUM PUMP</u>			
High Radiation Main Steam Line	Once/shift	Once per 3 months	Once per 3 months

**NOTES FOR TABLES 3.6.2h and 4.6.2h**

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- (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 inoperable status for up to 6 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.

With the number of Operable channels one less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for one trip system, either

1. Place the inoperable channel(s) in the tripped condition within 12 hours.
- or
2. Take the ACTION required by Specification 3.6.2a for that Parameter.

With the number of Operable channels one less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for both trip systems,

1. Place the inoperable channel(s) in one trip system in the tripped condition within one hour.
- and
2. a. Place the inoperable channel(s) in the remaining trip system in the tripped condition within 12 hours.
- or
- b. Take the ACTION required by Specification 3.6.2a for that Parameter.

Table 3.6.2j

**EMERGENCY VENTILATION INITIATION**

**Limiting Condition for Operation**

<u>Parameter</u>	<u>Minimum No. of Tripped or Operable Trip Systems</u>	<u>Minimum No. of Operable Instrument Channels per Operable Trip System</u>	<u>Set Point</u>	<u>Reactor Mode Switch Position in Which Function Must Be Operable</u>			
				Shutdown	Refuel	Startup	Run
(1) High Radiation Reactor Building Ventilation Duct	1	2(d)	≤ 5mr/hr	x	x	x	x
(2) High Radiation Refueling Platform	1	1	≤ 1000mr/hr	(a)	(a)	(a)	(a)

**NOTES FOR TABLES 3.6.2j AND 4.6.2j**

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- (a) This function shall be operable any time that irradiated fuel or the irradiated fuel cask is being handled in the reactor building.
- (b) Once per shift whenever this function is required to be operable.
- (c) Immediately prior to when function is required and once per week thereafter until function is no longer required.
- (d) A channel may be placed in an inoperable status for up to 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same Trip system is monitoring that parameter.

With the number of Operable channels one less than required by the Minimum Number of Operable Instrument Channels for the Operable Trip System, either

- 1) Place the inoperable channel(s) in the tripped condition within 24 hours.
- or
- 2) Take the ACTION required by Specification 3.6.2a for that Parameter.

Table 3.6.2k

**HIGH PRESSURE COOLANT INJECTION**

**Limiting Condition for Operation**

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

Table 4.6.2k

**HIGH PRESSURE COOLANT INJECTION**

**Surveillance Requirement**

<u>Parameter</u>	<u>Sensor Check</u>	<u>Instrument Channel Test</u>	<u>Instrument Channel Calibration</u>
(1) Low Reactor Water Level	Once per day	Once per 3 months <sup>(b)</sup>	Once per 3 months <sup>(b)</sup>
(2) Automatic Turbine Trip	None	Once during each operating cycle	None



**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 6 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.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:

1. For one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the ACTION required by Specification 3.6.2a for that Parameter.
2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.

## **BASES FOR 3.6.2 AND 4.6.2 PROTECTIVE INSTRUMENTATION**

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High Flow-Main Steam Line,  $\pm 1$  psid

High Flow-Emergency Cooling Line,  $\pm 1$  psid

High Area Temperature-Main Steam Line,  $\pm 10$ F

High Area Temperature-Clean-up and Shutdown,  $\pm 6$ F

High Radiation-Main Steam Line, +100% and -50% of set point value

High Radiation-Emergency Cooling System Vent, +100% and -50% of set point

High Radiation-Reactor Building Vent, +100% and -50% of set point

High Radiation-Refueling Platform, +100% and -50% of set point

High Radiation-Offgas Line,  $\pm 50$ % of set point, (Appendix D)\*

Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with NEDC-30851P-A, "Technical Specification Improvement Analyses for BWR Reactor Protection System," and MDE-77-0485, "Technical Specification Improvement Analysis for Nine Mile Point Nuclear Station, Unit 1."

Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with NEDC-30851P-A Suppl2, "Technical Specification Improvement Analyses for BWR Isolation Instrumentation Common to RPS and ECCS Instrumentation," and with NEDC-31677P-A, "Technical Specification Improvement Analyses for BWR Isolation Actuation Instrumentation." Because of local high radiation, testing instrumentation in the area of the main steam line isolation valves can only be done during periods of Station shutdown. These functions include high area temperature isolation and isolation valve position scram.

\* FSAR

## **BASES FOR 3.6.2 AND 4.6.2 PROTECTIVE INSTRUMENTATION (cont'd)**

Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with NEDC-30936P-A, "BWR Owners' Group Technical Specification Improvement Methodology (with Demonstration for BWR ECCS Actuation Instrumentation)," Parts 1 and 2 and RE-003, "Technical Specification Improvement Analysis for the Emergency Core Cooling System Actuation Instrumentation for Nine Mile Point Nuclear Station, Unit 1."

Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with GENE-770-06-1, "Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," as approved by the NRC and documented in the SER (letter to R. D. Binz IV from C. E. Rossi dated July 21, 1992).

Testing of the scram associated with the shutdown position of the mode switch can be done only during periods of Station shutdown since it always involves a scram.

- b. The control rod block functions are provided to prevent excessive control rod withdrawal so that MCPR is maintained greater than the SLCPR. The trip logic for this function is 1 out of n; e.g., any trip on one of the eight APRM's, eight IRM's or four SRM's will result in a rod block. The minimum instrument channel requirements provide sufficient instrumentation to assure the single failure criteria is met. Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with NEDC-30851P-A Suppl 1, "Technical Specification Improvement Analyses for BWR Control Rod Block Instrumentation," and with GENE-770-06-1, "Bases for Changes to Surveillance Test Intervals and Allowed Out-Of-Service Times for Selected Instrumentation Technical Specifications," as approved by the NRC and documented in the SER (letter to R. D. Binz IV from C. E. Rossi dated July 21, 1992).

