

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9012120167      DOC. DATE: 90/11/23      NOTARIZED: NO      DOCKET #  
 FACIL: 50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moha      05000410  
 AUTH. NAME      AUTHOR AFFILIATION  
 GRESOCK, G.      Niagara Mohawk Power Corp.  
 FIRLIT, J.F.      Niagara Mohawk Power Corp.  
 RECIP. NAME      RECIPIENT AFFILIATION

SUBJECT: LER 90-021-00: on 901026, TS violation - RHR sys valve tests not included in inservice test pump/valve program plan.

DISTRIBUTION CODE: IE22T      COPIES RECEIVED: LTR 1 ENCL 1      SIZE: 6  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

**NOTES:**

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	PD1-1 LA BRINKMAN, D	1	1	PD1-1 PD MARTIN, R.	1	1
INTERNAL:	ACNW	2	2	ACRS	2	2
	AEOD/DOA	1	1	AEOD/DSP/TPAB	1	1
	AEOD/ROAB/DSP	2	2	NRR/DET/ECMB 9H	1	1
	NRR/DET/EMEB 7E	1	1	NRR/DLPQ/LHFB11	1	1
	NRR/DLPQ/LPEB10	1	1	NRR/DOEA/OEAB	1	1
	NRR/DREP/PRPB11	2	2	NRR/DST/SELB 8D	1	1
	NRR/DST/SICB 7E	1	1	NRR/DST/SPLB8D1	1	1
	NRR/DST/SRXB 8E	1	1	<u>REG FILE</u> 02	1	1
	RES/DSIR/EIB	1	1	RGNI FILE 01	1	1
EXTERNAL:	EG&G BRYCE, J.H	3	3	L ST LOBBY WARD	1	1
	NRC PDR	1	1	NSIC MAYS, G	1	1
	NSIC MURPHY, G.A	1	1	NUDOCS FULL TXT	1	1

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NMP73955

November 23 , 1990

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

RE: Docket No. 50-410  
LER 90-21

Gentlemen:

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

LER 90-21 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/JM/lmc

ATTACHMENT

xc: Thomas T. Martin, Regional Administrator Region I  
William A. Cook, Sr. Resident Inspector

9012120167 901123  
PDR ADOCK 05000410  
S FDC

LER



LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) <b>Nine Mile Point Unit 2</b>	DOCKET NUMBER (2) <b>0 5 0 0 0 4 1 1 0 1</b>	PAGE (3) <b>1 OF 0 1 5</b>
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TITLE (4) **Technical Specification Violation - Residual Heat Removal System (RHS) Valve Tests Not Included in the Inservice Test Pump and Valve Program Plan**

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
<b>1</b>	<b>0</b>	<b>26</b>	<b>9</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>1</b>	<b>12</b>	N/A			0 5 0 0 0

OPERATING MODE (9) <b>5</b>	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) <b>0 1 0 0</b>	<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)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
	<input checked="" type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(vii)							
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)							
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)							
	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)								

LICENSEE CONTACT FOR THIS LER (12)

NAME <b>G. Gresock, Manager Nuclear Technology</b>	TELEPHONE NUMBER
	AREA CODE: <b>311 542 81-17 11 16 11</b>

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 **0** DAY **13** YEAR **19 11**

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

On October 26, 1990, it was determined that the Nine Mile Point Unit 2 (NMP2) Inservice Testing (IST) Program Plan, during its development, had certain Residual Heat Removal System (RHS) valve tests incorrectly omitted. As a result, these components have not been tested in accordance with NMP2 Technical Specification (T.S.) Section 4.0.5. NMP2 was in a refueling outage at the time this condition was determined reportable.

The root cause for this condition was determined to be inadequate design analysis.

Corrective actions include: the forming of a Nuclear Engineering specialists group; the evaluation of plant safety systems for IST compliance; and revising the Updated Safety Analysis Report (USAR).



2

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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 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)  0.5 0 0 0 4 1 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 0	- 0 2 1	- 0 0	0 2	OF	0 5

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

I. DESCRIPTION OF EVENT

On October 26, 1990, it was reported that the Nine Mile Point Unit 2 (NMP2) Inservice Testing (IST) Program Plan did not include certain Residual Heat Removal System (RHS) valve tests specified by the NMP2 Updated Safety Analysis Report (USAR). Consequently, these required tests were not included in the IST implementing test procedures in accordance with plant Technical Specification (T.S.) Section 4.0.5, "Inservice Testing of ASME Code Class 1, 2, and 3 Pumps and Valves". NMP2 was in a refueling outage at the time this condition was determined reportable.

