



10 CFR 50.73

NMP2L2855
October 27, 2023

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Nine Mile Point Nuclear Station, Unit 2
Renewed Facility Operating License No. NPF-69
Docket No. 50-410

Subject: NMP2 Licensee Event Report 2023-001, Revision 0, Automatic Reactor Scram
on Low Level Due to Partial Loss of Feedwater

In accordance with the reporting requirements contained in 10 CFR 50.73(a)(2)(iv)(A), please
find enclosed NMP2 Licensee Event Report (LER) 2023-001, Revision 0, Automatic Reactor
Scram on Low Level Due to Partial Loss of Feedwater.

There are no regulatory commitments contained in this letter.

Should you have any questions regarding the information in this submittal, please contact
Brandon Shultz, Site Regulatory Assurance Manager, at (315) 349-7012.

Respectfully,


10/26/23

Carl Crawford
Plant Manager, Nine Mile Point Nuclear Station

CC/MLR

Enclosure: NMP2 Licensee Event Report 2023-001, Revision 0, Automatic Reactor Scram
on Low Level Due to Partial Loss of Feedwater

cc: NRC Regional Administrator, Region I
NRC Resident Inspector
NRC Project Manager

1E22
NRK

Enclosure

**NMP2 Licensee Event Report 2023-001, Revision 0
Automatic Reactor Scram on Low Level Due to Partial Loss of Feedwater
Nine Mile Point Nuclear Station, Unit 2**

Renewed Facility Operating License No. NPF-69



LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)
(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Library and Information Collections Branch (T-6 A10M), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by email to Infocollections@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; email: omb_submission@omb.eop.gov. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

1. Facility Name Nine Mile Point Unit 2	<input checked="" type="checkbox"/> 050 <input type="checkbox"/> 052	2. Docket Number 410	3. Page 1 OF 3
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4. Title
 Automatic Reactor SCRAM on Low Level Due to Partial Loss of Feedwater

5. Event Date			6. LER Number			7. Report Date			8. Other Facilities Involved		
Month	Day	Year	Year	Sequential Number	Revision No.	Month	Day	Year	Facility Name	<input type="checkbox"/> 050	Docket Number
09	02	2023	2023	001	00	10	27	2023	Facility Name	<input type="checkbox"/> 052	Docket Number

9. Operating Mode Mode 1, Power Operation **10. Power Level** 100%

11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)

<input type="checkbox"/> 10 CFR Part 20	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 10 CFR Part 50	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 73.1200(a)
<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 73.1200(b)
<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)	<input type="checkbox"/> 73.1200(c)
<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.36(c)(2)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 73.1200(d)
<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 10 CFR Part 21	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 10 CFR Part 73	<input type="checkbox"/> 73.1200(e)
<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 21.2(c)	<input type="checkbox"/> 50.69(g)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.77(a)(1)	<input type="checkbox"/> 73.1200(f)
<input type="checkbox"/> 20.2203(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> 73.77(a)(2)(i)	<input type="checkbox"/> 73.1200(g)
<input type="checkbox"/> 20.2203(a)(2)(iv)		<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/> 73.77(a)(2)(ii)	<input type="checkbox"/> 73.1200(h)
<input type="checkbox"/> 20.2203(a)(2)(v)		<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)		

OTHER (Specify here, in abstract, or NRC 366A).

12. Licensee Contact for this LER

Licensee Contact Brandon Shultz, Site Regulatory Assurance Manager	Phone Number (Include area code) (315) 349-7012
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13. Complete One Line for each Component Failure Described in this Report

Cause	System	Component	Manufacturer	Reportable to IRIS	Cause	System	Component	Manufacturer	Reportable to IRIS
B	SJ	LCV	CCI	Yes					

14. Supplemental Report Expected	15. Expected Submission Date	Month	Day	Year
<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date)		02	02	2024

16. Abstract (Limit to 1326 spaces, i.e., approximately 13 single-spaced typewritten lines)

On 9/2/2023 at 0632 EDT, with Nine Mile Point Nuclear Station operating at 100% power, a Feedwater transient occurred resulting in a Reactor Protection System (RPS) Automatic Reactor Scram on Low Level (Level 3, 159.3"). Following the scram, reactor water level dropped below Level 2 (108.8") resulting in a Group 2 Recirc Sample System Isolation, Group 3 Traversing Incore Probe (TIP) Isolation Valve Isolation, Group 6 and 7 Reactor Water Cleanup Isolation, and Group 9 Containment Purge Isolations.

