

CATEGORY 1

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ACCESSION.NBR:9710030157 DOC.DATE: 97/09/26 NOTARIZED: NO DOCKET #
 FACIL:50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moha 05000410
 AUTH.NAME AUTHOR AFFILIATION
 BOSNIC,D. Niagara Mohawk Power Corp.
 DAHLBERG,K.A. Niagara Mohawk Power Corp.
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 97-010-00:on 970827,determined that non-conservative
 APRM gain adjustment results.Caused by inadequate technical
 review.Revised procedures to ensure that APRMs are adjusted
 to greater than or equal to required setting.W/970926 ltr.

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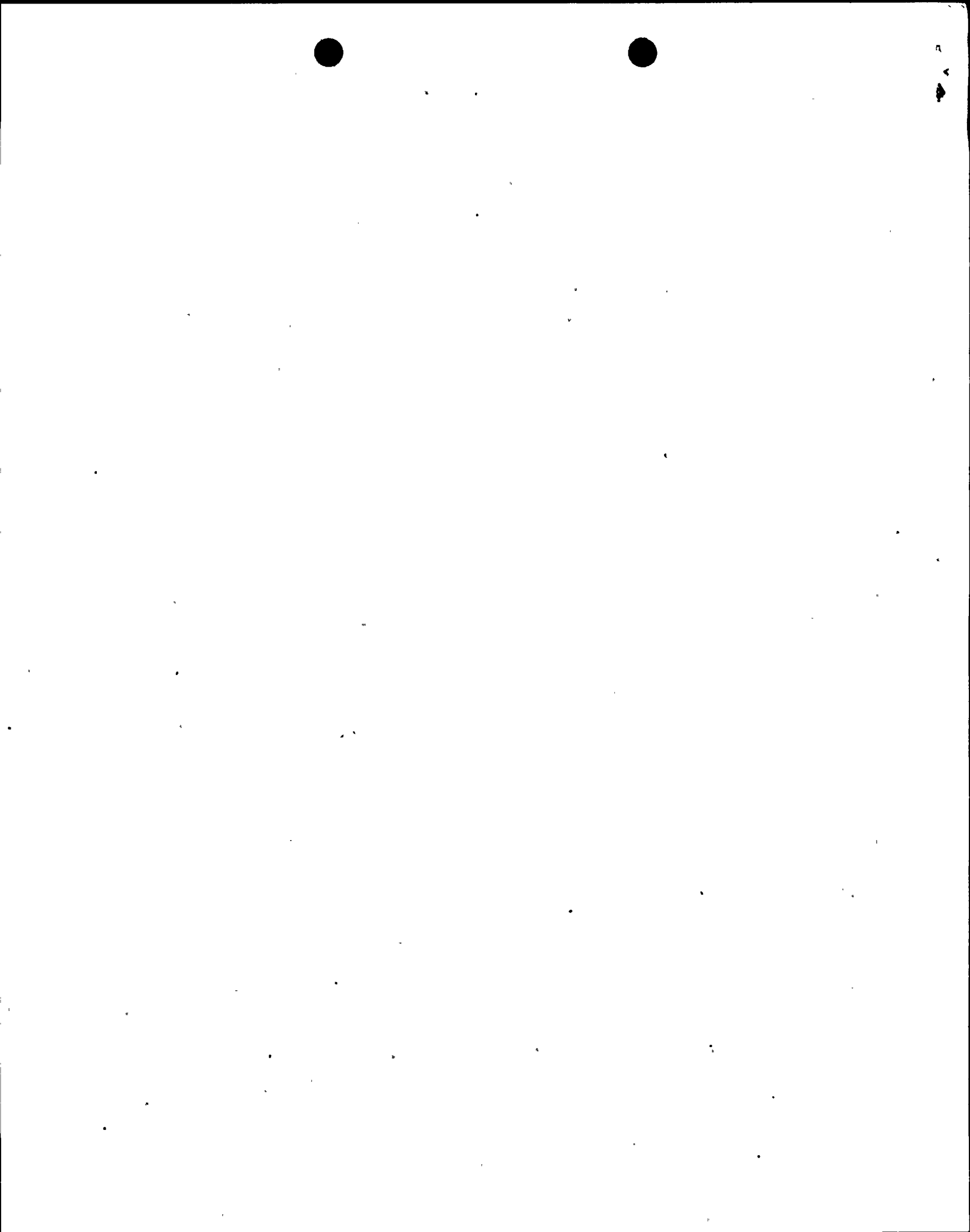
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NIAGARA MOHAWK

