Niagara Mohawk®

February 11, 2000
NMP2L 1933

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

RE: Docket No. 50-410
LER 00-01

Gentlemen:

In accordance with 10 CFR50.73(a)(2)(i)(B), we are submitting LER 00-01, "Missed Response Time Testing of the High Pressure Core Spray Initiation Signals and the Main Steam Flow Channels as Required by Technical Specifications."

Very truly yours,

Michael F. Peckham
Plant Manager - NMP2

MFP/CES/cr
Attachment

xc: Mr. H. J. Miller, Regional Administrator, Region I
Mr. G. K. Hunegs, NRC Senior Resident Inspector
Records Management

IE22

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES:

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Nine Mile Point Unit 2	05000410	01 OF 04

TITLE (4) **Missed Response Time testing of the High Pressure Core Spray Initiation Signals and the Main Steam Flow Channels as Required by Technical Specifications**

EVENT DATE (5)			LER NUMBER (6)					REPORT DATE(7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR		SEQUENTIAL NUMBER		REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
01	12	00	00		01		00	02	11	00	N/A	
											N/A	

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check one or more of the following)* (11)

POWER LEVEL (10)				
100	☐ 20.2201(b)	☐ 20.2203(a)(2)(v)	☒ 50.73(a)(2)(i)	☐ 50.73(a)(2)(viii)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(ii)	☐ 50.73(a)(2)(x)
	☐ 20.2203(a)(2)(i)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(iii)	☐ 73.71
	☐ 20.2203(a)(2)(ii)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(iv)	☐ OTHER *(Specify in Abstract below and in Text, NRC Form 366A)*
	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(1)	☐ 50.73(a)(2)(v)	
	☐ 20.2203(a)(2)(iv)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Mark Schimmel - Manager Work Control/Outage	(315) 349-4220

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO EPIX		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
☐ YES *(If yes, complete EXPECTED SUBMISSION DATE)*	☒ NO				

ABSTRACT *(Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines)* (16)

On January 12, 2000, while at 100 percent power, Niagara Mohawk Power Corporation identified that response time testing for the high pressure core spray initiation signals (from high drywell pressure and low reactor water level) and the main steam flow channels were not being tested within the frequency required by Technical Specifications Surveillance Requirements 4.3.2.3 and 4.3.3.3.

The cause was a lack of standardized guidance on the philosophy and methodology for maintaining and changing the surveillance test database.

The high pressure core spray system and the main steam line flow channels were declared inoperable until the required channels were satisfactorily tested. All response time testing surveillance frequencies were reviewed. Procedural guidance on the methodology for establishing the coding frequency in the surveillance test database will be issued, and all procedures with variable or staggered type frequency codes will be reviewed for proper database entry.

I. DESCRIPTION OF EVENT

On January 12, 2000, while at 100 percent power, Niagara Mohawk Power Corporation (NMPC) identified that response time testing for the high pressure core spray initiation signals from high drywell pressure and low reactor water level were not being tested within the frequency required by Technical Specifications 4.3.3.3. Technical Specification Surveillance Requirement 4.3.3.3 requires response time testing of each required trip function to be tested at least once per 18 months, such that all channels are tested at least once per N times 18 months, where N is the total number of redundant channels in a specific trip system.

NMPC identified that the response time testing for the high pressure core spray initiation signals had not been performed within the required surveillance interval. The last surveillances were completed on all channels in March 1997. In April 1997, the surveillance test database was changed from an 18 month frequency to a 36-month frequency. The logic for changing the frequency code was that at the 18-month point, half of the channels would be tested and then the other half of the channels would be tested 18 months from the first half, as required by Technical Specifications. Changing the frequency resulted in missing the 18-month staggered time periodicity of Technical Specifications because all of the channels were tested in March 1997, while maintaining a 36-month periodicity.

To determine the extent of condition, NMPC reviewed all response time testing surveillances, and identified that the main steam flow channels were not being tested as required by Technical Specification 4.3.2.3. Technical Specification 4.3.2.3 requires the same response time frequency as Technical Specification 4.3.3.3. All channels were tested in December 1997. In October 1996, the surveillance test database was changed from an 18-month frequency to a 36-month frequency using the same logic as stated above. Again, the 18-month staggered time periodicity of Technical Specifications was missed, because all of the channels were tested in December 1997, while maintaining a 36-month periodicity.

II. CAUSE OF EVENT

The cause for the missed surveillances for the high pressure core spray system initiation signals and the main steam flow channels was inadequate management expectations and guidance for maintaining and changing the surveillance test database. There was no standardized guidance to establish the philosophy and methodology for maintaining and changing the surveillance test database. Contributing to the cause was inadequate corrective actions from Nine Mile Point Unit 1 Licensee Event Report 94-03 that involved not maintaining the surveillance test database.

III. ANALYSIS OF EVENT

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B), "Any operation or condition prohibited by the plant's Technical Specifications." Technical Specification Surveillance Requirements 4.3.2.3 and 4.3.3.3 require response time testing of each required trip function or emergency core cooling system to be tested at least once per 18 months, such that all channels are tested at least once per N times 18 months, where N is the total number of redundant channels in a specific trip system. The Technical Specification surveillance requires half of the channels be tested every 18 months on a staggered frequency; this requirement was missed for half of the channels.

After the identification of the missed testing, the required channels were satisfactorily tested, demonstrating the channels were able to perform their safety function.

NMPC performed a probabilistic risk analysis and determined that missing both 18 month staggered frequencies is non-risk significant.

Based on the information provided above, the failure to perform the Technical Specification surveillance requirements for the high pressure core spray initiation signal and the main steam line flow channels did not adversely affect the health and safety of the general public or plant personnel.

IV. CORRECTIVE ACTIONS

1. NMPC declared the high pressure core spray system and the main steal line flow channels inoperable until the required surveillances were performed.

2. NMPC reviewed all response time testing surveillance procedures for the correct surveillance test database entry, and only identified the two conditions documented in this license event report.

3. Procedure GAP-PSH-02, "Preventive Maintenance and Surveillance Test Database," will be revised to establish consistent methodology for coding frequency of the surveillance test database, to provide guidance to personnel for reviewing and processing database changes, and to clarify the requirements of the independent technical review and verification of database changes by March 2, 2000.

4. All non-response time test procedures with variable or staggered type frequency codes will be reviewed for proper database entry and automatic generation in accordance with applicable references by April 14, 2000.

V. ADDITIONAL INFORMATION

A. Failed components: none

B. Previous similar events:

- Nine Mile Point Unit 1 Licensee Event Report 94-03 (Missed Technical Specification Surveillance Caused By Inadequate Change Management) reported a deficiency with a missed Technical Specification surveillance requirement caused by the failure to maintain the surveillance test database. Licensee Event Report 94-03 corrective actions failed to prevent this occurrence.

- Licensee Event Report 97-01 (Technical Specification Violation Caused by Inadequate Response Time Testing of High Pressure Core Spray Actuation Instrumentation) reported a deficiency with response time testing. The cause of the inadequate response time testing was a 1993 evaluation that incorrectly concluded certain testing was not required. The cause of Licensee Event Report 97-01 is different than the cause of this licensee event report (00-01); therefore, the corrective actions from Licensee Event Report 97-01 would not have identified or prevented the surveillance test database error.

C. Identification of components referred to in this licensee event report:

Components	IEEE 803A Function	IEEE 805 System ID
High Pressure Core Spray System	N/A	BG
Main Steam System	N/A	SB
Flow Channel	CHA	SB
Trip Channel	CHA	BG/SB