The APRM rod block trip is flow biased and prevents a significant reduction in MCPR especially during operation at reduced flow. The APRM provides gross core protection; i.e., limits the gross core power increase from withdrawal of control rods in the normal withdrawal sequence. The trips are set so that MCPR is maintained greater than the SLCPR.

The APRM rod block also provides local protection of the core; i.e., the prevention of critical heat flux in a local region of the core, for a single rod withdrawal error from a limiting control rod pattern. The trip point is flow biased. The worst case single control rod withdrawal error has been analyzed and the results show that with the specified trip settings rod withdrawal is blocked before the MCPR reaches the SLCPR, thus allowing adequate margin. Below ~60% power the worst case withdrawal of a single control rod results in a MCPR > SLCPR without rod block action, thus below this level it is not required.

The IRM rod block function provides local as well as gross core protection. The scaling arrangement is such that trip setting is less than a factor of 10 above the indicated level. Analysis of the worst case accident results in rod block action before MCPR approaches the SLCPR.

**BASES FOR 3.6.2 AND 4.6.2 PROTECTIVE INSTRUMENTATION (cont'd)**

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A downscale indication on an APRM or IRM is an indication the instrument has failed or the instrument is not sensitive enough. In either case the instrument will not respond to changes in control rod motion and the control rod motion is prevented. The downscale rod blocks are set at 5 percent of full scale for IRM and 2 percent of full scale for APRM (APRM signal is generated by averaging the output signals from eight LPRM flux monitors).

Table 3.6.11-1

**ACCIDENT MONITORING INSTRUMENTATION**

<u>Parameter</u>	<u>Total Number of Channels</u>	<u>Minimum Number of Operable Sensors or Channels</u>	<u>Action (See Table 3.6.11-2)</u>
(1) Relief Valve Position Indication	2/Valve	1/Valve*	1
(2) Safety Valve Position Indication	2/Valve	1/Valve*	1 (
(3) Reactor Vessel Water Level	2	1*	2
(4) Drywell Pressure Monitor	2	1	4
(5) Suppression Chamber Water Level	2	1*	4
(6) Containment Hydrogen Monitor	2	1	4
(7) Containment High Range Radiation Monitor	2	1	3
(8) Suppression Chamber Water Temperature	2	1	2 (

\* A channel may be placed in an inoperable status for up to 6 hours for required surveillance provided at least one Operable channel is monitoring that Parameter.

Table 4.6.11

**ACCIDENT MONITORING INSTRUMENTATION**

**Surveillance Requirement**

<b><u>Parameter</u></b>	<b><u>Instrument Channel Test</u></b>	<b><u>Instrument Channel Calibration</u></b>
(1) Relief Valve Position Indicator (Primary - Acoustic)	Once per quarter	Once during each major refueling outage
Relief Valve Position Indicator (Backup - Thermocouple)	Once per quarter	Once during each major refueling outage
(2) Safety Valve Position Indicator (Primary - Acoustic)	Once per quarter	Once during each major refueling outage
Safety Valve Position Indicator (Backup - Thermocouple)	Once per quarter	Once during each major refueling outage
(3) Reactor Vessel Water Level	Once per quarter	Once during each major refueling outage
(4) Drywell Pressure Monitor	Once per month	Once during each major refueling outage
(5) Suppression Chamber Water Level Monitor	Once per quarter	Once during each major refueling outage
(6) Containment Hydrogen Monitor	Once per month	Once per quarter
(7) Containment High Range Radiation Monitor	Once per month	Once during each major refueling outage
(8) Suppression Chamber Water Temperature	Once per month	Once during each major refueling outage

## BASES FOR 3.6.11 AND 4.6.11 ACCIDENT MONITORING INSTRUMENTATION

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Accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. This capability is consistent with the recommendations of NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations," and/or NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980 and NUREG 0661, "Safety Evaluation Report Mark I Containment Long Term Program."

The maximum allowable setpoint deviation for the Suppression Chamber Water Level Instrumentation is  $\pm 1.8$  inches.

Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with GENE-770-06-1, "Bases for Changes to Surveillance Test Intervals and Allowed Out-Of-Service Times for Selected Instrumentation Technical Specification" as approved by the NRC and documented in the SER (letter to R. D. Binz IV from C. E. Rossi dated July 21, 1992).



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 139 TO FACILITY OPERATING LICENSE NO. DPR-63  
NIAGARA MOHAWK POWER CORPORATION  
NINE MILE POINT NUCLEAR STATION UNIT NO. 1  
DOCKET NO. 50-220

