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Docket No.: 50-364

NL-23-0883

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

Joseph M. Farley Nuclear Plant - Unit 2
Licensee Event Report 2023-003-00
Pressurizer Code Safety Valve Lift Pressure
Outside of Technical Specifications Limits

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.73(a)(2)(i)(B), Southern Nuclear Company is submitting the enclosed Licensee Event Report for Unit 2.

This letter contains no NRC commitments. If you have any questions regarding this submittal, please contact Gene Surber, Licensing Manager, at (334) 661-2265.

Respectfully submitted,

Edwin Dean III

Vice President – Farley

SD/rgs/cbg

Enclosure: Unit 2 Licensee Event Report 2023-003-00

Cc: Regional Administrator, Region II
NRR Project Manager – Farley Nuclear Plant
Senior Resident Inspector – Farley Nuclear Plant
RTYPE: CFA04.054

Joseph M. Farley Nuclear Plant - Unit 2
Licensee Event Report 2023-003-00
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Enclosure

Unit 2 Licensee Event Report 2023-003-00

NRC FORM 366 (10-01-2023) | U.S. NUCLEAR REGULATORY COMMISSION | APPROVED BY OMB: NO. 3150-0104 | EXPIRES: 03/31/2024

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/)

1. Facility Name		2. Docket Number	3. Page
Joseph M. Farley Nuclear Plant, Unit 2	■ 050 ☐ 052	364	1 OF 2

4. Title

Pressurizer Code Safety Valve Lift Pressure Outside of Technical Specifications Limits

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	☐ 050	Docket Number
10	24	2023	2023	- 003 -	00	12	07	2023	Facility Name	☐ 052	Docket Number

9. Operating Mode	10. Power Level
6	000

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

10 CFR Part 20	☐ 20.2203(a)(2)(vi)	**10 CFR Part 50**	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)	☐ 73.1200(a)
☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)	☐ 73.1200(b)
☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)	☐ 73.1200(c)
☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)	☐ 73.1200(d)
☐ 20.2203(a)(2)(i)	**10 CFR Part 21**	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(A)	**10 CFR Part 73**	☐ 73.1200(e)
☐ 20.2203(a)(2)(ii)	☐ 21.2(c)	☐ 50.69(g)	☐ 50.73(a)(2)(v)(B)	☐ 73.77(a)(1)	☐ 73.1200(f)
☐ 20.2203(a)(2)(iii)		☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(C)	☐ 73.77(a)(2)(i)	☐ 73.1200(g)
☐ 20.2203(a)(2)(iv)		☑ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(v)(D)	☐ 73.77(a)(2)(ii)	☐ 73.1200(h)
☐ 20.2203(a)(2)(v)		☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)		

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

12. Licensee Contact for this LER

Licensee Contact	Phone Number (Include area code)
Gene Surber, Licensing Manager	(334) 661-2265

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
X	AB	RV	C710	Y						

14. Supplemental Report Expected		15. Expected Submission Date	Month	Day	Year
☑ No	☐ Yes (If yes, complete 15. Expected Submission Date)				

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

On October 24, 2023, while at 0% power level and Mode 6 (refueling), it was discovered that a Unit 2 pressurizer code safety valve (PSV), which had been removed during the refueling outage (2R29) and shipped off-site for testing, failed its as-found lift pressure test. The PSV lifted above the Technical Specification (TS) 3.4.10 allowable lift setting value. Setpoint drift of the PSV is the most likely cause of the failure.

It is likely that the PSV was outside of the TS limits longer than allowable by the Required Action Statement (15 minutes) during the previous operating cycle in all applicable modes of operation. Therefore, this condition is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by TS.

The PSV was replaced during the October 2023 refueling outage.

LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 03/31/2024

(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/)

1. FACILITY NAME		2. DOCKET NUMBER	3. LER NUMBER		
			YEAR	SEQUENTIAL NUMBER	REV NO.
Joseph M. Farley Nuclear Plant, Unit 2	■ 050 ☐ 052	364	2023	- 003	- 00

NARRATIVE

EVENT DESCRIPTION:

On October 24, 2023, while Unit 2 was at 0% power level and in Mode 6 (Refueling), with the Reactor Coolant System (RCS) [AB] at atmospheric pressure and 91 degrees Fahrenheit, the 2C Pressurizer Code Safety Valve (PSV) [RV] (Serial # N56963-01-0003, Manufacturer: Crosby; Model: HB-86-BP) was removed as part of the routine In-Service Testing (IST) program and sent to an off-site testing facility. The as-found lift pressure was discovered to be 2522 psig which was outside of the Technical Specification (TS) 3.4.10 allowable lift pressure settings of >/= 2423 psig and </= 2510 psig. The tested valve was within the ASME code acceptance band of +/- 3% (2411-2559 psig). Based on the lift pressure meeting the IST program (ASME code) monitored requirements, there was no IST scope expansion for the PSV.

EVENT ANALYSIS:

Setpoint drift of the PSV was determined to be the most likely cause of the failure.

REPORTABILITY AND SAFETY ASSESSMENT:

This failure constitutes a condition that is reportable pursuant to 10 CFR 50.73(a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications." There is no firm evidence, prior to the time of discovery at the test facility, of when the failure occurred. Since the as-found lift setpoint was within ASME Code allowance and less than 110% design pressure of the RCS, the condition did not have an adverse impact on its over-pressurization function. The as-found lift pressure was 2522 psig, and the valve re-closed following the lift. There were no actual safety consequences for this event. No safety system responses occurred. There was no release of radioactivity.

CORRECTIVE ACTIONS:

The PSV was replaced during the October 2023 refueling outage. The as-left setpoints were within +/- 1% tolerance. Previous corrective actions for PSV failures included a spring changeout campaign for all PSV's and TS 3.4.10 was also previously revised. The 2C PSV that was removed was the last PSV in the spring changeout campaign.

PREVIOUS SIMILAR EVENTS:

Similar events have been reported for Unit 1 and Unit 2.

LER 2023-01-00
LER 2020-02-00
LER 2019-01-00
LER 2018-01-00
LER 2017-03-00

OTHER SYSTEMS AFFECTED:

No other systems were affected by this event.