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AUTH.NAME AUTHOR AFFILIATION
TESSIER,R. Niagara Mohawk Power Corp.
FIRLIT,J.F. Niagara Mohawk Power Corp.
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 91-013-00:on 911202,secondary containment integrity was momentarily breached.Caused by man-machine interface.At least one airlock door was closed to restore secondary containment.Physical locks will be evaluated.W/911223 ltr.

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NIAGARA MOHAWK

NINE MILE POINT NUCLEAR STATION / P.O. BOX 32 LYCOMING, NEW YORK 13093 / TELEPHONE (315) 343-2110

Joseph F. Firlit
Vice President
Nuclear Generation

NMP83176

December 23, 1991

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

RE: Docket No. 50-220
LER 91-13

Gentlemen:

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

LER 91-13 Is being submitted in accordance with 10CFR50.73 (a)(2)(i)(B), "Any operation or condition prohibited by the plant's Technical Specifications."

This report was completed in the format designated in NUREG-1022, Supplement 2, dated September 1985.

Very truly yours,

Joseph F. Firlit
Vice President - Nuclear Generation

JFF/MD/lmc
ATTACHMENT

xc: Thomas T. Martin, Regional Administrator Region I
Wayne L. Schmidt, Sr. Resident Inspector

Cert # P 850 966 984

JE27 1/1

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

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)
Breach of Secondary Containment Integrity Due To Inadequate Design

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)
									N/A	0 5 0 0 0
1 2	0 2	9 1	9 1	0 1 3	0 0	1 2	2 3	9 1	N/A	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)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0 9 3		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
R. Tessier - Operations Manager NMP1	3 1 5 3 4 9 - 2 7 0 7

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

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	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)

On December 2, 1991, at 1100 hours, with the mode switch in the "RUN" position and the Reactor Power level at approximately 98% of rated, Secondary Containment Integrity was momentarily breached. This breach was the result of both Reactor Building Airlock doors, providing access from the Turbine Building to the Reactor Building, being open simultaneously. Nine Mile Point Unit 1 (NMP1) Technical Specifications (T.S.), Sections 1.12 and 3.4.3, state that at least one door in each of the double door access ways shall be closed whenever Secondary Containment Integrity is required.

The cause of this event is man-machine interface. The limited time combined with seven distinct actions the individual must perform to open the door, results in an increased probability that both doors could be opened at the same time. The Reactor Building Airlock doors are not physically interlocked to prevent simultaneous opening.

Initial corrective actions taken were to close at least one Airlock door to restore Secondary Containment. Additional corrective actions include the evaluation of the installation of physical interlocks and the processing of a Technical Specification amendment to incorporate a Limiting Condition of Operation (LCO) for a specific time period to allow for this event.

I. DESCRIPTION OF EVENT

On December 2, 1991, at 1100 hours, with the mode switch in the "RUN" position and the Reactor Power level at approximately 98% of rated, Secondary Containment Integrity was momentarily breached. This breach was the result of both Reactor Building Airlock doors, providing access from the Turbine Building to the Reactor Building, being open simultaneously. Nine Mile Point Unit 1 (NMP1) Technical Specifications (T.S.), Sections 1.12 and 3.4.3, state that at least one door in each of the double door access ways shall be closed whenever Secondary Containment Integrity is required.

On December 2, 1991, a Niagara Mohawk Power Corporation (NMPC) employee attempted to exit the Reactor Building to the Turbine Building, while another NMPC employee was attempting to enter the Reactor Building from the Turbine Building. This resulted in both access doors of the same airlock being open at the same time for less than 4 seconds. At the start of the event the access lights for each Airlock door were green, indicating that the opposite Airlock door was closed. A NMPC employee on the Turbine Building side, carded into the Security Card Reader, per NMPC procedures, and received a green light on the card reader (this indication is separate from the Airlock door access indicating lights), indicating that the Turbine Building access door was unlocked and able to be opened. At the same time, a NMPC employee on the Reactor Building side, seeing the green access door indicating lights, opened the access door to exit the building. The access door on the Reactor Building side does not have a card reader, and may be opened, by procedure, when there is a green light indicating the Turbine Building access door is closed.

Immediately upon realizing that both Airlock doors were open, NMPC personnel shut both doors. After occurrence of this event, personnel proceeded with entry and exiting of the Reactor Building without further incident. Secondary Containment was breached for approximately two to three seconds.

II. CAUSE OF EVENT

The primary cause of this event is man-machine interface. The limited time combined with seven distinct actions the individual must perform to open the door, results in an increased probability that both doors could be opened at the same time. The Reactor Building Airlock doors are not physically interlocked to prevent simultaneous opening. During this event, each individual's actions were consistent with plant procedures and practices. When it was recognized that both doors were open, personnel immediately took actions to close at least one door.

III. ANALYSIS OF EVENT

This event is reportable in accordance with 10CFR 50.73 (a)(2)(i)(B), "Any operation or condition prohibited by the plant's Technical Specifications."

The Reactor Building serves as the Secondary Containment during normal station operation. The Reactor Building Ventilation System maintains the Reactor Building at a negative pressure relative to the Turbine Building. Maintaining Reactor Building Integrity ensures that any fission products released to the Reactor Building will be routed through the Emergency Ventilation System. The use of a series of double airlock doors is a means of maintaining negative Reactor Building pressure and limiting the release of radioactivity to the environment.

This momentary breach of Secondary Containment posed no significant safety consequences, since the negative pressure in the Reactor Building was maintained, thus preventing any potential release path of radioactive gases.

IV. CORRECTIVE ACTIONS

Immediate corrective action taken was to close the Reactor Building and Turbine Building access doors to restore Secondary Containment Integrity.

Long term corrective action is to:

1. Evaluate the installation of physical interlocks to mechanically prevent opening both Airlock doors simultaneously, and;

2. Provide a Technical Specification amendment to allow entering into a Limiting Condition for Operation, for a specified amount of time, which would allow momentary breaching of Secondary Containment that does not result in the loss of negative pressure in the Reactor Building.

V. ADDITIONAL INFORMATION

A. Previous similar events:

There have been four similar events. Description of these events are contained in LER's 83-34, 86-35, 90-18, and 91-11. The first two events were the result of personnel error and the corrective actions involved training personnel and

V. ADDITIONAL INFORMATION (cont.)

heightened awareness of the functions of the airlock doors to maintain Secondary Containment. Training alone would not have prevented this event from occurring.

The third event is similar to this event, but the corrective actions addressed personnel performing maintenance on the Airlock doors and would not have prevented this event from occurring.

The fourth event is the same. Its corrective actions may have prevented this event from occurring, but sufficient time was not available to implement the corrective actions. Further, the corrective actions of LER 91-11 are being re-evaluated. There is a concern that if both Airlock doors are able to be opened, that the interlocks may prevent the doors from being closed, resulting in a significant breach of Secondary Containment.

B. Failed components: none.

C. Identification of components referred to in this LER:

COMPONENT	IEEE 803 FUNCTION	IEEE SYSTEM ID
Rx. Bldg. Secondary Containment	N/A	NG
Turbine Building	N/A	NM
Airlock	AL	N/A
Indicator Light	IL	N/A
Rx. Bldg. Vent. System	N/A	VA