1.0 INTRODUCTION

By letter dated December 4, 1992, as supplemented February 12, 1993, and February 17, 1993, Niagara Mohawk Power Corporation (the licensee or NMPC) submitted a request for changes to the Nine Mile Point Nuclear Station Unit No. 1 (NMP1), Technical Specifications (TS). The requested changes would revise TS 3.6.2, 4.6.2, 3.6.11, and 4.6.11 and associated Bases to increase the surveillance test intervals and add allowable out-of-service times for various instruments. The licensee stated in its request that the requested changes are consistent with the NRC staff's previous approvals of several General Electric Company (GE) Licensing Topical Reports (LTRs). The licensee's submittal also stated that the proposed out-of-service times are consistent with the guidance provided in NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4." The proposed changes would permit specified instrument channel functional tests to be performed once per 3 months rather than once per week or once per month. The proposed changes would include editorial corrections on TS pages 192, 199, and 210. The February 12, 1993, letter clarified the actions to be taken in the event of a loss of more than one instrument channel in a trip system so that a loss of function will not occur. The February 17, 1993, letter withdrew the original plant specific proprietary reports and affidavits requesting withholding of proprietary information. The February 17, 1993, letter also resubmitted the plant specific proprietary reports and affidavits to more specifically delineate General Electric's proprietary information. Neither the February 12, 1993, letter nor the February 17, 1993, letter change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The licensee has proposed changes to TS 3.6.2 and 4.6.2 (Protective Instrumentation) and TS 3.6.11 and 4.6.11 (Accident Monitoring Instrumentation). The proposed changes are based on the NRC staff's previous approvals of the following GE LTRs:

1. NEDC-30851P-A, "Technical Specification Improvement Analyses for BWR Reactor Protection System," dated March 1988. This LTR was approved by

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PDR ADDCK 05000220  
P PDR



letter and enclosed safety evaluation dated July 15, 1987, from A. C. Thadani (NRC) to T. A. Pickens (BWR Owners Group).

2. NEDC-30851P-A (Supplement 2), "Technical Specification Improvement Analysis for BWR Isolation Instrumentation Common to RPS and ECCS Instrumentation," dated March 1989. This LTR was approved by letter and enclosed safety evaluation dated January 6, 1989, from C. E. Rossi (NRC) to D. N. Grace (BWR Owners Group).
3. NEDC-31677P-A, "Technical Specification Improvement Analysis for BWR Isolation Actuation Instrumentation," dated July 1990. This LTR was approved by letter and enclosed safety evaluation dated June 18, 1990, from C. E. Rossi (NRC) to S. D. Floyd (BWR Owners Group).
4. NEDC-30936P-A, "BWR Owners' Group Technical Specification Improvement Methodology (With Demonstration for BWR ECCS Actuation Instrumentation) Part 1," dated December 1988. This LTR was approved by letter and enclosed safety evaluation dated December 9, 1988, from A. C. Thadani (NRC) to D. N. Grace (BWR Owners Group).
5. NEDC-30936P-A, "BWR Owners' Group Technical Specification Improvement Methodology (With Demonstration for BWR ECCS Actuation Instrumentation) Part 2," dated December 1988. This LTR was approved by letter and enclosed safety evaluation dated December 9, 1988, from C. E. Rossi (NRC) to D. N. Grace (BWR Owners Group).
6. NEDC-30851P-A (Supplement 1), "Technical Specification Improvement Analysis for BWR Control Rod Block Instrumentation," dated October 1988. This LTR was approved by letter and enclosed safety evaluation dated September 22, 1988, from C. E. Rossi (NRC) to D. N. Grace (BWR Owners Group).
7. GENE-770-06-1, "Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," dated February 1991. This LTR was approved by letter and enclosed safety evaluation dated July 21, 1992, from C. E. Rossi (NRC) to R. D. Bing IV (BWR Owners Group).

Each of the above LTRs was prepared and approved on a generic basis with requirements for individual licensees to perform plant-specific evaluations to demonstrate that the LTRs are applicable to plant-specific license amendment requests. NMPC has performed the required plant-specific evaluations for NMP1. These evaluations are discussed below:

1. Appendix L of NEDC-30851P-A identifies NMP1, a GE BWR-2 product line reactor with a Mark I containment, as a participating utility in the development of this LTR. Section 7.4, "Conclusions of Plant Specific Applications," of NEDC-30851P-A concluded that the generic results of this

LTR can be applied to NMP1. Furthermore, NMPC's December 4, 1992, submittal included a copy of GE Report MDE-77-0485 DRF A00-02119-D, April 1985 (Proprietary), "Technical Specification Improvement Analysis for the Reactor Protection System for Nine Mile Point Nuclear Station, Unit 1," which concludes in Section 4, "Summary and Conclusions," that the generic analyses in NEDC-30851P-A are applicable to NMP1. Therefore, we have concluded that NEDC-30851P-A is applicable to NMP1.

