NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Nine Mile Point Unit #1	0 5 0 0 0 2 2 0	1 OF 0 4

TITLE (4)
Completion of Reactor Shutdown due to Inoperable Electromatic Relief Valves

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)
										0 5 0 0 0
0 6	1 7	8 4	8 4	— 0 1 4	— 0 0	0 7	1 7	8 4		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 1 2	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Robert Randall, Supervisor Technical Services	3 1 5 — 3 4 9 - 2 4 4 5

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
X	S B	R V	D 2 4 3	Y		X	S B	R V	D 2 4 3	Y	
X	S B	R V	D 2 4 3	Y		X	S B	R V	D 2 4 3	Y	

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

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

ABSTRACT

During startup on June 17, 1984 (after the recently completed reactor shutdown, which occurred on June 14, 1984 and was reported in LER 84-13), cyclic surveillance test N1-ST-C2, "Manual Opening of the Solenoid-Actuated Pressure Relief Valves and Flow Verification," was being performed on all six of the plant's solenoid actuated pressure relief valves. These relief valves recently had maintenance performed on them after they initially failed the surveillance test on June 14, 1984. During this second test, at approximately 0625 hrs, one relief valve (#121) failed to close and three (#112, 113, and 123) exhibited seat leakage after successful testing. The manual blocking valve for #121 was closed to limit reactor blow down. A reactor shutdown was completed in accordance with the plant's technical specifications immediately after the event occurred. Work Requests were issued to perform necessary maintenance on the relief valves to restore them to an operable status. While performing maintenance on the four valves (#112, 113, 121, and 123) material was found in the main valve seats and pilot valve guide openings. Based on this, a decision was made to clean and overhaul all six pilot and main valves. The valves were restored to an operable status and successfully tested on June 22, 1984.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Nine Mile Point Unit #1	0 5 0 0 0 2 2 0	8 4	— 0 1 4	— 0 0	0 2 OF 0 4

TEXT (If more space is required, use additional NRC Form 366A's) (17)

TEXT

During startup on June 17, 1984, cyclic surveillance test N1-ST-C2, "Manual Opening of the Solenoid-Actuated Pressure Relief Valves and Flow Verification," was being performed on all six of the plant's main steam line solenoid actuated relief valves. (This test was initially performed on June 14, 1984, and three of the four relief valves tested on that date failed. LER 84-13 reported this event.) These relief valves had maintenance performed on them to make them operable after the initial event occurred. During this test, at approximately 0625 hrs on 6/17/84, relief valve 121 stuck in the open position and seat leakage was detected on relief valves 111, 112, 113, 122, and 123, after successful testing. Subsequently, all six electromatic relief and pilot valves were removed, completely disassembled, cleaned, and refurbished. During cleaning, material was found to be plugging the pilot valve guide openings and also evident on seating surfaces of the main valves. The material lodging in the seat area was suspected as having caused the seat leakage associated with these valves. Material which plugged the pilot valve guide openings on relief valve 121 was suspected as having caused relief valve 121 to stick open when tested. All six valves were reinstalled and successfully passed a third surveillance test performed on June 22, 1984.

ASSESSMENT OF POTENTIAL SAFETY CONSEQUENCES

The testing of solenoid actuated relief valves is conducted individually, at low power under controlled conditions with ready access to the normally inaccessable primary containment. Under these conditions, failure of a valve to open or failure of a valve to close poses no threat to the safety of the plant. Technical Specifications require this testing once per operating cycle, and station policy in general requires this testing following maintenance activities on these valves. Therefore, station operation with valves inoperable due to maintenance activities is unlikely.

The function of these valves is twofold. First, to limit reactor pressure to reduce the challenges to the primary code safety valves on an overpressure event. Technical Specifications require five of the six valves to operate for this purpose. As a result of the testing on 6/17/84 when all six valves opened upon testing, this function would have been served.

The second function is to blow down the reactor pressure to allow core spray injection during a small break LOCA. Only three valves (with redundancy) are required for this function. The valve sticking open is of no consequence since in this scenario the valves are never given a close signal.

Based on these results, there were no actual adverse consequences from this event and the potential consequences are within the design basis of the plant.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

CORRECTIVE ACTION

A reactor shutdown was completed in compliance with the plant's Technical Specifications. All six electromatic relief and pilot valves were removed, cleaned and refurbished. The valves were then reinstalled. The surveillance test was then performed a third time on June 22, 1984. During this testing, all valves successfully passed the surveillance requirements.

NRC Form 366B
(9-83)

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LICENSEE EVENT REPORT (LER) FAILURE CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6) YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	PAGE (3)
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

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X	S B	R V	D 2 4 3	Y		X	S B	R V	D 2 4 3	Y	

NRC FORM 366B
(9-83)

NIAGARA MOHAWK POWER CORPORATION

NIAGARA MOHAWK

300 ERIE BOULEVARD WEST
SYRACUSE, N.Y. 13202

July 17, 1984

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

RE: Docket No. 50-220
LER 84-14

Gentlemen:

In accordance with 10 CFR 50.73, we hereby submit the following Licensee Event Report:

LER 84-14 Which is being submitted in accordance with 10 CFR 50.73 (a) (2) (i) (A), "The completion of any nuclear plant shutdown required by the plant's Technical Specifications."

A 10 CFR 50.72 report was made at 0702 hrs on June 17, 1984. This Licensee Event Report was completed in the format designated in NUREG-1022, dated September 1983.

Very truly yours,

Thomas E. Lempges

Thomas E. Lempges
Vice President
Nuclear Generation

TEL/bh
attachments
cc: Dr. Thomas E. Murley
Regional Administrator

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