During the preparation of the NMP2 Inservice Testing Program Plan Component Exclusion/Justification document, questions arose concerning; (1) what components needed to be included in the ASME Section XI IST Program Plan; and (2) the correctness of test parameters for components presently in the IST plan. Specifically, information provided in USAR table 3.9A-12 (Active Valves), and pump and valve information provided in the Failure Modes and Effects Analysis (FMEA) section of the USAR was not consistent with the scope of the present Program Plan. A cross section review was performed on the RHS system to identify potential components in question. A Problem Report (PR No. 09301) was then generated to request Engineering clarification on the subject component's functional operability requirements.

The disposition to the Problem Report determined that test requirements for eight (8) motor operated valves, presently included in the IST Program Plan, were incomplete. Requirements for these safety related ASME Code Class 2 valves were limited to testing the valves in one direction only. This was based on the valves' function, normal operating position, and active/passive safety function designation.

II. CAUSE OF EVENT

A root cause investigation was performed utilizing Nuclear Division Procedure NDP-16.01, "Root Cause Evaluation".

The root cause for this condition was determined to be inadequate design analysis. Niagara Mohawk and contractor personnel misinterpreted the relationship between active safety-related components and their functional operability requirements. A





LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 0	- 0 2 1	- 0 1 0	0 1 3	OF	0 1 5

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

II. CAUSE OF EVENT (cont.)

document does not exist which defines this relationship or provides a clear understanding of what will or will not contribute to the safe shutdown of the reactor or mitigate the consequences of an accident. This misinterpretation resulted in the inadequate stroke testing of the eight Residual Heat Removal safety-related motor operated valves.

III. ANALYSIS OF EVENT

This condition is considered reportable under 10CFR50.73 (a)(2)(i)(B), "Any operation or condition prohibited by the plant's Technical Specification".

Specifically, any violation of an ASME Code, Section XI requirement constitutes a violation of the Plant Technical Specifications, Section 4.0.5, "Surveillance Requirements for Inservice Inspection and Testing of ASME Code Class 1, 2, and 3 Components".

The intent of the testing required by ASME Section XI is to provide data for assessing the operational readiness of certain safety-related pumps and valves. Failure to perform this testing in accordance with ASME Section XI requirements decreases the level of confidence as to the operational readiness of the components involved. In the worst case, failure to properly test could have prevented early detection of component degradation which could eventually result in component failure.

Although certain plant components were not fully tested in accordance with ASME Section XI, their function was demonstrated either during Tech Spec surveillance tests (e.g., TS quarterly system test) or during the various plant operating modes. No functional problems were identified or observed.

However, testing in accordance with ASME Section XI will be performed prior to returning the system to service in order to ensure that components are operating properly.

Based on the above, there were no adverse safety consequences to the plant or public as a result of this condition.



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LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 0	- 0 2 1	- 0 0	0 4	0 4	0 5

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

IV. CORRECTIVE ACTIONS

1. The scope of Problem Report No. 09301 has been extended to include a review of plant safety systems to evaluate and assess the present IST Program Plan's compliance with ASME Section XI requirements. This activity shall be completed, and components satisfactorily tested prior to the restart of NMP2 from its present refueling outage.
2. A Nuclear Engineering group has been formed to function as specialists in the areas of IST Program Plan management, development and update. Activities will include maintaining a documented program on IST plan interpretations and justifications. The group also coordinates program changes and ensures changes are properly reviewed.
3. The Nuclear Design Department will initiate a Licensing Document Change Notice (LDCN) for the applicable USAR sections to reflect and identify components that have safety-related functions and require operability tests in accordance with Technical Specification Section 4.0.5. This activity shall be completed by December 31, 1990.
4. A supplement to this LER will be issued to report the results of the review discussed in corrective action 1 above.

V. ADDITIONAL INFORMATION

- A. Failed Component Identification: None
- B. Previous Similar Events:

Three previous LER's (LER 90-14, LER 89-20, and LER 89-18) have identified IST implementing test procedure deficiencies, and contained corrective actions requiring reviews and revisions to these procedures.

However, there have been no previous similar events identifying components that should have, but were not included in the Inservice Testing Program Plan.



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		9 0	0 2 1	0 0	0 5	OF 0 5

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V. ADDITIONAL INFORMATION (cont.)

C. Identification of Components Referred to in this LER.

Component	IEEE 803 Function	IEEE 805 System I.D.
Motor Operated Butterfly Valves	20	BO
Motor Operated Gate Valves	20	BO