2. Appendix A of NEDC-30851P-A (Supplement 2) identifies NMP1 as a participating utility in the development of this LTR. Section 3.4, "BWR-2 Plants," specifically analyzes BWR-2 plants. Therefore, we have concluded that NEDC-30851P-A (Supplement 2) is applicable to NMP1.
3. Appendix E of NEDC-31677P-A identifies NMP1 as a participating utility in the development of this LTR. Section 5.4, "BWR-2 Plants," and Appendix C3, "BWR-2 Isolation Actuation Instrumentation Technical Specification Requirements," specifically analyze BWR-2 plants. Therefore, we have concluded that NEDC-31677P-A is applicable to NMP1.
4. Appendix N of Part 1 of NEDC-30936P-A identifies NMP1 as a participating utility in the development of this LTR. NMPC's December 4, 1992, submittal included a copy of GE Report RE-003 DRF A00-02558E, January 1987 (Proprietary), "Technical Specification Improvement Analysis for the Emergency Core Cooling System Actuation Instrumentation for Nine Mile Point Nuclear Station, Unit 1," which concludes in Section 4, "Summary and Conclusions," that the generic analyses in NEDC-30936P-A, Parts 1 and 2, are applicable to NMP1. Therefore, we have concluded that NEDC-30936P-A, Part 1, is applicable to NMP1.
5. Appendix B of Part 2 of NEDC-30936P-A identifies NMP1 as a participating utility in the development of this LTR. Section 5.3, "Plant Specific Analysis Results of BWR-2 Plants," of NEDC-30936P-A, Part 2, specifically analyzes BWR-2 plants. Furthermore, as noted above, GE Report RE-003 also concludes that the generic analyses in NEDC-30936P-A are applicable to NMP1. Therefore, we have concluded that NEDC-30936P-A, Part 2, is applicable to NMP1.
6. Appendix B of NEDC-30851P-A (Supplement 1) identifies NMP1 as a participating utility in the development of this LTR. Section 4, "Plant Technical Specifications," specifically addresses BWR-2 plants. Therefore, we have concluded that NEDC-30851P-A (Supplement 1) is applicable to NMP1.
7. GENE-770-06-1 identifies application of changes to surveillance test intervals and allowable out-of-service times for selected instrumentation. The instrumentation included in GENE-770-06-1 is either the same or similar instrumentation to that analyzed in the above referenced LTRs. The changes in surveillance test intervals and allowable out-of-service

times covered by GENE-770-06-1 are consistent with the guidance provided in NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4." Therefore, we have concluded that GENE-770-06-1 is applicable to NMP1.

Each of the above LTRs also contain requirements for licensees to demonstrate that the drift characteristics for the applicable instrumentation are bounded by the assumptions used in the LTRs when the functional test interval is extended from once per month to once per 3 months. In response to these requirements, the NRC staff noted that the proposed changes in NMP1 surveillance test intervals are applicable only to the Instrument Channel Tests. For NMP1, Instrument Channel Tests are defined in TS Definition 1.6 as: "Instrument channel test means injection of a simulated signal into the channel to verify its proper response including, where applicable, alarm and/or trip initiating action." During our review of the proposed changes, the NRC staff determined that during performance of Instrument Channel Tests at NMP1, the instrument functions, e.g., alarms and/or trips, are verified but NMPC does not verify instrument set points during these tests. Instrument set points are verified during Instrument Channel Calibrations which the current TS require to be performed on a quarterly frequency. The proposed license amendment does not propose any changes in the frequency for performing the Instrument Channel Calibration surveillance tests. Therefore, in accordance with the clarification regarding instrument drift allowances provided in a letter dated April 27, 1988, from C. E. Rossi (NRC) to R. F. Janecek (BWR Owners Group), no further action on this issue is required since the surveillance test intervals for performing Instrument Channel Calibrations are unchanged.

Our evaluations of specific proposed changes are as follows:

Tables 3.6.2a and 4.6.2a - Instrumentation That Initiates Scram

Note (o) of current TS Tables 3.6.2a and 4.6.2a provides that an affected instrument channel may be placed in an inoperable status for up to 2 hours (up to 5 hours for the High Radiation Main-Steam Line Instrument Channel Calibration surveillance) 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. The proposed change would revise Note (o) to read:

- (o) A channel may be placed in an inoperable status for up to 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same trip system is monitoring that parameter.

With one channel required by Table 3.6.2a inoperable in one or more Parameters, place the inoperable channel and/or that trip system in the tripped condition\* within 12 hours.

With two or more channels required by Table 3.6.2a inoperable in one or more Parameters:

1. Within 1 hour, verify sufficient channels remain Operable or tripped\* to maintain trip capability for the Parameter, and
2. Within 6 hours, place the inoperable channel(s) in one trip system and/or that trip system\*\* in the tripped condition\*, and
3. Within 12 hours, restore the inoperable channels in the other trip system to an Operable status or tripped\*.

Otherwise, take the ACTION required by Specification 3.6.2a for that Parameter.

\* An inoperable channel or trip system need not be placed in the tripped condition where this would cause the Trip Function to occur. In these cases, if the inoperable channel is not restored to Operable status within the required time, the ACTION required by Specification 3.6.2a for the parameter shall be taken.

\*\* This ACTION applies to that trip system with the most inoperable channels; if both trip systems have the same number of inoperable channels, the ACTION can be applied to either trip system.

The proposed change would increase the allowable out-of-service time for performing required surveillances for the affected instrument channels (Parameters (2) High Reactor Pressure, (3) High Drywell Pressure, (4) Low Reactor Water Level, (5) High Water Level Scram Discharge Volume, (6) Main-Steam-Line Isolation Valve Position, (9)(a)(i) IRM Upscale, (9)(a)(ii) IRM Inoperative, (9)(b)(i) APRM Upscale, (9)(b)(ii) APRM Inoperative, (9)(b)(iii) APRM Downscale, (10) Turbine Stop Valve Closure, and (11) Generator Load Rejection) from 2 hours to 6 hours. The allowable out-of-service time for Parameter (7) High Radiation Main-Steam-Line would be increased from 5 hours to 6 hours. These proposed changes in allowable out-of-service times are consistent with the provisions of NEDC-30851P-A and are, therefore, acceptable.

The proposed change to Note (o) includes actions to be taken when one or more channels are inoperable. The actions to be taken if channels are inoperable are consistent with current NRC staff positions and with the guidance provided in NUREG-1433, ensure that a loss of function will not exist if two or more channels are inoperable, and are, therefore, acceptable.

The proposed change would correct an error of omission on TS page 192. The word "Upscale" would be added to Parameter (9)(a)(i) in Table 3.6.2a. This change corrects an editorial error of omission and is, therefore, acceptable.

