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November 30, 2017

10 CFR 50.73

GO2-17-187

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. 2017-007-00**

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2017-007-00 for Columbia Generating Station. This report is submitted pursuant to 10 CFR 50.73(a)(2)(v)(C) and 10 CFR 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 Compliance Supervisor, at (509) 377-4792.

Executed on this 30<sup>th</sup> day of November, 2017.

Respectfully,

A. L. Javorik  
Vice President, Engineering

Attachment: Licensee Event Report 2017-007-00

cc: NRC Region IV Regional Admin  
NRC Region IV Project Manager  
NRC Senior Resident Inspector/988C  
C.D. Sonoda – BPA/1399  
W.A. Horin – Winston & Strawn

**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 Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOF-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

**1. FACILITY NAME**

Columbia Generating Station

**2. DOCKET NUMBER****05000** 397**3. PAGE**1 **OF** 3**4. TITLE**

Valve Closure Results in Momentary Increase in Secondary Containment Pressure

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
10	03	2017	2017	007	00	11	30	2017	FACILITY NAME	DOCKET NUMBER
										<b>05000</b>
										<b>05000</b>
<b>9. OPERATING MODE</b>			<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</b>							
<b>1</b>			<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)		<input type="checkbox"/> 50.73(a)(2)(ii)(A)		<input type="checkbox"/> 50.73(a)(2)(viii)(A)		
			<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)		<input type="checkbox"/> 50.73(a)(2)(ii)(B)		<input type="checkbox"/> 50.73(a)(2)(viii)(B)		
			<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)		<input type="checkbox"/> 50.73(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(ix)(A)		
			<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)		<input type="checkbox"/> 50.73(a)(2)(iv)(A)		<input type="checkbox"/> 50.73(a)(2)(x)		
<b>10. POWER LEVEL</b>  <b>100</b>			<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)		<input type="checkbox"/> 50.73(a)(2)(v)(A)		<input type="checkbox"/> 73.71(a)(4)		
			<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)		<input type="checkbox"/> 50.73(a)(2)(v)(B)		<input type="checkbox"/> 73.71(a)(5)		
			<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)		<input checked="" type="checkbox"/> 50.73(a)(2)(v)(C)		<input type="checkbox"/> 73.77(a)(1)		
			<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)		<input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)		<input type="checkbox"/> 73.77(a)(2)(i)		
			<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)		<input type="checkbox"/> 50.73(a)(2)(vii)		<input type="checkbox"/> 73.77(a)(2)(ii)		
				<input type="checkbox"/> 50.73(a)(2)(i)(C)		<input type="checkbox"/> OTHER Specify in Abstract below or in NRC Form 366A				

**12. LICENSEE CONTACT FOR THIS LER**

## LICENSEE CONTACT

Sandra Christianson, Principal Engineer

## TELEPHONE NUMBER (Include Area Code)

(509) 377-4376

**13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT**

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

**14. SUPPLEMENTAL REPORT EXPECTED**☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☒ NO**15. EXPECTED SUBMISSION DATE**

MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On October 3, 2017 at 0800 PDT, Secondary Containment (Reactor Building) became inoperable due to pressure increasing above the Technical Specification (TS) limit of -0.25 inches of water gauge (inwg). While the plant was at 100% power, a Reactor Building exhaust valve unexpectedly closed, resulting in a loss of Secondary Containment for approximately two minutes. Secondary Containment was declared inoperable and TS Action Statement 3.6.4.1.A was entered. The Control Room operators reopened the Reactor Building exhaust valve and pressure returned to within limits automatically. Secondary Containment was declared operable at 0810 PDT and TS Action Statement 3.6.4.1.A was exited. The event was reported under 10 CFR 50.72(b)(3)(v)(C) and 10 CFR 50.72(b)(3)(v)(D) as Event Notification #52999.

The apparent cause of the event is a surface degradation on the lower stab of an electrical disconnect causing a momentary high resistance when the cubicle door is opened. This event occurred during performance of thermography in the cubicle.

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

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1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
Columbia Generating Station	05000- 397	YEAR 17	- SEQUENTIAL NUMBER 007	- REV NO. 00

**NARRATIVE****Plant Conditions**

At the time of the event, the plant was operating in Mode 1 at 100% power. The division 1 emergency diesel generator [EK] [DG] (DG1) was out of service for maintenance but did not contribute to this event. There were no other structures, systems, or components that were inoperable at the start of the event that contributed to the event.

**Event Description**

On October 3, 2017 at 0800 PDT, Operations personnel received an annunciator alarm for high Secondary Containment [NH] differential pressure when the Reactor Building [NG] exhaust inboard isolation valve [V] failed shut. For a time period of approximately two minutes, Secondary Containment differential pressure increased above -0.25 inches of water gauge (inwg), resulting in Technical Specification (TS) 3.6.4.1 not being met. The pressure rise was due to unexpected isolation of the Reactor Building inboard exhaust isolation valve during electrical switchgear inspections.

This event is reportable 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 per 10 CFR 50.73(a)(2)(v)(C) and 10 CFR 50.73(a)(2)(v)(D). This condition was reported under 10 CFR 50.72(b)(3)(v)(C) and 10 CFR 50.72(b)(3)(v)(D) via Event Notification #52999 for an event or condition that could have prevented fulfillment of a safety function needed to control the release of radioactive material and accident mitigation.

**Immediate Corrective Actions**

Control Room operators reopened the Reactor Building exhaust inboard isolation valve and pressure was restored within TS limits.

**Assessment of Safety Consequences**

This event resulted in an unplanned entry into TS 3.6.4.1.A, in which Secondary Containment pressure was greater than -0.25 inwg for approximately two minutes. The peak pressure during this event was +3.7 inwg. While the actual pressure was beyond the range allowed by Technical Specifications, the purpose of maintaining a slight negative pressure is to assist in drawdown of secondary containment to support accident response of the safety related SGT system. Existing engineering analysis demonstrates the drawdown credited in Columbia's accident analysis could have been attained using either of the two available trains of the SGT system. There was no actual safety consequence associated with this event since opening the Reactor Building exhaust inboard isolation valve restored Secondary Containment, and there was no loss of safety function or potential for radiological release.

**Cause of Event**

The apparent cause of the event is a surface degradation on the lower stab of an electrical disconnect causing a momentary high resistance when the cubicle door is opened. This event occurred during performance of thermography in the cubicle.

**Further Corrective actions**

Cleaning and inspection of the disconnect switches including the stab to bus connection on the electrical disconnects and correction of any deficiency found will be performed in the next available outage. As an interim corrective action, thermography on the electrical panels associated with the degraded electrical disconnects will be discontinued until after the cleaning and inspection of the electrical disconnect is completed.

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

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		YEAR	SEQUENTIAL NUMBER	REV NO.
Columbia Generating Station	05000- 397	17	- 007	- 00

**NARRATIVE****Similar Events**

A loss of the ability to maintain Secondary Containment pressure greater than required by Technical Specifications has occurred at Columbia Generating Station six times in the past two years. One event was due to inclement weather, one event was due degraded lubrication on a circuit breaker [52] fan [FAN], one was a faulty control switch on a fan, one was due to human performance errors during rescheduled work, and two events were due to latent errors from initial construction of the plant.

Energy Industry Identification System (EIIIS) Information codes from IEEE Standards 805-1984 and 803-1983 are represented in brackets as [XX] and [XXX] throughout the body of the narrative.