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 FACIL: 50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moha 05000410  
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 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 89-013-00: on 890406, violation of Tech Specs during  
 performance of surveillance of APRM.

W/8 ltr.

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 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

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DEDRO	1 1	IRM/DCTS/DAB	1 1
NRR/DEST/ADE 8H	1 1	NRR/DEST/ADS 7E	1 0
NRR/DEST/CEB 8H	1 1	NRR/DEST/ESB 8D	1 1
NRR/DEST/ICSB 7	1 1	NRR/DEST/MEB 9H	1 1
NRR/DEST/MTB 9H	1 1	NRR/DEST/PSB 8D	1 1
NRR/DEST/RSB 8E	1 1	NRR/DEST/SGB 8D	1 1
NRR/DLPQ/HFB 10	1 1	NRR/DLPQ/QAB 10	1 1
NRR/DOEA/EAB 11	1 1	NRR/DREP/RPB 10	2 2
NUDOCS-ABSTRACT	1 1	<u>REG FILE</u> 02	1 1
RES/DSIR/EIB	1 1	RES/DSR/PRAB	1 1
RGN1 FILE 01	1 1		
EXTERNAL: EG&G WILLIAMS, S	4 4	FORD BLDG HOY, A	1 1
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## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Nine Mile Point Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 4 1 0										PAGE (3) 1 OF 0 5				
TITLE (4) Violation of Technical Specifications Due to Personnel Error																								
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 4	0 6	8 9	8 9	0 1 3	0 0	0 5	0 5	8 9	N/A						0 5 0 0 0									
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) 0 4 9		20.402(b)					20.405(c)					50.73(a)(2)(iv)					73.71(b)							
		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)(vi)					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 Robert G. Smith, Operations Superintendent Unit 2										TELEPHONE NUMBER AREA CODE 3 1 5 3 4 9 - 2 3 8 8														
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																								
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD'S		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD'S														
A	I L	0 0 4 5	G 0 8 0	N																				
SUPPLEMENTAL REPORT EXPECTED (14)																								
YES (If yes, complete EXPECTED SUBMISSION DATE)										X NO										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR

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

**ABSTRACT**

On April 6, 1989 at 2110 hours, it was determined that Nine Mile Point Unit 2 (NMP2) had been in violation of Technical Specifications (TS) during the performance of the surveillance procedure for Average Power Range Monitoring (APRM), (N2-ISP-NMS-W@007). The violation was a failure to have inoperable channels (or the associated trip system) in the tripped condition as required by Technical Specification 3.3.1, Action (a). At the time of this determination, Nine Mile Point Unit 2 was in power operation (Mode 1) at 49 percent power.

The root cause for this event was personnel error. The performer of Shift Checks-Mode 1 (N2-OSP-LOG-S001) made an incorrect assumption regarding use of the Main Steam Radiation Monitor acceptance criteria. The subsequent review by the Assistant Station Shift Supervisor was inadequate. A contributing cause was the procedure instructions for the use of acceptance criteria were open for interpretation.

The corrective actions taken for this event were: 1). A Work Request was written to troubleshoot and repair Main Steam Line radiation monitor "C". 2). Operations Surveillance Procedure N2-OSP-LOG-S001 was changed to eliminate confusion which contributed to the event. 3). Operations instructions (night notes) were written to immediately increase attention in performance and review of surveillance procedures, especially logs. 4). The Operator and Assistant Station Shift Supervisor were counseled by the Superintendent of Operations for their performance.

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PDR ADOCK 05000410  
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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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Nine Mile Point Unit 2	0   5   0   0   0   4   1   0	8   9	—   0   1   3	—   0   0	0   2	OF	0   5

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

I. DESCRIPTION OF THE EVENT

On April 6, 1989 at 2110, the Operations Department determined that Nine Mile Point Unit 2 (NMP2) had been in violation of Technical Specification (TS) 3.3.1. At the time of the determination, the plant was in power operation (Mode 1) with the reactor mode switch in "RUN". Reactor power was 49 percent, 1626 megawatts thermal. Reactor coolant temperature and pressure were 541 degrees Fahrenheit and 957 pounds per square inch, respectively.

The sequence of this event was as follows:

1. Main Steam Line (MSL) Radiation Monitor "A" was declared inoperable at 1930 hours on April 5, 1989 and the Reactor Protection System (RPS) "A" trip system was placed in the tripped condition in accordance with Technical Specification 3.3.1, Action (a).
2. On April 6, 1989, it was necessary to perform the weekly Average Power Range Monitor (APRM) functional test (N2-ISP-NMS-W@007).

A meeting of the Site Operations Review Committee (SORC) was convened to approve a plan of action for performance of the Average Power Range Monitor functional test which was established in accordance with Technical specification Table 3.3.1-1, Note (a).

The first step was to insert a manual scram into the Reactor Protection System "A" and bypass the auto trip function of the Main Steam Line Radiation Monitor "A". To perform the Average Power Range Monitor functional test, the following steps were performed for each Average Power Range Monitor channel tested [as allowed by Technical Specification Table 3.3.1-1, Note (a)];

1. clear the Reactor Protection System "A" manual scram signal,
2. perform the Average Power Range Monitor functional test,
3. reset the Average Power Range Monitor trip signal,
4. insert a manual scram into the Reactor Protection System "A".

At the completion of the Average Power Range Monitor functional surveillance, the bypass for Main Steam Line radiation monitor "A" was removed and the Reactor Protection System "A" was left in the tripped condition.



## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

3. At 2110 hours on April 6, 1989 during the review of Shift Checks - Mode 1 (N2-OSP-LOG-S001), it was determined that Main Steam Line radiation monitor "C" was inoperable and had been inoperable during the performance of the Average Power Range Monitor functional surveillance. Therefore, during those times when the Reactor Protection System "A" was not in the tripped condition the unit was in violation of Technical Specification Table 3.3.1-1, Note (a) (because there was not at least one operable channel in the trip system monitoring Main Steam Line radiation).