The proposed changes in Table 4.6.2a would decrease the Instrument Channel Test surveillance frequency of Parameter (1), Manual Scram, from once per 3 months to once per week and would increase the Instrument Channel Test surveillance frequencies of the following Parameters from once per week or once per month to once per 3 months:

- a. High Reactor Pressure - Parameter (2)
- b. High Drywell Pressure - Parameter (3)
- c. Low Reactor Water Level - Parameter (4)
- d. High Water Level Scram Discharge Volume - Parameter (5)
- e. Main-Steam-Line Isolation Valve Position - Parameter (6)
- f. High Radiation Main-Steam-Line - Parameter (7)
- g. APRM Upscale - Parameter (9)(b)(i)  
APRM Inoperative - Parameter (9)(b)(ii)  
APRM Downscale - Parameter (9)(b)(iii)
- h. Generator Load Rejection - Parameter (11)

These proposed changes in surveillance test frequencies are consistent with NEDC-30851P-A and are, therefore, acceptable.

Tables 3.6.2b and 4.6.2b - Instrumentation That Initiates Primary Coolant System or Containment Isolation

Note (f) of current TS Tables 3.6.2b and 4.6.2b provides that an affected instrument channel may be placed in an inoperable status for up to 2 hours (up to 5 hours for the High Radiation Main-Steam Line Instrument Channel Calibration surveillance) 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. The proposed change would revise Note (f) and add Note (g) to Tables 3.6.2b and 4.6.2b to read:

- (f) A channel may be placed in an inoperable status for up to 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same Trip System is monitoring that Parameter.

With the number of Operable Channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for one trip system, either

- 1. Place the inoperable channel(s) in the tripped condition within
  - a. 12 hours for Parameters common to SCRAM Instrumentation, and
  - b. 24 hours for Parameters not common to SCRAM Instrumentation.

or

2. Take the ACTION required by Specification 3.6.2a for that Parameter.

With the number of Operable Channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for both trip systems,

1. Place the inoperable channel(s) in one trip system in the tripped condition within 1 hour,

and

2. a. Place the inoperable channel(s) in the remaining trip system in the tripped condition within
  - (1) 12 hours for Parameters common to SCRAM Instrumentation, and
  - (2) 24 hours for Parameters not common to SCRAM Instrumentation.

or

- b. take the ACTION required by Specification 3.6.2a for that Parameter.

- (g) A channel may be placed in an inoperable status for up to 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same Trip System is monitoring that Parameter.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels for the Operable Trip System, either

1. Place the inoperable channel(s) in the tripped condition within 24 hours.

or

2. Take the ACTION required by Specification 3.6.2a for that Parameter.

Revised Note (f) and added Note (g) would increase or provide allowable out-of-service times for performing required surveillances for the affected instrument channels (Parameters (1) Low-Low Reactor Water Level, (3) High Steam Flow Main-Steam Line, (5) Low Reactor Pressure, (6) Low-Low-Low Condenser Vacuum, (7) High Temperature Main Steam Line Tunnel, (8) High Area Temperature, (10) Low-Low Reactor Water, and (11) High Drywell Pressure) from 2 hours to 6 hours. The allowable out-of-service time for Parameter (4) High Radiation Main Steam Line would be increased from 5 hours to 6 hours. These

proposed changes in allowable out-of-service times are consistent with the provisions of NEDC-30851P-A (Supplement 2) and NEDC-31677P-A and are, therefore, acceptable.

The proposed change to Note (f) and the addition of Note (g) specify actions to be taken when one or more channels are inoperable. The actions to be taken if channels are inoperable are consistent with current NRC staff positions and with the guidance provided in NUREG-1433, ensure that a loss of function will not exist if two or more channels are inoperable, and are, therefore, acceptable.

The proposed change would make two editorial changes in Table 3.6.2b. The units "°F" would be added in the Set Point column to Parameters (8) and (9) High Area Temperature. These changes are purely editorial in nature, do not change any requirements, and are, therefore, acceptable.

The proposed changes in Table 4.6.2b would increase the Instrument Channel Test surveillance frequencies of the following Parameters from once per week or once per month to once per 3 months:

a. PRIMARY COOLANT ISOLATION

- 1) Low-Low Reactor Water Level - Parameter (1)

b. MAIN-STEAM-LINE ISOLATION

- 1) High Steam Flow Main Steam Line - Parameter (3)
- 2) High Radiation Main Steam Line - Parameter (4)
- 3) Low Reactor Pressure - Parameter (5)

c. CONTAINMENT ISOLATION

- 1) Low-Low Reactor Water Level - Parameter (10)
- 2) High Drywell Pressure - Parameter (11)

These proposed changes in surveillance test frequencies are consistent with NEDC-30851P-A (Supplement 2) and NEDC-31677P-A and are, therefore, acceptable.

Tables 3.6.2c and 4.6.2c - Instrumentation That Initiates Or Isolates Emergency Cooling

Note (d) of current TS Tables 3.6.2c and 4.6.2c provides that an affected instrument channel (Parameters (1) High-Reactor Pressure, (2) Low-Low Reactor Water Level, and (3) High Steam Flow Emergency Cooling System) 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. The proposed change would revise the 2 hours to 6 hours. The proposed change would also add Notes (e) and (f) to TS Tables 3.6.2c and 4.6.2c to read:

- (e) With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:
    - 1. For one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the action required by Specification 3.6.2a for that Parameter.
    - 2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.
  
