

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8707150713 DOC. DATE: 87/07/10 NOTARIZED: NO DOCKET #
 FACIL: 50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moha 05000410
 AUTH. NAME AUTHOR AFFILIATION
 RANDALL, R. G. Niagara Mohawk Power Corp.
 LEMPGES, T. E. Niagara Mohawk Power Corp.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-032-00: on 870612, actuation of ESF experienced. Cause unknown. Operators verified plant status as normal, reset isolation signal & return RWCU sys to svc. W/870710 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD1-1 LA	1 1	PD1-1 PD	1 1
	NEIGHBORS, D	1 1	MINER, S	1 1
INTERNAL:	ACRS MICHELSON	1 1	ACRS MOELLER	2 2
	AEOD/DOA	1 1	AEOD/DSP/ROAB	2 2
	AEOD/DSP/TPAB	1 1	DEDRO	1 1
	NRR/DEST/ADE	1 0	NRR/DEST/ADS	1 0
	NRR/DEST/CEB	1 1	NRR/DEST/ELB	1 1
	NRR/DEST/ICSB	1 1	NRR/DEST/MEB	1 1
	NRR/DEST/MTB	1 1	NRR/DEST/PSB	1 1
	NRR/DEST/RSB	1 1	NRR/DEST/SGB	1 1
	NRR/DLPQ/HFB	1 1	NRR/DLPQ/QAB	1 1
	NRR/DOEA/EAB	1 1	NRR/DREP/RAB	1 1
	NRR/DREP/RPB	2 2	NRR/PMAS/ILRB	1 1
	NRR/PMAS/PTSB	1 1	REG FILE 02	1 1
	RES DEPY GI	1 1	RES TELFORD, J	1 1
	RES/DE/EIB	1 1	RGN1 FILE 01	1 1
EXTERNAL:	EG&G GROH, M	5 5	H ST LOBBY WARD	1 1
	LPDR	1 1	NRC PDR	1 1
	NSIC HARRIS, J	1 1	NSIC MAYS, G	1 1



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 03
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TITLE (4)
Reactor Cleanup System Isolation on High Differential Flow Oscillations

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)																																																																																																
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<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="12">THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)</td> </tr> <tr> <td colspan="3">OPERATING MODE (9) 3</td> <td colspan="3">20.402(b)</td> <td colspan="3">20.405(c)</td> <td colspan="3"><input checked="" type="checkbox"/> 50.73(a)(2)(iv)</td> <td colspan="3">73.71(b)</td> </tr> <tr> <td colspan="3">POWER LEVEL (10) 0 0 0</td> <td colspan="3">20.405(a)(1)(i)</td> <td colspan="3">50.38(e)(1)</td> <td colspan="3"><input type="checkbox"/> 50.73(a)(2)(v)</td> <td colspan="3">73.71(c)</td> </tr> <tr> <td colspan="3"></td> <td colspan="3">20.405(a)(1)(ii)</td> <td colspan="3">50.38(e)(2)</td> <td colspan="3"><input type="checkbox"/> 50.73(a)(2)(vii)</td> <td colspan="3" rowspan="3">OTHER (Specify in Abstract Below and in Text, NRC Form 365A)</td> </tr> <tr> <td colspan="3"></td> <td colspan="3">20.405(a)(1)(iii)</td> <td colspan="3">50.73(a)(2)(i)</td> <td colspan="3"><input type="checkbox"/> 50.73(a)(2)(viii)(A)</td> </tr> <tr> <td colspan="3"></td> <td colspan="3">20.405(a)(1)(iv)</td> <td colspan="3">50.73(a)(2)(ii)</td> <td colspan="3"><input type="checkbox"/> 50.73(a)(2)(viii)(B)</td> </tr> <tr> <td colspan="3"></td> <td colspan="3">20.405(a)(1)(v)</td> <td colspan="3">50.73(a)(2)(iii)</td> <td colspan="3"><input type="checkbox"/> 50.73(a)(2)(ix)</td> <td colspan="3"></td> </tr> </table>												THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)												OPERATING MODE (9) 3			20.402(b)			20.405(c)			<input checked="" type="checkbox"/> 50.73(a)(2)(iv)			73.71(b)			POWER LEVEL (10) 0 0 0			20.405(a)(1)(i)			50.38(e)(1)			<input type="checkbox"/> 50.73(a)(2)(v)			73.71(c)						20.405(a)(1)(ii)			50.38(e)(2)			<input type="checkbox"/> 50.73(a)(2)(vii)			OTHER (Specify in Abstract Below and in Text, NRC Form 365A)						20.405(a)(1)(iii)			50.73(a)(2)(i)			<input type="checkbox"/> 50.73(a)(2)(viii)(A)						20.405(a)(1)(iv)			50.73(a)(2)(ii)			<input type="checkbox"/> 50.73(a)(2)(viii)(B)						20.405(a)(1)(v)			50.73(a)(2)(iii)			<input type="checkbox"/> 50.73(a)(2)(ix)					
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LICENSEE CONTACT FOR THIS LER (12)

NAME Robert G. Randall, Supervisor Technical Support	TELEPHONE NUMBER 3 1 1 5 3 1 4 9 1 - 1 2 1 4 1 5
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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)

<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)
		MONTH DAY YEAR 0 9 1 1 8 7

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

On June 12, 1987 at 2121 hours, Nine Mile Point Unit 2 (NMP2) experienced actuation of an Engineered Safety Feature (ESF), specifically, isolation of the Reactor Water Cleanup (RWC) system. At the time of the event, the plant was in a hot shutdown condition with the reactor mode switch in "SHUTDOWN". Reactor pressure and temperature were approximately 583 pounds per square inch gauge (psig) and 482°F, respectively.