During the performance of N2-OSP-LOG-S001 on the previous shift, the Operator who performed the surveillance failed to use the appropriate channel check criteria based on misinterpretation of the surveillance instructions. The surveillance test instructed the operator to use the comparison criteria only after all four of the radiation monitors cleared the downscale alarm. The "A" monitor was not above the downscale (because it was inoperable), and therefore, the operator did not use the criteria.

The subsequent Assistant Station Shift Supervisor review of the test was inadequate. Another statement in the procedure instructs the operator not to use the criteria unless the plant is at a steady state power level. (The plant was starting up, but had been at a constant power level for the entire shift). The Assistant Station Shift Supervisor misinterpreted the "steady state power" statement. The Assistant Station Shift Supervisor also failed to question (and correct) the operator's decision not to use the proper criteria.

## II. CAUSE OF THE EVENT

The root cause of the event was personnel error due to the wrong assumption made. While performing procedure N2-OSP-LOG-S001, "Shift Checks-Mode 1", the Licensed Operator made the assumption that Attachment 2 of the procedure did not have to be performed since one of the Main Steam Line (MSL) radiation monitors was inoperable. Instruction A of Attachment 2 states that the attachment does not have to be performed if all four monitors have not cleared the downscale alarm point. The Operator assumed that since one monitor was inoperable (2MSS\*RE46A) it essentially satisfied the requirements of Instruction A; therefore, he did not complete that attachment.

The second personnel error occurred while reviewing N2-OSP-LOG-S001, the Assistant Station Shift Supervisor assumed that Attachment 2 was not performed because the plant conditions were not steady state (Instruction B of Attachment 2 states that the attachment does not have to be performed if the plant is not in a steady state condition). The Assistant Station Shift Supervisor also failed to question (and correct) the operator's decision not to use the proper criteria. Had Attachment 2 been completed correctly, it would have been clear that Main Steam Line (MSL) radiation monitor 2MSS\*RE46C was inoperable and this event could have been avoided.

Additionally, a contributing cause to this event was procedure deficiency. The instructions to perform Attachment 2 were open for interpretation.





## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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Nine Mile Point Unit 2	0   5   0   0   0   4   1   0	8   9	—   0   1   3	—   0   0	0   4	OF	0   5

TEXT (# more space is required, use additional NRC Form 368A's) (17)

III. ANALYSIS OF THE EVENT

This event is reportable in accordance with 10CFR50.73(a)(2)(i)(B) because the condition is in violation of Technical Specifications.

There were no safety consequences to the plant or public as a result of this event.

Had this event occurred at a higher or lower power level, the severity would not have changed. Had there been an actual Main Steam Line radiation monitor event, plant safety was assured due to the fact that the Division I Main Steam Isolation Valve (MSIV) isolation signal to the Reactor Protection System (RPS) associated with the "A" radiation monitor was not cleared during the performance of the Average Power Range Monitor (APRM) surveillance testing. A trip signal from the Division II radiation monitors (B or D) would have resulted in closure of the MSIVs. The MSIV closure would have caused a reactor scram.

The time required for the performance of the Average Power Range Monitor (APRM) channel functional test (N2-ISP-NMS-W@007) was 2 hours, 46 minutes. During this time period, the Reactor Protection System (RPS) "A" was intermittently taken out of the tripped condition.

IV. CORRECTIVE ACTIONS

- 1). Emergency Work Request #160666 was performed to troubleshoot and repair Main Steam Line (MSL) radiation monitor "C".
- 2). Operations surveillance procedure, N2-OSP-LOG-S001, was changed to eliminate confusion as to when to use the Main Steam Line (MSL) radiation monitor acceptance criteria.
- 3). Operations personnel were briefed during shift meetings and using Operations Department night notes addressing the requirement for procedure compliance and emphasizing the need for surveillance tests to be done in a questioning manner with attention to detail. Follow up required reading for all Operators re-enforced these concepts.
- 4). The Operator and Assistant Station Shift Supervisor were counseled by the Superintendent of Operations for their performance.



## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104  
EXPIRES: 8/31/88

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		89	013	010	05	OF 05

TEXT (If more space is required, use additional NRC Form 368A's) (17)

V. ADDITIONAL INFORMATION

## A. Failed Component Identification:

Main Steam Line Radiation Monitors 2MSS\*RE46A and 2MSS\*RE46C

## B. Previous Similar Event:

None

There have been other Licensee Event Reports (LERs) concerning Nine Mile Point Unit 2 (NMP2) surveillance procedures (87-41, 87-46, 87-61, 87-83, 88-10, 88-13, 88-16, 88-18, 88-33, 88-53, 88-58, 88-60). These LERs and their corrective actions have been reviewed, and it was determined that this LER (89-13) was unique in that qualified individuals made a conscious decision which was in error.

## C. The following table lists the identifier codes for the Main Steam Line radiation monitor according to IEEE 805-1984, IEEE 803A-1983, and Table 9 of the NPRDS Reporting Procedures Manual.

IEEE 805 <u>System</u>	IEEE 803A <u>Component</u>	NPRDS Table 9 <u>Manufacturer</u>
IL	45	G080



May 5, 1989

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

RE: Docket No. 50-410  
LER 89-13


Gentlemen:

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

LER 89-13 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,

  
J. L. Willis  
General Superintendent  
Nuclear Generation

JLW/AC/mjv  
(0461V)

Attachment

cc: Regional Administrator, Region 1  
Sr. Resident Inspector, W. A. Cook

P26249/556  
IE22  
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