  - (f) With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for one trip system, either
    - 1. Place the inoperable channel(s) in the tripped condition within 24 hours.
    - or
    - 2. Take the ACTION required by Specification 3.6.2a for that Parameter.
- With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for both trip systems,
- 1. Place the inoperable channel(s) in one trip system in the tripped condition within one hour
- and
- 2. a. Place the inoperable channel(s) in the remaining trip system in the tripped condition within 24 hours.
  - or
  - b. Take the ACTION required by Specification 3.6.2a for that Parameter.

The revision to Note (d) would increase the allowable out-of-service times for performing required surveillances for the affected instrument channels (Parameters (1) High Reactor Pressure, (2) Low-Low Reactor Water Level, and



(3) High Steam Flow Emergency Cooling System) from 2 hours to 6 hours. The proposed changes in allowable out-of-service times are consistent with the provisions of NEDC-30936P-A, NEDC-31677P-A, and RE-003 and are, therefore, acceptable.

The proposed addition of Notes (e) and (f) would specify actions to be taken when one or more channels are inoperable. The actions to be taken if channels are inoperable are consistent with current NRC staff positions and with the guidance provided in NUREG-1433, ensure that a loss of function will not exist if two or more channels are inoperable, and are, therefore, acceptable.

The proposed changes in Table 4.6.2c would increase the Instrument Channel Test surveillance frequencies of the following Parameters from once per month to once per 3 months:

EMERGENCY COOLING INITIATION

- 1) High Reactor Pressure - Parameter (1)
- 2) Low-Low Reactor Water Level - Parameter (2)

The proposed changes in surveillance test frequencies are consistent with NEDC-30936P-A (Parts 1 and 2) and NEDC-31677P-A and are, therefore, acceptable.

Tables 3.6.2d and 4.6.2d - Instrumentation That Initiates Core Spray

Tables 3.6.2d and 4.6.2d of the current TS contain a Note (f) on TS page 210 that was applicable only during the spring 1986 refueling outage. The proposed change would delete this note. Deletion of this note is purely an administrative change since the note is no longer applicable and therefore, its deletion is acceptable.

Note (g) of current TS Tables 3.6.2d and 4.6.2d provides that an affected instrument channel (Parameter (1) High Drywell Pressure, (2) Low-Low Reactor Water Level, and (3) Reactor Pressure and either (1) or (2) above) 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. The proposed change would revise the 2 hours to 6 hours, redesignate Note (g) as Note (f), and expand the redesignated Note (f) to read:

- (f) A channel may be placed in an inoperable status for up to 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same Trip System is monitoring that parameter.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:

1. With one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the ACTION required by Specification 3.6.2a for that Parameter.
2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.

The revision to redesignated Note (f) to increase the allowable out-of-service times for performing required surveillances for the affected instrument channels from 2 hours to 6 hours is consistent with the provisions of NEDC-30936P-A, Part 2, and is, therefore, acceptable.

The proposed addition to redesignated Note (f) would specify actions to be taken when one or more channels are inoperable. The actions to be taken if channels are inoperable are consistent with current NRC staff positions and with the guidance provided in NUREG-1433, ensure that a loss of function will not exist if two or more channels are inoperable, and are, therefore, acceptable.

The proposed changes in Table 4.6.2d would increase the Instrument Channel Test surveillance frequencies of the following Parameters from once per month to once per 3 months:

a. START CORE SPRAY PUMPS

- 1) High Drywell Pressure - Parameter (1)
- 2) Low-Low Reactor Water Level - Parameter (2)

b. OPEN CORE SPRAY DISCHARGE VALVES

- 1) Reactor Pressure and either (1) or (2) above - Parameter (3)

The proposed changes in surveillance test frequencies are consistent with NEDC-30936P-A (Parts 1 and 2) and RE-003 and are, therefore, acceptable.

Tables 3.6.2e and 4.6.2e - Instrumentation That Initiates Containment Spray

Note (c) of current TS Tables 3.6.2e and 4.6.2e provides that an affected instrument channel (Parameter (1)a. High Drywell Pressure and b. Low-Low Reactor Water Level) 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. The proposed change would revise the 2 hours to 6 hours and expand Note (c) to read:

- (c) A channel may be placed in an inoperable status for up to 6 hours for required surveillances without placing the Trip system in the tripped condition provided at least one Operable Instrument Channel in the same Trip System is monitoring that parameter.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:

1. With one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the ACTION required by Specification 3.6.2a for that Parameter.
2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.

The revision to Note (c) to increase the allowable out-of-service time for performing required surveillances for the affected instrument channels from 2 hours to 6 hours is consistent with the provisions of GENE-770-06-1 and is, therefore, acceptable.

The proposed addition to Note (c) would specify actions to be taken when one or more channels are inoperable. The actions to be taken if channels are inoperable are consistent with current NRC staff positions and with the guidance provided in NUREG-1433, ensure that a loss of function will not exist if two or more channels are inoperable, and are, therefore, acceptable.

The proposed changes in Table 4.6.2e would increase the Instrument Channel Test surveillance frequencies of the following Parameters from once per month to once per 3 months:

INITIATES CONTAINMENT SPRAY

- 1) High Drywell Pressure - Parameter (1)a.
- 2) Low-Low Reactor Water Level - Parameter (1)b.

The proposed changes in surveillance test frequencies are consistent with GENE-770-06-1 and are, therefore, acceptable.