The root cause of the event has not been determined at this time. Investigation into the root cause will continue with a supplemental report to be submitted by September 11, 1987. The investigation will focus on the RWC flow transmitters which initiated the isolation.

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FACILITY NAME (1) Nine Mile Point Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 4 1 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		87	- 03 2	- 0 0	0 2	OF	0 3

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

I. DESCRIPTION OF EVENT

On June 12, 1987 at 2121 hours, Nine Mile Point Unit 2 (NMP2) experienced actuation of an Engineered Safety Feature (ESF), specifically, isolation of the Reactor Water Cleanup (RWCU) system. At the time of the event, the plant was in a hot shutdown condition with the reactor mode switch in "SHUTDOWN". Reactor pressure and temperature were approximately 583 pounds per square inch gauge (psig) and 482°F, respectively.

Following a scram at 2056 hours (LER 87-31), a Niagara Mohawk operator was controlling reactor water level. During reactor startup/hot standby, it is necessary to remove excess reactor coolant, due to Control Rod Drive (RDS) system cooling water in-flow and reactor water thermal swell, via the RWCU system until steam can be passed directly to the Main Condenser. The removed excess reactor coolant (reject flow) may be directed to either the Main Condenser or to the Liquid Radioactive Waste Treatment system. While removing the inservice RWCU filter demineralizer in preparation to reduce the amount of reject flow, a sensed high flow differential between RWCU system suction and reject flow transmitters occurred and initiated the RWCU system isolation.

For the event, operator actions were per the approved temporary operating procedure 87-41, "Feedwater/Clean-Up System Operation". This procedure is in effect during startup and shutdown of the plant to mitigate feedwater line temperature stratification.

There were no components or systems which were inoperable and/or out of service which contributed to the event. No plant system or component failures resulted from the event.

II. CAUSE OF EVENT

The root cause of the RWCU isolation has not been determined at this time. Investigation into the root cause will continue with a supplemental report to be submitted by September 11, 1987.

The investigation will focus on the RWCU flow transmitters which initiated the isolation.



FACILITY NAME (1) 2 Nine Mile Point Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 4 1 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 7	— 0 3 2	— 0 0	0 3	OF	0 3

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

III. ANALYSIS OF EVENT

The NMP2 Final Safety Analysis Report Section 5.4.8 states: "The RWCU system is classified as a primary power generation system (not an Engineered Safety Feature (ESF)), a small part of which is part of the reactor coolant pressure boundary (RCPB) up to and including the outside isolation valve. The other portions of the system are not part of the RCPB and can be isolated from the reactor. The RWCU system may be operated at any time during planned reactor operations or it may be shutdown if water quality is within the Technical Specification limits."

An RWCU isolation does not impair the station's capability to achieve a safe shutdown condition. The RWCU isolation function operated as designed with no other transients or inoperable systems contributing to the event.

The event is considered reportable via 10CFR50.73 (a)(2)(iv) because the isolation function is an ESF function which is part of the Primary Containment and Reactor Vessel Isolation Control System.

The duration of the event was approximately nine minutes.

IV. CORRECTIVE ACTIONS

The immediate corrective actions were for the operators to verify the plant status as normal, reset the isolation signal and return the RWCU system to service.

Additional corrective actions for this event will be dependent upon the final determination of the root cause investigation.

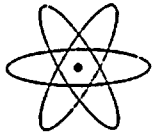
V. ADDITIONAL INFORMATION

Identification of Components Referred to in this LER

Component	IEEE 803 EIIIS Funct	IEEE 805 System ID
Flow Transmitter	FT	IJ
Instrument Line	TBG	CE
Reactor Water Clean Up System	N/A	CE
Flow Indicator	FI	CE
Isolation Logic System	N/A	JE

Although the event described in LER 87-26 deals with a RWCU isolation related to the reject flow transmitters, the root cause of that event was personnel error in venting one of the transmitters. Therefore, that event and the event described above are not considered similar.





NIAGARA MOHAWK POWER CORPORATION

NIAGARA  MOHAWK

301 PLAINFIELD ROAD
SYRACUSE, NY 13212

THOMAS E. LEMPGES
VICE PRESIDENT—NUCLEAR GENERATION

July 10, 1987

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

RE: Docket No. 50-410
LER 87-32

Gentlemen:

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

LER 87-32 Is being submitted in accordance with 10 CFR 50.73 (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). However, actuation of an ESF, including the RPS, that resulted from and was part of the preplanned sequence during testing or reactor operation need not be reported."

A 10 CFR 50.72 (b) (2) (ii) report was made at 2345 hours on June 12, 1987.

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

Very truly yours,

Thomas E. Lempges
Vice President
Nuclear Generation

TEL/JTD/mjd

Attachments

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

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