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November 9, 2017  
GO2-17-183

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. 2017-005-00**

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2017-005-00 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 herein. 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 9<sup>TH</sup> day of November, 2017

Respectfully,

W. G. Hettel  
Vice President, Operations

Enclosure 1: Licensee Event Report 2017-005-00

cc: NRC Region IV Administrator  
NRC NRR Project Manager  
NRC Senior Resident Inspector/988C  
CD Sonoda – BPA/1399  
WA 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, NEOB-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.

<b>1. FACILITY NAME</b> Columbia Generating Station	<b>2. DOCKET NUMBER</b> 05000 397	<b>3. PAGE</b> 1 OF 3
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**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
09	12	2017	2017	005	00	11	9	2017	FACILITY NAME	05000
									FACILITY NAME	05000

**9. OPERATING MODE**      **11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)**

<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 Tracey Parmelee, Principal Engineer, Compliance	TELEPHONE NUMBER (Include Area Code) (509) 377-8395
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**13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT**

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

**14. SUPPLEMENTAL REPORT EXPECTED**      **15. EXPECTED SUBMISSION DATE**

YES (If yes, complete 15. EXPECTED SUBMISSION DATE)       NO

MONTH	DAY	YEAR

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

On September 12, 2017 at 1227 PDT, Secondary Containment became inoperable due to pressure increasing above the Technical Specification limit of -0.25 inches of water gauge. While the plant was at 100% power, a Reactor Building exhaust valve and supply valve unexpectedly lost power and closed, resulting in a loss of Secondary Containment for approximately one minute. While Technical Specification limits were exceeded for this short time period, the resulting pressure excursion was bounded by analytical results; and thus, there were no safety consequences for this condition. This event was reported under 10 CFR 50.72(b)(3)(v)(C) and 10 CFR 50.72(b)(3)(v)(D) as Event Notification #52966.

The apparent cause of the event was that station personnel did not deliberately and conservatively perform work tasks. Workers failed to update work instructions when work was rescheduled, and did not verify power sources at the work site. Corrective actions for this event include conducting a workshop on management expectations of Maintenance, increased management oversight, and addressing human performance issues.



**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  Columbia Generating Station	2. DOCKET NUMBER  05000- 397	3. LER NUMBER		
		YEAR  2017	SEQUENTIAL NUMBER  005	REV NO.  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.

**Event Description**

On September 12, 2017 at 1227 PDT, Operations personnel received trouble alarms for the Off Gas System [WF], Fuel Pool Cooling System [DA], and Condensate Blowdown System [SD]. A Reactor Building [NG] exhaust valve [ISV] and supply valve [ISV] closed due to a loss of power. Concurrently, station electricians called to report an electrical spark while replacing the motor control center bucket [MCC] for the Reactor Core Isolation Cooling [BN] vacuum pump [P]. For a time period of approximately one minute, Secondary Containment differential pressure increased above -0.25 inches of water gauge (inwg), resulting in Technical Specification (TS) Surveillance Requirement 3.6.4.1.1 not being met.

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 #52966 for an event or condition that could have prevented fulfillment of a safety function needed to control the release of radioactive material, and needed to mitigate the consequences of an accident.

**Immediate Corrective Actions**

Operations personnel took manual control of the Reactor Building exhaust air controller [DCC] and restored Reactor Building differential pressure to normal. Both the supply and exhaust valves were re-opened, and the Reactor Building exhaust air controller was then returned to automatic function.

**Assessment of Safety Consequences**

This event resulted in an unplanned entry into TS Action Statement 3.6.4.1.A, in which Secondary Containment pressure was greater than -0.25 inwg for approximately one minute. The peak pressure during this event was -0.18 inwg. While the actual pressure was beyond the range allowed by Technical Specifications, the purpose of maintaining a slight vacuum is to assist in drawdown of secondary containment to support accident response of the safety related Standby Gas Treatment [BH] (SGT) system. Existing engineering analysis demonstrates that for this event, the drawdown credited in Columbia's accident analysis could have been attained using either of the two available trains of the SGT system, thus there were no potential safety consequences. There was no actual safety consequence associated with this event since there was no loss of safety function and no potential for radiological release.

**Cause of Event**

The apparent cause of the event was that station personnel did not deliberately and conservatively perform work tasks. Workers failed to update work instructions when work was rescheduled, and did not verify power sources at the work site.



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		<b>YEAR</b> 2017	<b>SEQUENTIAL NUMBER</b> 005	<b>REV NO.</b> 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 four times in the past two years. One event was due to inclement weather, one event was due to degraded lubrication on a circuit breaker [52] fan [FAN], and two events were due to latent errors from initial construction of the plant. Energy Northwest has implemented corrective actions for these previous events.

**Further Corrective Actions**

A Maintenance workshop will be held to strengthen understanding and knowledge of standards, and management's expectations of Maintenance personnel. Focused observations will be conducted to determine the effectiveness of the workshop. Additionally, human performance issues will be addressed.

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