Tables 3.6.2f and 4.6.2f - Instrumentation That Initiates Auto Depressurization

Note (d) of current TS Tables 3.6.2f and 4.6.2f provides that an affected instrument channel (Parameter (1) a. Low-Low-Low Reactor Water Level and b. High Drywell Pressure) 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. The proposed change would revise the 2 hours to 6 hours and expand Note (d) to read:

- (d) A channel may be placed in an inoperable status for up to 6 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.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:

1. With one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the ACTION required by Specification 3.6.2a for that Parameter.
2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.

The revision to Note (d) to increase the allowable out-of-service time for performing required surveillances for the affected instrument channels from 2 hours to 6 hours is consistent with the provisions of NEDC-30936P-A and is, therefore, acceptable.

The proposed addition to Note (d) would specify actions to be taken when one or more channels are inoperable. The actions to be taken if one or more channels are inoperable are consistent with current NRC staff positions and with the guidance provided in NUREG-1433, ensure that a loss of function will not exist if two or more channels are inoperable, and are, therefore, acceptable.

The proposed changes in Table 4.6.2f would increase the Instrument Channel Test surveillance frequencies of the following Parameters from once per month to once per 3 months:

INITIATES AUTO DEPRESSURIZATION

- 1) Low-Low-Low Reactor Water - Parameter (1)a.
- 2) High Drywell Pressure - Parameter (1)b.

The proposed changes in surveillance test frequencies are consistent with NEDC-30936P-A (Parts 1 and 2) and RE-003 and are, therefore, acceptable.

Tables 3.6.2g and 4.6.2g - Instrumentation That Initiates Control Rod Withdrawal Block

The proposed change would add Note (i) to TS Tables 3.6.2g and 4.6.2g. Note (i) would permit an affected instrument channel (Parameter (1) SRM a. Detector not in Startup Position, b. Inoperative, c. Upscale, (2) IRM a. Detector not in Startup Position, b. Inoperative, c. Downscale, d. Upscale, and (3) APRM a. Inoperative, b. Upscale (Biased By Recirculation Flow), c. Downscale) to be placed in an inoperable status for up to 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one other operable channel in the same Trip System is monitoring that Parameter. The proposed addition of Note (i) is consistent with NEDC-30851P-A (Supplement 1) and GENE-770-06-1 and is, therefore, acceptable.

The proposed changes in Table 4.6.2g would increase the Instrument Channel Test surveillance frequencies of the following Parameters from once per month to once per 3 months:

a. APRM CONTROL ROD WITHDRAWAL BLOCK

- 1) Inoperative - Parameter (3)a.
- 2) Upscale (Biased by Recirculation Flow) - Parameter (3)b.
- 3) Downscale - Parameter (3)c.

b. RECIRCULATION FLOW CONTROL ROD WITHDRAWAL BLOCK

- 1) Comparator Off Normal - Parameter (4)a.
- 2) Flow Unit Inoperative - Parameter (4)b.
- 3) Flow Unit Upscale - Parameter (4)c.

The proposed changes in surveillance test frequencies are consistent with NEDC-30851P-A (Supplement 1) and GENE-770-06-1 and are, therefore, acceptable.

Tables 3.6.2h and 4.6.2h - Vacuum Pump Isolation

The proposed change would add Note (b) to TS Tables 3.6.2h and 4.6.2h. Proposed Note (b) would read as follows:

- (b) A channel may be placed in an inoperable status for up to 6 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.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for one trip system, either:

1. Place the inoperable channel(s) in the tripped condition within 12 hours.

or

2. Take the ACTION required by Specification 3.6.2a for that Parameter.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement for both trip systems,

1. Place the inoperable channel(s) in one trip system in the tripped condition within one hour.

and

2. a. Place the inoperable channel(s) in the remaining trip system in the tripped condition within 12 hours.  
or  
b. Take the ACTION required by Specification 3.6.2a for that Parameter.

Note (b) would permit an affected instrument channel (Parameter - High Radiation Main Steam Line) to be placed in an inoperable status for up to 6 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. Note (b) would also provide the actions to be taken if one or more channels are inoperable. Permission to place an instrument channel in an inoperable status for up to 6 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 is consistent with NEDC-31677P-A and is, therefore, acceptable. The actions to be taken if one or more channels are inoperable are consistent with current NRC staff positions and with the guidance provided in NUREG-1433, ensure that a loss of function will not exist if two or more channels are inoperable, and are, therefore, acceptable.

The proposed changes in Table 4.6.2h would increase the Instrument Channel Test surveillance frequency for the High Radiation Main Steam Line parameter from once per week to once per 3 months. This proposed change is consistent with NEDC-31677P-A and is, therefore, acceptable.

#### Tables 3.6.2j and 4.6.2j - Emergency Ventilation Initiation

The proposed change would add Note (d) to TS Tables 3.6.2j and 4.6.2j. Proposed Note (d) would read as follows:

- (d) A channel may be placed in an inoperable status for up to 6 hours for required surveillances without placing the Trip System in the tripped condition provided at least one Operable Instrument Channel in the same Trip system is monitoring that parameter.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels for the Operable Trip System, either

- 1) Place the inoperable channel(s) in the tripped condition within 24 hours.
- or
- 2) Take the ACTION required by Specification 3.6.2a for that Parameter.

