

LICENSEE EVENT REPORT (LER)

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

TITLE (4) **Completion of Reactor Shutdown due to Inoperable Main Steam Electromatic 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	1 4	8 4	8 4	0 1 3	0 1	0 7	2 7	8 4		0 5 0 0 0		
										0 5 0 0 0		

OPERATING MODE (9) **N**

POWER LEVEL (10) **0.2 5**

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50. (Check one or more of the following) (11)

20.402(b)	20.408(a)	80.73a(2)(iv)	73.71(b)
20.408(c)(1)(ii)	80.38(a)(1)	80.73a(2)(v)	73.71(a)
20.408(a)(1)(ii)	80.38(a)(2)	80.73a(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.408(a)(1)(iii)	XX 80.73a(2)(i)	80.73a(2)(viii)(A)	
20.408(a)(1)(iv)	80.73a(2)(ii)	80.73a(2)(viii)(B)	
20.408(a)(1)(v)	80.73a(2)(iii)	80.73a(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

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

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS
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)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO  MONTH DAY YEAR

EXPECTED SUBMISSION DATE (15)

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

ABSTRACT

During startup after the recent refueling outage on June 14, 1984, cyclic surveillance test N1-ST-C2, "Manual Opening of the Solenoid Actuated Pressure Relief Valves and Flow Verification", was being performed. During the test, four of the plant's six Main Steam Line Solenoid Actuated Relief Valves were tested. Three of these valves failed to operate properly; two valves stuck open, and the third valve blew fuses and failed to open when it was tested. Wires located inside the pilot valve associated with the blown fuses prevented the movement of the shorting bar causing the fuses to blow when the relief valve was tested. These wires were relocated to assure that they would not interfere with the movement of the shorting bar. Seat leakage in the pilot valves associated with the stuck open relief valves was suspected as having caused the main relief valves to stick open after testing. Maintenance work was performed on these pilot valves to correct the seat leakage on each. All four main relief valves were then manually stroked successfully to insure that they all moved freely.

The surveillance test was then performed a second time on all six relief valves on June 17, 1984. Three relief valves leaked past their seats after testing due to material lodging in the seat area of each valve, and another relief valve, 121 stuck open due to debris plugging the pilot guide openings. This second incident is reported in LER 84-14.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

TEXT (If more space is required, use additional NRC Form 308A's) (17)

TEXT

During startup after the recent refueling outage on June 14, 1984, cyclic surveillance test N1-ST-C2, "Manual Opening of the Solenoid-Actuated Pressure Relief Valves and Flow Verification," was being performed. The reactor was at 25% thermal power, but the turbine-generator was off line. All of the plant's six solenoid actuated pressure relief valves were previously rewired for 10 CFR 50 Appendix R and for equipment qualification concerns, followed by successful preoperational testing of each pilot valve during reactor cold shutdown conditions. At approximately 1600 hrs, four of the six solenoid-actuated pressure relief valves were tested. Relief valve 111 tested successfully with no seat leakage. Relief valves 112 and 121 stuck open upon testing. Manual valves were promptly closed which limited the blow down associated with the stuck valves. Relief valve 113 repeatedly blew fuses and failed to open when tested. Relief valves 122 and 123 were not tested at that time. A reactor shutdown was completed in compliance with Technical Specification 3.1.5b. Seat leakage in the pilot valves on relief valves 112 and 121 was suspected as having caused these relief valves to stick open when they were tested. Wires located inside the pilot valve on relief valve 113 prevented the movement of the shorting bar on the pilot valve. This allowed the current flow through the solenoid to remain high, and as a result blew the fuses each time the valve was tested.

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 inaccessible 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 6/14/84 the reactor was immediately shutdown per Technical Specification requirements, and hence there were no adverse effects on the health and safety of the public.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

ASSESSMENT OF POTENTIAL SAFETY CONSEQUENCES - cont.

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 two valves sticking open is of no consequence since in this scenario the valves are never given a close signal.

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

CORRECTIVE ACTION

A reactor shutdown was completed in compliance with the plant's Technical Specifications. The pilot valve on relief valve 112 was refurbished, and the main valve was then manually stroked successfully. New pilot valves were installed on relief valves 121 and 122. The main valves on relief valves 121, 122, and 123 were then manually stroked successfully. The internal wires in the pilot valve on relief valve 113 were relocated to assure that these wires would not interfere with the movement of the shorting bar. The surveillance test was then performed a second time on all six relief valves on June 17, 1984. Relief valves 112, 113, and 123 leaked past their seats due to material lodging in the seat area of each valve and relief valve 121 stuck open due to material plugging the pilot valve guide openings. This second incident is reported in LER 84-14.

NIAGARA MOHAWK POWER CORPORATION

NIAGARA  MOHAWK

300 ERIE BOULEVARD, WEST  
SYRACUSE, N. Y. 13202

July 27, 1984

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

RE: Docket No. 50-220  
LER 84-13  
Revision 01

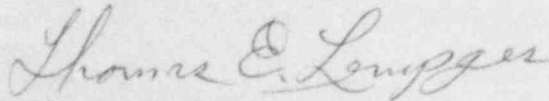
Gentlemen:

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

LER 84-13      Which is being submitted in accordance with  
Revision 01      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 1625 hrs on June 14, 1984. This Licensee Event Report was completed in the format designated in NUREG-1022, dated September 1983. This report is being submitted to correct an inaccurate statement reported in LER 84-13.

Very truly yours,



Thomas E. Lempges  
Vice President  
Nuclear Generation

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

IE22  
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