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 3

TITLE (4)

Reactor Scram During Surveillance Test

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 6	0 8	8 4	8 4	— 0 1 0	— 0 0	0 7	0 9	8 4		0 5 0 0 0
										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)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 0 0	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)	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 Support	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 NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

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 a refueling outage, a refueling surveillance test was being performed. In the course of testing a full load pick up of an emergency diesel power supply, Reactor Protection System (RPS) Channel 11 Power Supply Bus experienced a monentary power loss, causing the "Low Condenser Vacuum-Main Steam Isolation Valve (MSIV) Closure Scram Bypass below 600 psig" relays to deenergize. Since the 600 psig bypass is a noncoincident logic signal, RPS channels 11 and 12 tripped as a result of this power loss, initiating an automatic reactor scram. The momentary power loss was attributed to a DC Speed Control in Motor Generator Set 162 being out of adjustment. The Channel 11 Power Supply Bus automatically re-energized after the loss occurred. The DC Speed Control was adjusted and has since been operating normally. The scram signal was reset after careful analysis and evaluation of the scram, and the surveillance test was successfully completed.

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 0	— 0 0	0 2 OF 0 3

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

TEXT

On June 8, 1984, during a refueling outage, the reactor was in cold shutdown and subcritical, reactor vessel pressure was less than 600 psig, the mode switch was set to "refuel", and all control rods were fully inserted. At 1644 hrs, refueling surveillance test N1-ST-R2, "Loss of Coolant and Emergency Diesel Simulated Automatic Initiation Test" was being performed. This test is conducted by de-energizing the emergency busses coincident with a simulated loss of coolant accident signal, and verifying that the diesel generator starts and that the ECCS loads properly sequence onto the diesel. When the AC Drive Motors for Reactor Protection System (RPS) Power Supply Motor Generator (MG) Sets 162 and 172 are de-energized, the DC Motors are designed to auto start and maintain the AC output to RPS busses 11 and 12. In this instance, the DC Speed Controller for MG Set 162 was out of adjustment, which caused a frequency dip. The dip caused the trip of the MG Set 162 output protective relaying, which caused the RPS 11 bus to de-energize (the "Low Condenser Vacuum-Main Steam Isolation Valve Closure Scram Bypass below 600 psig" relays were 2 relays that de-energized). The "Low Condenser Vacuum-Main Steam Isolation Valve Closure Scram" relays in RPS channels 11 and 12 were already de-energized because the MSIV's were closed and condenser vacuum was less than 23 inches Hg at the time. Since the 600 psig bypass is a noncoincident logic signal (ie. each 600 psig bypass has contacts in RPS channels 11 and 12), RPS channels 11 and 12 both tripped as a result of this loss even though the RPS channel 12 Power Supply Bus was energized An automatic scram was produced as a direct result of both RPS channel tripping. The DC speed controller brought the MG Set frequency back to 60 Hz, and the protective relaying cleared and reclosed the MG Set 162 output contactor. Approximately 100 seconds after the diesels started, both MG Sets transferred automatically back to AC drive as designed.

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 0	— 0 0	0 3 OF 0 3

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

ASSESSMENT OF SAFETY CONSEQUENCES

There are no potential safety consequences arising out of this event because: 1) The plant is designed so that the Low Condenser Vacuum - MSIV Closure Scram relays are connected in parallel with the Low Condenser Vacuum - MSIV Closure Scram Bypass below 600 psig relays. When the reactor is under normal operating conditions (ie. the mode switch is set on "run", and the reactor vessel pressure is greater than 850 psig), the Low Condenser Vacuum - MSIV Closure Scram relays are energized, and the Low Condenser Vacuum MSIV Closure Scram Bypass below 600 psig relays are de-energized. When the reactor is in any other mode except "run" and the reactor vessel pressure is less than 600 psig, the opposite states exist in the relays. Since the Low Condenser Vacuum - MSIV Closure Scram signal is a coincident signal (ie. it has contacts in only one RPS channel), a power bus loss on one RPS channel during normal reactor operation would result in only that channel tripping; the other channel would not be affected, and a reactor scram would not occur. Therefore, the conditions which caused this event to occur would not have caused a reactor scram to occur under normal operating conditions; 2) the reactor was in cold shutdown and subcritical; 3) the mode switch was set to "refuel"; 4) all control rods were fully inserted during the event; and 5) the DC speed control dip and attenuation to 60 Hz is an acceptable event due to the protective relaying on the MG Set output, which protects the RPS components and automatically re-energizes the RPS when the condition clears.

CORRECTIVE ACTION

The DC Speed Control was adjusted and has since been operating normally. The scram signal was reset after careful analysis and evaluation of the scram, and the surveillance test was successfully completed.

NIAGARA MOHAWK POWER CORPORATION

NIAGARA MOHAWK

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

NMP-8794

July 9, 1984

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

RE: Docket No. 50-220
LER 84-10

Gentlemen:

In accordance with 10CFR50.73, we hereby submit the following Licensee Event Report:

LER 84-10 Which is being submitted in accordance with 10CFR50.73(a)(2)(iv), "Any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF), including the Reactor Protection System (RPS)."

A 10CFR50.72 report was made at 1808 hrs on 6/3/84. This 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/lo
Attachments
cc: Dr. Thomas E. Murley
Regional Administrator

IE22
1/1