Note (d) would permit an affected instrument channel (Parameter (1) High Radiation Reactor Building Ventilation Duct) to be placed in an inoperable status for up to 6 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. Note (b) would also provide the actions to be taken if one or more channels are inoperable. Permission to place an instrument channel in an inoperable status for up to 6 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 is consistent with NEDC-31677P-A and is, therefore, acceptable. The actions to be taken if one or more channels are inoperable are consistent with current NRC staff positions and with the guidance provided in NUREG-1433, ensure that a loss of function will not exist if two or more channels are inoperable, and are, therefore, acceptable.

Tables 3.6.2k and 4.6.2k - High Pressure Coolant Injection

Note (c) of current TS Tables 3.6.2k and 4.6.2k provides that an affected instrument channel (Parameter (1) Low Reactor Water Level) 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. The proposed change would revise the 2 hours to 6 hours and expand Note (c) to read:

- (c) A channel may be placed in an inoperable status for up to 6 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.

With the number of Operable channels less than required by the Minimum Number of Operable Instrument Channels per Operable Trip System requirement:

1. For one channel inoperable, place the inoperable channel in the tripped condition within 24 hours or take the ACTION required by Specification 3.6.2a for that Parameter.
2. With more than one channel inoperable, take the ACTION required by Specification 3.6.2a for that Parameter.

The revision to Note (c) to increase the allowable out-of-service time for performing required surveillances for the affected instrument channels from 2 hours to 6 hours is consistent with the provisions of NEDC-30936P-A (Parts 1 and 2) and RE-003 and is, therefore, acceptable.

The proposed addition to Note (c) would specify actions to be taken when one or more channels are inoperable. The actions to be taken if one or more channels are inoperable are consistent with current NRC staff positions and with the guidance provided in NUREG-1433, ensure that a loss of function will not exist if two or more channels are inoperable, and are, therefore, acceptable.

The proposed change in Table 4.6.2k would increase the Instrument Channel Test surveillance frequency for the Low Reactor Water Level parameter from once per month to once per 3 months. This proposed change is consistent with NEDC-30936P-A (Parts 1 and 2) and RE-003 and is, therefore, acceptable.

#### Tables 3.6.11-1 and 4.6.11 - Accident Monitoring Instrumentation

The proposed change would add footnote (\*) to Table 3.6.11-1. Footnote (\*) would permit one channel of the affected instrument channels (Parameters (1) Relief Valve Position Indication, (2) Safety Valve Position Indication, (3) Reactor Vessel Water Level, and (5) Suppression Chamber Water Level) to be placed in an inoperable status for up to 6 hours for required surveillances provided at least one operable channel is monitoring that Parameter. These proposed changes are consistent with GENE-770-06-1 and are, therefore, acceptable.

The proposed changes in Table 4.6.11 would increase the Instrument Channel Test surveillance frequencies of the following Parameters from once per month to once per quarter.

- a. Relief Valve Position Indication (Primary and Backup) - Parameter (1)
- b. Safety Valve Position Indication (Primary and Backup) - Parameter (2)
- c. Reactor Vessel Water Level - Parameter (3)
- d. Suppression Chamber Water Level - Parameter (5)



The proposed changes in surveillance test frequencies are consistent with GENE-770-06-1 and are, therefore, acceptable.

The proposed change would also modify the Bases for TS 3.6.2, 4.6.2, 3.6.11, and 4.6.11 to reference the GE LTRs which justify the above proposed changes. The NRC staff offers no objection to the proposed Bases changes.

Proposed TS pages 191 and 196a were modified to incorporate changes approved by License Amendment No. 138 which was issued on January 8, 1993.

NMPC included TS pages 211, 213, 218, 219, and 224 in the December 4, 1992, submittal. However, no changes were proposed on these pages; therefore, they are not included in this amendment.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and surveillance requirements. The NRC staff has determined that the 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 the amendment involves no significant hazards consideration, and there has been no public comment on such finding (57 FR 61117). Accordingly, the 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 the amendment.

### 5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: D. Brinkman

Date: February 24, 1993

February 24, 1993

Docket No. 50-220

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

Dear Mr. Sylvia:

SUBJECT: ISSUANCE OF AMENDMENT FOR NINE MILE POINT NUCLEAR STATION UNIT NO. 1  
(TAC NO. M85109)

The Commission has issued the enclosed Amendment No. 139 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station Unit No. 1 (NMP-1). The amendment consists of changes to the Technical Specifications (TS) in response to your application transmitted by letter dated December 4, 1992, as supplemented February 12, 1993, and February 17, 1993.

The amendment revises TS 3.6.2, 4.6.2, 3.6.11, and 4.6.11 and associated Bases to increase the surveillance test intervals and add allowable out-of-service times for various instruments. The changes are in accordance with General Electric Company Licensing Topical Reports which have been previously reviewed and approved by the NRC staff. The allowable out-of-service times are consistent with the provisions of NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4." The changes permit specified instrument channel functional tests to be performed once per 3 months rather than once per week or once per month. The amendment also makes editorial corrections on TS pages 192, 199, and 210.

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

Sincerely,  
Original signed by:  
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. 139 to DPR-63
- 2. Safety Evaluation

cc w/enclosures:

See next page

Distribution:

See next page

\*See previous concurrence

PDI-1:LA	PDI-1:PM <i>D/S</i>	OTSB	HICB	OGC <i>AB</i>	PDI-1:D
CVogan <i>W</i>	DBrinkman <i>smm</i>	*CGrimes	*JWermeil	<i>R. Bachmann</i>	RACapra <i>rw</i>
<i>2/18/93</i>	<i>2/18/93</i>	02/12/93	02/11/93	<i>2/18/93</i>	<i>2/24/93</i>

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