



Randy Crawford
Manager
Regulatory Assurance
225-381-4177

RBG-48268

10 CFR 50.73

December 28, 2023

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

Subject: Licensee Event Report 50-458 / 2023-004-00, Drywell Post Accident
Radiation Monitor Inoperable due to Unrecognized Surveillance Failure

River Bend Station – Unit 1
NRC Docket Nos. 50-458
Renewed Facility Operating License No. NPF-47

In accordance with 10 CFR 50.73, enclosed is the subject Licensee Event Report.

This document contains no commitments.

Should you have any questions, please contact Mr. Randy Crawford, Regulatory Assurance
Manager, at 225-381-4177.

Respectfully,

A handwritten signature in black ink, appearing to read 'Randy Crawford', with a long horizontal flourish extending to the right.

Randy Crawford

RC/tf

Enclosure: Licensee Event Report 50-458 / 2023-004-00, Drywell Post Accident Radiation
Monitor Inoperable due to Unrecognized Surveillance Failure

cc: NRC Region IV Regional Administrator - Region IV
NRC Senior Resident Inspector - River Bend Station

Enclosure

RBG-48268

**Licensee Event Report 50-458 / 2023-004-00, Drywell Post Accident Radiation Monitor
Inoperable due to Unrecognized Surveillance Failure**



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: 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 River Bend Station, Unit 1	<input checked="" type="checkbox"/> 050 <input type="checkbox"/> 052	2. Docket Number 458	3. Page 1 OF 3
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4. Title
 Drywell Post Accident Radiation Monitor Inoperable due to Unrecognized Surveillance Failure

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		Docket Number
11	02	2023	2023	- 004 -	00	12	28	2023	N/A	<input type="checkbox"/>	050 N/A
									N/A	<input type="checkbox"/>	052 N/A

9. Operating Mode Mode 4	10. Power Level 0
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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 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 checked="" 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 Randy Crawford, Regulatory Assurance Manager	Phone Number (Include area code) 225-381-4177
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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
A	IP	MON	G036	N	N/A	N/A	N/A	N/A	N/A

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

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

On November 2, 2023, with River Bend Station in Mode 4 and 0% power, personnel discovered an unrecognized surveillance failure for the Division I Drywell Post Accident Radiation Monitor (RMS-RE20A). The monitor was declared Inoperable and the appropriate Technical Specification Condition was entered.

The surveillance was reperformed on RMS-RE20A and the monitor was declared Operable on November 12, 2023.

The surveillance failure was due to human performance error.

This condition is being reported as an Operation or Condition Prohibited by Technical Specifications per 10 CFR 50.73(a)(2)(i)(B).



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

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1. FACILITY NAME River Bend Station, Unit 1	<input checked="" type="checkbox"/> 050	2. DOCKET NUMBER 458	3. LERNUMBER		
	<input type="checkbox"/> 052		YEAR 2023	SEQUENTIAL NUMBER 004	REV NO. 00

NARRATIVE

EVENT DESCRIPTION

River Bend Station (RBS) Technical Specification (TS) Limiting Condition of Operation (LCO) 3.3.3.1, Post Accident Monitoring (PAM) Instrumentation requires both Division I and Division II Drywell Post Accident Radiation Monitors to be Operable in Modes 1 and 2. If one Drywell Post Accident Radiation Monitor is declared Inoperable, LCO 3.3.3.1 Condition A is entered, and the monitor must be restored to Operable in 30 days.

On November 2, 2023, with RBS in Mode 4 and 0% power, personnel discovered an unrecognized surveillance failure (STP-511-4289 RMS-Primary Drywell Area Radiation Monitor, Channel Calibration RMS-RE20A) for the Division I Drywell Post Accident Radiation Monitor (RMS-RE20A) [IL] [MON] during a review of a previously performed work package. The monitor was declared Inoperable and LCO 3.3.3.1 Condition A was entered. The surveillance was performed with satisfactory results on November 2, 2023, and the monitor was declared Operable on November 12, 2023.

The unrecognized surveillance failure was identified during a review of the last performance of STP-511-4289 which was performed on February 28, 2023. It was determined that RMS-RE20A was left in an out of tolerance state and did not meet the requirements of the surveillance. Therefore, RMS-RE20A is considered Inoperable from February 28, 2023, until November 12, 2023.

LCO 3.3.3.1 is applicable in Modes 1 and 2. RBS was in Mode 4 on February 28, 2023, and did not exit Mode 4 until entering Mode 2 on June 15, 2023. RBS then went from Mode 2 to Mode 1 on June 16, 2023, and remained in Mode 1 until entering Mode 3 on October 29, 2023, for a planned outage. RBS did not enter an applicable Mode again until November 13, 2023, when Mode 2 was entered for start up to exit the planned outage. Therefore, RBS was Operating in a manner prohibited by TS from June 15, 2023, until October 29, 2023.

Prior to February 28, 2023, STP-511-4289 was last performed on March 11, 2021, with satisfactory results. Therefore, RMS-RE20A was Operable until the failed surveillance performed on February 28, 2023.

EVENT CAUSE

The casual evaluation investigation has determined that the event was caused by a human performance error while performing the surveillance on February 28, 2023. The RBS technician performing the surveillance did not identify and correct a parameter that was found out of tolerance.

SAFETY ASSESSMENT

The primary purpose of the PAM instrumentation is to display plant variables that provide information required by the control room operators during accident situations. This information provides the necessary support for the operator to take the manual actions for which no automatic control is provided and that are required for safety systems to accomplish their safety functions for Design Basis Events. RMS-RE20B provides redundant function capability to RMS-RE20A and was Operable from February 28, 2023, to November 12, 2023. Therefore, safety function was maintained throughout the time RMS-RE20A was Inoperable and this event was of minimal significance to the health and safety of the public.



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NARRATIVE

CORRECTIVE ACTIONS

Complete:

There are 82 active radiation monitors at RBS. A random sample of 20 completed radiation monitor work orders were selected based on the monitor classification and the work order having data tables like the data tables found in STP-511-4289. Seven of these work orders were completed by the technician that made the error on STP-511-4289 in February. No additional errors were identified during this review.

Planned:

- Culpability review in accordance with station procedures.
- Individual performance management and practices in accordance with station procedures
- Distribute lessons learned to station personnel.

PREVIOUS SIMILAR OCCURRENCES

No previous similar occurrences identified.

Energy Industry Identification System (EIIIS) codes are identified in the text as [XX]. River Bend equipment codes are identified as (XX).