All control rods inserted as expected. High Pressure Core Spray and Reactor Core Isolation Cooling initiated (RCIC) and injected as expected. Emergency Core Cooling Systems (ECCS) and RCIC were secured and normal reactor pressure and level control was established for hot shutdown.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A).



**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Library, and Information Collections Branch (T-6 A10M), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by email to Infocollections.Resource@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; email: ofra_submission@omb.eop.gov. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

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1. FACILITY NAME Nine Mile Point Unit 2	<input checked="" type="checkbox"/> 050	2. DOCKET NUMBER 50-410	YEAR	3. LER NUMBER	
	<input type="checkbox"/> 052		2023	SEQUENTIAL NUMBER	REV NO.
				001	00

NARRATIVE

THE ENERGY INDUSTRY IDENTIFICATION SYSTEM (EIIS) COMPONENT FUNCTION IDENTIFIED AND SYSTEM NAME OF EACH COMPONENT OR SYSTEM REFERRED TO IN THIS LER ARE ENCLOSED WITHIN [BRACKETS]

I. DESCRIPTION OF EVENT

A. PRE-EVENT PLANT CONDITIONS:

Prior to the event, NMP2 was in Mode 1 (Power Operation) at 100% power.

B. EVENT:

On 9/2/2023 at 0632 EDT, with Nine Mile Point Nuclear Station operating at 100% power, a Feedwater [SJ] transient occurred resulting in an RPS Automatic Reactor Scram on Low Level (Level 3, 159.3"). Following the Scram, reactor water level dropped below Low Low Level (Level 2, 108.8") resulting in a Group 2 Recirc Sample System Isolation [AD], Group 3 TIP Isolation Valve Isolation, Group 6 and 7 Reactor Water Cleanup Isolation [CE], and Group 9 Containment Purge Isolations [BB].

All control rods inserted as expected. High Pressure Core Spray [BG] and Reactor Core Isolation Cooling [BN] initiated and injected as expected. ECCS Systems and RCIC were secured and normal reactor pressure and level control was established for hot shutdown.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A).

C. INOPERABLE SYSTEMS, STRUCTURES, OR COMPONENTS THAT CONTRIBUTED TO THE EVENT:

None. Any non-safety related equipment that contributed to the event will be provided in the supplement.

D. DATES AND APPROXIMATE TIMES OF MAJOR OCCURENCES AND OPERATOR ACTIONS:

The dates, times, major occurrences, and operator actions for this event are as follows.

September 2, 2023:

0632 – A sudden reduction in Feedwater flow causes level lowering to Low Level (Level 3, 159"), resulting in an RPS Automatic Reactor Scram.

0632 – Shortly following the scram, Low Low Level (Level 2, 108.8") is reached, resulting in Group 2, 3, 6, 7, 8, and 9 isolations. Recirculating Pumps trip, and High Pressure Core Spray (HPCS) and Reactor Core Isolation Cooling (RCIC) automatically initiate.

0635 – Turbine tripped on reverse power.

None. Additional dates and times of major occurrences and operator actions may be provided in the supplement when the evaluation is complete.



**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

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	<input type="checkbox"/> 052		YEAR 2023	SEQUENTIAL NUMBER 001	REV NO. 00

NARRATIVE

E. METHOD OF DISCOVERY:

This event was self-revealed when RPS Automatic Scram signal was received on Low Level (Level 3, 159").

F. SAFETY SYSTEM RESPONSES:

All safety systems responded per design.

II. CAUSE OF THE EVENT

The direct cause of the Feedwater transient was due to stem-plug separation of the 2FWS*LV10B, Level Control Valve Feedwater Flow B, which resulted loss of flow from the 'B' Feedwater line.

The event is being evaluated and additional information may be provided in the supplement.

III. ANALYSIS OF THE EVENT

The scram did not have any impact to the health or safety of the public. All safety systems responded per design. The analysis will be provided in the supplement.

IV. CORRECTIVE ACTIONS

A. ACTION TAKEN TO RETURN AFFECTED SYSTEMS TO PRE-EVENT NORMAL STATUS:

The station completed repairs to the 2FWS*LV10B, Level Control Valve Feedwater Flow B.

B. ACTION TAKEN OR PLANNED TO PREVENT OCCURRENCE:

This information will be provided in the supplement when the evaluation is completed.

V. ADDITIONAL INFORMATION

A. FAILED COMPONENTS:

2FWS*LV10B, Level Control Valve Feedwater Flow B.

B. PREVIOUS LERs on SIMILAR EVENTS:

None