



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.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.

1. Facility Name Calvert Cliffs Nuclear Power Plant, Unit 2	<input checked="" type="checkbox"/> 050 <input type="checkbox"/> 052	2. Docket Number 05000318	3. Page 1 OF 3
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4. Title
Manual Actuation of Auxiliary Feedwater System Due to 22 Steam Generator Feedwater Pump Trip

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
11	08	2023	2023	- 003 -	00	01	08	2024	Facility Name	<input type="checkbox"/> 052	Docket Number

9. Operating Mode 3-Hot Standby	10. Power Level 0
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11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)

10 CFR Part 20	<input type="checkbox"/> 20.2203(a)(2)(vi)	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)	10 CFR Part 21	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	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 Arthur L. Simpson, Principal Regulatory Engineer	Phone Number (Include area code) 410-495-6913
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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	P	B580	Y					

14. Supplemental Report Expected

<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date)
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15. Expected Submission Date

Month	Day	Year

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

At 06:45 on November 8, 2023, the 22 Steam Generator Feedwater Pump (SGFP) tripped on high casing water level. The pump was in service supporting heat removal following the Unit 2 automatic reactor trip that occurred the previous day. The 21 SGFP was in standby at the time and had a high casing water level as well. Therefore, Operations entered the applicable procedure and manually started the 23 auxiliary feedwater pump to reinitiate flow to the steam generators. Plant conditions during the event resulted in an excessive accumulation of condensate in the SGFP turbine casings. Station procedures did not account for the specific set of conditions that resulted in the SGFP turbine casing high water levels. This challenged operation of both SGFPs. The high turbine casing water level was corrected via a station work order. Planned corrective actions include review of station procedures for plant configurations similar to those realized during the subject event, and a performance analysis to determine if additional training is needed.



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

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1. FACILITY NAME Calvert Cliffs Nuclear Power Plant, Unit 2	<input checked="" type="checkbox"/> 050	2. DOCKET NUMBER 05000318	3. LER NUMBER		
	<input type="checkbox"/> 052		YEAR	SEQUENTIAL NUMBER	REV NO.
			2023	- 003	- 00

NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

Calvert Cliffs Nuclear Power Plant, Unit 2, is a Combustion Engineering Pressurized Water Reactor with a licensed maximum power level of 2737 megawatts thermal. The Energy Industry Identification System code used in the text is identified as [SJ].

A. CONDITION PRIOR TO EVENT

Unit: 2
Date: November 8, 2023
Power level: 0
Mode: Unit 2 was in Mode 3 when the condition was discovered.

B. DESCRIPTION OF EVENT

At 06:45 on November 8, 2023, the 22 Steam Generator Feedwater Pump (SGFP) tripped on high casing water level. The pump was in service supporting heat removal following the Unit 2 automatic reactor trip that occurred the previous day. The 21 SGFP was in standby at the time and also had a high casing water level. Therefore, Operations entered the applicable procedure and started the 23 Auxiliary Feedwater Pump at 07:04, to reinitiate flow to the steam generators.

C. DATES AND APPROXIMATE TIMES OF MAJOR OCCURRENCES

- 11/7/2023:16:17: Unit 2 Automatic Reactor Trip due to Loss of Unit Service Transformer
- 11/7/2023:16:17: Unit 2 in Mode 3 (Hot Standby)
- 11/8/2023: 06:45: 22 SGFP tripped on high casing water level.
- 11/8/2023: 07:04: Operations manually started 23 AFW pump to restore AFW.

D. CAUSE OF EVENT

The method of discovery for this event was self-revealing and is documented in the site's Corrective Action Program under IR04716258. At 06:45, the 22 SGFP tripped due to a high casing water level condition. The high casing water level condition also existed on the 21 SGFP which was in standby at the time. Therefore, Operations manually actuated the Auxiliary Feedwater System per station procedures after the 22 SGFP tripped.

Plant conditions during the event resulted in an excessive accumulation of condensate in the 21 and 22 SGFP turbine casings. As noted above, 22 SGFP tripped on high casing water level, and the high casing water condition existed on the standby 21 SGFP as well. Station procedures did not account for the specific set of conditions that resulted in the SGFP turbine casing high water levels. This challenged operation of both SGFPs.



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NARRATIVE

E. SAFETY ANALYSIS

The subject event satisfies the criteria in NUREG-1022, Revision 3, for any event or condition that resulted in manual or automatic actuation of any of the systems listed in 10CFR50.73, paragraph (a)(2)(iv)(B). Specifically, for this event, the Auxiliary Feedwater System was manually actuated. Therefore, this event is reportable pursuant to 10CFR50.73(a)(2)(iv)(A). There were no safety consequences as a result of the event. All safety systems, including the Auxiliary Feedwater System, functioned and operated as designed.

F. CORRECTIVE ACTIONS

The high turbine casing water level was corrected via a station work order. Planned corrective actions include review of station procedures for plant configurations similar to those realized during the subject event, and a performance analysis to determine if additional training is needed.

G. PREVIOUS OCCURRENCES

A review of Calvert Cliffs' events was performed. No events were identified from this review for initiation of auxiliary feedwater due to SGFP trip.

H. COMPONENT FAILURE DATA

Component	IEEE 803 FUNCTION ID	IEEE805 SYSTEM ID
Steam Generator Feedwater Pump	P	SJ