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September 23, 2021

GO2-21-113

10 CFR 50.73

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

Subject: **COLUMBIA GENERATING STATION, DOCKET NO. 50-397**
LICENSEE EVENT REPORT NO. 2021-001-00

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2021-001-00 for Columbia Generating Station. This report is submitted pursuant to 50.73(a)(2)(v)(C) and 50.73(a)(2)(v)(D).

There are no commitments being made to the Nuclear Regulatory Commission by this letter. If you have any questions or require additional information, please contact Ms. D.M. Wolfgramm, Regulatory Affairs Manager, at (509) 377-4792.

Executed on this 23rd day of September, 2021.

Respectfully,

DocuSigned by:
David P. Brown
D199DB13836043F...

David P. Brown
Site Vice President

Attachment: Licensee Event Report 2021-001-00

cc: NRC Region IV Regional Admin
NRC Region IV Project Manager
NRC Senior Resident Inspector/988C
C.D. Sonoda – BPA/1399

(08-2020)

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/)

COMMISSION

APPROVED BY OMB: NO. 3150-0104 **EXPIRES: 08/31/2023**

1. Facility Name	2. Docket Number	3. Page
Columbia Generating Station	05000 397	1 OF 3

4. Title
Breach of Secondary Containment

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
07	28	2021	2021	- 001 -	00	09	23	2021		05000
									Facility Name	Docket Number
										05000

9. Operating Mode	10. Power Level
Mode 1	100%

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)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(A)	**10 CFR Part 73**
☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.69(g)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(4)
☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(i)(A)	☑ 50.73(a)(2)(v)(C)	☐ 73.71(a)(5)
☐ 20.2203(a)(2)(i)	**10 CFR Part 21**	☐ 50.73(a)(2)(i)(B)	☑ 50.73(a)(2)(v)(D)	☐ 73.77(a)(1)(i)
☐ 20.2203(a)(2)(ii)	☐ 21.2(c)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)	☐ 73.77(a)(2)(i)
☐ 20.2203(a)(2)(iii)	**10 CFR Part 50**	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)	☐ 73.77(a)(2)(ii)
☐ 20.2203(a)(2)(iv)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)	
☐ 20.2203(a)(2)(v)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)	

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

12. Licensee Contact for this LER

Licensee Contact	Phone Number (Include area code)
Valerie Lagen, Principal Licensing Engineer	(509) 372-5507

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

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

16. Abstract (Limit to 1560 spaces, i.e., approximately 15 single-spaced typewritten lines)

On July 28th, 2021, Columbia Generating Station was in Mode 1 at 100% reactor power when a Secondary Containment (Reactor Building) roof hatch was opened to support maintenance activities. The breach in Secondary Containment resulted in Surveillance Requirement 3.6.4.1.2 not being met. Maintenance personnel did not notify Operations prior to opening the roof hatch and Technical Specification Action Statement (TSAS) 3.6.4.1.A was not entered as required. The breach also resulted in Secondary Containment exceeding the Technical Specification (TS) limit of vacuum of less than 0.25 inches of vacuum water gauge.

While TS limits were briefly exceeded, the resulting pressure excursion was bounded by analytical results; and thus, there were no safety consequences for this condition. This event was reported under reporting criteria 10 CFR 50.72(b)(3)(v)(C) and 50.72(b)(3)(v)(D) as Event Notification #55385.

Work instructions contained insufficient detail to ensure applicable TS impacts were identified leading to Energy Northwest staff operating in knowledge space.

LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

(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.
Columbia Generating Station	05000- 397	2021	- 001	- 00

NARRATIVE

Plant Conditions

At the time of the event, the plant was operating in Mode 1 at 100% power. There were no structures, systems, or components that were inoperable at the start of the event that contributed to the event. Both Standby Gas Treatment (SGT) [BH] trains were operable.

Event Description

On July 28th, 2021 at 0922 PDT, the Secondary Containment [NG] hatch was opened to access the Reactor Building roof for maintenance activities. A second breach occurred when the maintenance personnel exited the roof. Each of the breach times were limited to 45 second intervals. Surveillance Requirement (SR) 3.6.4.1.2 is not met when any hatch in Secondary Containment is not closed and sealed and thus the Secondary Containment system became inoperable while the hatch was open. An alarm was received in the control room indicating a Secondary Containment vacuum of less than 0.25 inches of vacuum water gauge when the roof hatch was opened.

This event was reported as an event that could have prevented fulfillment of safety functions needed to control the release of radiation, and mitigate the consequences of an accident in accordance with 10 CFR 50.72(b)(3)(v)(C) and 10 CFR 50.72(b)(3)(v)(D) via Event Notification # 55385.

Immediate Corrective Actions

The Control Room received a Secondary Containment pressure alarm indicating a vacuum condition of less than 0.25 inches of vacuum water gauge while the roof hatch was open. Closing the hatch allowed the pressure to recover and the alarm cleared.

Assessment of Safety Consequences

The Secondary Containment low pressure alarm indicated a condition of less than 0.25 inches of vacuum water gauge. The maximum indicated pressure was 0.19 inches of vacuum water gauge. The purpose of maintaining a slight vacuum is to restrict the release of radioactive materials from the primary containment and to ensure the fission products entrapped within the Secondary Containment will be treated by the SGT system prior to discharge to the environment. There were no radiological releases, system actuations, or isolations associated with this event.

Surveillance Requirement 3.6.4.1.4 verifies that the SGT System will rapidly establish and maintain a pressure in the Secondary Containment that is less than ambient pressure. The design basis draw-down for Columbia is 20 minutes. An analysis was conducted to determine the impact of the breach on the specified safety system function for Secondary Containment at the beginning of a Design Basis Accident. The results showed that SGT would meet the credited design requirement to draw-down Secondary Containment to >/= 0.25 inches of vacuum water gauge in less than 20 minutes.

Secondary Containment was able to meet its required safety function to mitigate the consequence of a Design Basis Accident. There was no actual safety consequence associated with this event since there was no loss of safety function and no potential for radiological release.

NRC FORM 366A (08-2020) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 08/31/2023

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1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Columbia Generating Station	05000- 397	2021	- 001	- 00

NARRATIVE

Cause of Event

Work instructions contained insufficient detail to ensure applicable TS impacts were identified leading to Energy Northwest staff operating in knowledge space.

Similar Events

There has been one similar event at Columbia in the last five years reported as LER 2017-005-00 where Secondary Containment was declared inoperable due to a non-permitted penetration seal breach. Energy Northwest has implemented corrective actions for this previous event.

Further Corrective Actions

Plant procedures and work instructions are being revised to ensure clarity for required actions when breaching Secondary Containment.

Energy Industry Identification System codes from IEEE Standards 805-1984 and 803-1983 are represented in brackets as [WW] throughout the body of the narrative.