GENERATION
BUSINESS GROUP

NINE MILE POINT NUCLEAR STATION/LAKE ROAD, P.O. BOX 63, LYCOMING, NEW YORK 13093

September 26, 1997
NMP2L 1727

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

RE: Docket No. 50-410
LER 97-10

Gentlemen:

In accordance with 10CFR50.73 (a)(2)(i)(B), we are submitting LER 97-10, "Non-Conservative APRM Gain Adjustment Results in Technical Specification Violation."

Very truly yours,

Kim A. Dahlberg
Plant Manager - NMP2

KAD/GJG/lmc
Attachment

xc: Mr. H. J. Miller, Regional Administrator, Region I
Mr. B. S. Norris, Senior Resident Inspector
Records Management

Handwritten initials: Iccol

9710030157 970926
PDR ADDCK 05000410
S PDR





LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-330), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503

FACILITY NAME (1)

Nine Mile Point Unit 2

DOCKET NUMBER (2)

05000410

PAGE (3)

1 OF 4

TITLE (4)

Non-Conservative APRM Gain Adjustment Results in Technical Specification Violation

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)	
08	27	97	97	010	00	09	26	97	N/A	05000	
									N/A	05000	

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) 95	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> OTHER
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<i>Specify in Abstract below and in Text, NRC Form 366A</i>
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME

Don Bosnic - Manager Operations Unit 2

TELEPHONE NUMBER

(315) 349-7952

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)

YES (if yes, complete EXPECTED SUBMISSION DATE)

NO

EXPECTED SUBMISSION DATE (15)

MONTH

DAY

YEAR

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

On August 27, 1997, with Nine Mile Point Unit 2 (NMP2) in Operational Condition (OC) 1 (Power Operation) and reactor thermal power at approximately 95 percent, it was determined that NMP2 had operated in violation of Technical Specification (TS) 3.2.2 during previous startups and other power maneuvers. This violation occurred when APRMs were setup to 2 percent lower than required by the TS 3.2.2 action statement, due to the improper application of TS Table 4.3.1.1-1 Note g, RPS Instrumentation Surveillance Requirements.

The root cause of these events is inadequate technical review.

No immediate corrective actions were required since NMP2 was not operating in a condition requiring the APRM gain adjustment needed to satisfy TS 3.2.2 at the time of discovery. Procedures have been revised to ensure that APRMs are adjusted to greater than or equal to the required setting per TS 3.2.2.



LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20535, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Nine Mile Point Unit 2	05000410	97	- 10	- 00	02 OF 04

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

I. DESCRIPTION OF EVENT

On August 27, 1997, with Nine Mile Point Unit 2 (NMP2) in Operational Condition (OC) 1 (Power Operation) and reactor thermal power at approximately 95 percent, NMP2 personnel identified several instances in the past where NMP2 did not comply with Technical Specification (TS) 3.2.2 during startup and other power maneuvers.

Specifically, to compensate for peaking in the core, such as during startup and other power maneuvers, the flow biased simulated thermal power scram setpoint must be reduced in accordance with TS 3.2.2. Due to the transitory nature of those operating conditions, rather than lowering the scram setpoint, TS 3.2.2 allows the adjustment of APRMs. The APRM gain adjustments must be made such that the APRM readings are greater than or equal to 100% times CMFLPD (Core Maximum Fraction of Limiting Power Density).

