

W3F1-2026-00037

10 CFR 50.73

August 17, 2026

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

Subject: Licensee Event Report 50-382/2026-001-00, Dry Cooling Tower 'B' Automatic Isolation Due to Level Switch Failure
Waterford Steam Electric Station, Unit 3
NRC Docket No. 50-382
Renewed Facility Operating License No. NPF-38

Entergy Operations, Inc. (Entergy) submits the enclosed Licensee Event Report (LER) 50-382/2026-001-00 for Waterford Steam Electric Station, Unit 3 (WF3). The event reported herein is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) Any operation or condition which was prohibited by the plant's Technical Specifications.

This letter contains no new commitments.

Should you have any questions concerning this issue, please contact me at 504-739-6747.

Respectfully,

**John R.
Twarog**

Digitally signed by John R. Twarog
DN: cn=John R. Twarog, c=US,
o=Waterford 3 Regulatory and Emergency
Preparedness Manager, ou=Waterford 3
Regulatory and Emergency Preparedness
Manager, email=jtwarog@entergy.com
Date: 2026.08.17 14:50:00 -0500

John Twarog

JRT/cc

Enclosure: LER 50-382/2026-001-00

cc: NRC Region IV Regional Administrator
NRC Senior Resident Inspector – Waterford Steam Electric Station, Unit 3
NRC Project Manager – Waterford Steam Electric Station, Unit 3

Enclosure

W3F1-2026-00037

Licensee Event Report

50-382/2026-001-00



LICENSEE EVENT REPORT (LER)

(See Page 3 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. 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

Waterford Steam Electric Station, Unit 3



050



052



053

2. Docket Number

00382

3. Page

1 OF 3

4. Title

Dry Cooling Tower 'B' Automatic Isolation Due to Level Switch Failure

5. Event Date

6. LER Number

7. Report Date

Month	Day	Year	Year	Sequential Number	Revision No.	Month	Day	Year
05	30	2026	2026	- 001 -	00	08	17	2026

8. Other Facilities Involved

Facility Name	☐ 050	Docket Number
N/A		
Facility Name	☐ 052	Docket Number
N/A		
Facility Name	☐ 053	Docket Number
N/A		

9. Operating Mode

1

10. Power Level

094

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

☒ 10 CFR Part 20	☐ 20.2203(a)(3)(i)	☐ 50.69(g)	☐ 50.73(a)(2)(v)(C)	☐ 53.1640(a)(2)(ii)(A)	☐ 73.77(a)(1)(ii)
☐ 20.2201(b)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(D)	☐ 53.1640(a)(2)(ii)(B)	☐ 73.77(a)(2)(i)(A)
☐ 20.2201(d)	☐ 20.2203(a)(4)	☒ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(vii)	☐ 53.1640(a)(2)(iii)	☐ 73.77(a)(2)(i)(B)
☐ 20.2203(a)(1)	☒ 10 CFR Part 21	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(viii)(A)	☐ 53.1640(a)(2)(iv)	☐ 73.1200(a)
☐ 20.2203(a)(2)(i)	☐ 21.2(c)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(B)	☐ 53.1640(a)(2)(v)	☐ 73.1200(b)
☐ 20.2203(a)(2)(ii)	☒ 10 CFR Part 50	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(ix)(A)	☐ 53.1640(a)(2)(vii)(A)	☐ 73.1200(c)
☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(x)	☐ 53.1640(a)(2)(viii)(A)	☐ 73.1200(d)
☐ 20.2203(a)(2)(iv)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☒ 10 CFR Part 53	☐ 53.1640(a)(2)(viii)(B)	☐ 73.1200(e)
☐ 20.2203(a)(2)(v)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☐ 53.1640(a)(2)(i)(A)	☐ 53.1640(a)(2)(ix)	☐ 73.1200(f)
☐ 20.2203(a)(2)(vi)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 53.1640(a)(2)(i)(B)	☒ 10 CFR Part 73	☐ 73.1200(g)
			☐ 53.1640(a)(2)(i)(C)	☐ 73.77(a)(1)(i)	☐ 73.1200(h)

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

12. Licensee Contact for this LER

Licensee Contact

John Twarog - Manager, Regulatory and Emergency Preparedness

Phone Number (Include area code)

504-739-6747

LICENSEE EVENT REPORT (LER) (Continued)

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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
D	CC	LS	M040	Yes						

14. Supplemental Report Expected

☒ No ☐ Yes (If yes, complete 15. Expected Submission Date)

15. Expected Submission Date

Month	Day	Year

16. Abstract

On May 30, 2026 at 0105 CDT, with Waterford Steam Electric Station, Unit 3 operating in Mode 1, Component Cooling Water (CCW) Surge Tank 'B' side Level Switch (LS) CC ILS7013-B inadvertently actuated resulting in the automatic isolation and bypass of Dry Cooling Tower (DCT) 'B'. The inadvertent actuation of the LS was the second occurrence following functional testing two days prior. The cause of the inadvertent LS actuations was microbiological growth blocking flow from the upper sensing line on the level switch. This growth stemmed from ineffective Chemistry Program monitoring of the stagnant portion of the system. Following flushing of the upper and lower sensing lines and validation that the condition no longer existed, the system was returned to service on May 31, 2026 which determined the condition existed longer than allowed by Technical Specifications and therefore is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B).

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

(See NUREG-1022, R.3 for instruction and guidance for completing this form
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1. FACILITY NAME	☒ 050 ☐ 052 ☐ 053	2. DOCKET NUMBER	YEAR	3. LER NUMBER SEQUENTIAL NUMBER	REV NO.
Waterford Steam Electric Station, Unit 3		00382	2026	001	00

NARRATIVE**Event Description:**

On May 28, 2026 at 1003 CDT, with Waterford Steam Electric Station, Unit 3 operating in Mode 1, functional testing began on Component Cooling Water (CCW) Surge Tank 'B' side Level Switch (LS) CC ILS7013-B [CC:LS] requiring entry into TS 3.7.3 72-hour shutdown LCO Action. The maintenance was performed without issue until the displacer rod was found stuck. The displacer rod was mechanically agitated and the float housing was drained discovering debris and sediment. Further functional testing was performed satisfactorily prior to restoring the system and returning to operations. During restoration, leads were re-landed associated with CC ILS7013-B resulting in the isolation of DCT 'B'.

Troubleshooting was performed including further flushing CC ILS7013-B Displacer housing until water was clean/clear. TS 3.7.3 was exited at 0312 hours on 5/29/2026. On May 30, 2026 at 0105 CDT, Component Cooling Water (CCW) Surge Tank 'B' side Level Switch (LS) CC ILS7013-B [CC:LS] inadvertently actuated resulting in the automatic isolation and bypass of Dry Cooling Tower (DCT) 'B'. Technical Specifications (TS) 3.7.3 Component Cooling Water (CCW) and Auxiliary Component Cooling Water (ACCW) 72 hour shutdown Limiting Condition for Operation (LCO) Action and 3.7.4 Ultimate Heat Sink (UHS) [BS] 72-hour shutdown LCO Action 'A' were entered. This LS inadvertent actuation was the second occurrence following functional testing two days prior. After the second LS failure, additional troubleshooting was performed. Testing of the level switch, float, and float rod with no deficiencies identified. The upper and lower sensing lines were vented, drained, and flushed resulting in dirty black water and a microbiological blockage being discovered. Flushing and venting continued followed by multiple functional tests and visual verifications to validate that the condition no longer exists. The TS conditions were exited on May 31, 2026 at 2310 CDT. A past operability evaluation was completed on June 16, 2026 and determined that the TS 72- hour LCO Action had been exceeded due to the failure to correct the condition following the first event. This is a reportable event in accordance with 10 CFR 50.73(a)(2)(i)(B).

Safety Assessment:

During the period of time that the level switch isolated the DCT 'B', the safety function of the cooling towers would have been impacted which would have rendered that train of CCW and UHS inoperable. The safety function was still met by having one train of CCW and UHS not impacted by this faulted condition. No other equipment affecting the safe shutdown of the unit was impacted by this condition.

Event Causes:

The cause for the event was microbiological growth blocking flow from the upper sensing line on the level switch stemming from ineffective Chemistry Program monitoring of the stagnant portion of the system. A contributing cause for the delayed correction of this condition was inadequate troubleshooting during the original point of discovery resulting in an additional failure of the level switch.

Corrective Actions:

- Troubleshooting performed removing blockage and functional testing.
- Action assigned to chemistry to monitor and add chemicals to control microbiological growth in stagnant parts of CCW Surge Tank sensing lines
- Action assigned to update the preventative maintenance task to include flushing all components of the level switch and support chemical addition.

Previous Similar Events:

On December 14, 1999, CR-WF3-1999-01276 documented biological material was found clogging the vent line to CC ILS7012 limit switch causing CCW Surge Tank level to cycle between 80-87% rather than the normal 70-87%. The line was flushed and restored to service. System Engineering and Chemistry determined that the cause was stagnant conditions in that portion of the system.