Contrary to this, operations procedures N2-RESP-001 and N2-OSP-NMS-@004 allowed the APRM readings to be left lower than 100% times CMFLPD by as much as 2%. This procedure deficiency has existed since May 20, 1988. NMP2 personnel have identified several violations since the beginning of the current operating cycle, and it is reasonable to assume that other violations of this nature have occurred since May 20, 1988.

II. CAUSE OF EVENT

The procedure deficiency has been determined to be inadequate technical review. Personnel incorrectly applied the plus or minus 2 percent APRM adjustment tolerance provided in TS Table 4.3.1.1-1 Note g, RPS Instrumentation Surveillance Requirements, when setting the APRMs to 100% times CMFLPD as required by TS 3.2.2. The plus or minus allowance can only be applied after the APRMs have been set to read greater than or equal to 100% times CMFLPD per TS 3.2.2.

III. ANALYSIS OF EVENT

This event is reportable in accordance with 10CFR50.73 (a)(2)(i)(B), "any operation or condition prohibited by the plant's Technical Specifications."

The flow biased simulated thermal power scram was not credited in the Reload Transient Analyses for NMP2 operating Cycles 2 through 6. Credit was taken for this scram during Cycle 1 for the loss of Feedwater Heating analyses. The Cycle 1 analysis was performed using conservative methodology. Subsequent to Cycle 1, the NMP2 fuel vendor began using a new methodology for the Loss of Feedwater Heating transient. If that methodology had been applied for Cycle 1, the flow biased simulated thermal power scram would not have been credited. The new methodology demonstrates that the Loss of Feedwater Heating event is not a



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COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT
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Nine Mile Point Unit 2	05000410	97	- 10	- 00	03 OF 04

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

III. ANALYSIS OF EVENT (cont'd)

limiting event. The fuel vendor no longer evaluates the Loss of Feedwater Heating for a normal reload analyses. Therefore, there were no adverse consequences to the health and safety of the public or to NMP2 plant personnel.

IV. CORRECTIVE ACTIONS

No immediate corrective actions were required. NMP2 was not operating with high peaking in the core at the time of discovery.

Previously implemented actions to address instances of inadequate managerial methods, relative to technical procedure preparation and review, are also applicable to this event. Specifically, a corrective action described in LER 94-003:

An inadequate technical review has been recognized in the past as being one of the major reasons for violating specific requirements. Niagara Mohawk has upgraded specific programs whose purpose is not only to ensure that adequate procedures are written, but also to ensure the review of these procedures is carried out in a manner that should eliminate events such as these. These include, but are not limited to, the following procedurally controlled programs:

- NIP-SEV-01, Applicability Reviews and Safety Evaluations
- NIP-PRO-03, Preparation and Review of Technical Procedures
- PWM-PRO-0105, Technical Procedure Verification and Validation

However, the last technical review performed on procedure N2-RESP-001 was performed in December 1995 after these programs were implemented. Therefore, that review has been determined to be an error by the individual involved.

The following corrective actions will be taken:

1. Procedures N2-RESP-001 and N2-OSP-NMS-@004 have been revised to ensure that APRMs are adjusted to greater than or equal to the required setting per TS 3.2.2.
2. The individual who performed the most recent technical review of N2-RESP-001 has been counseled regarding the review of TS Surveillance Report (SR) and the need to assure literal compliance.



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Nine Mile Point Unit 2	05000410	97	10	00	04 OF 04

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

IV. **CORRECTIVE ACTIONS** (cont'd)

- 3. Core Thermal Limits and Neutron Monitoring TSs have been reviewed for similar setting interpretation discrepancies. There were no further discrepancies identified.

V. **ADDITIONAL INFORMATION**

- A. Failed components: none.
- B. Previous similar events: LER 96-01 identified that an inadequate channel functional test had been performed on the reactor mode switch contacts for the APRMs. Corrective actions included reviewing the remaining Neutron Monitoring channel functional test procedures. The review of other channel functional tests would not have identified this event.
- C. Identification of components referred to in this LER:

COMPONENT	IEEE 803 FUNCTION	IEEE 805 SYSTEM ID
Average Power Range Monitor (APRM)	MON	IG

