



Alex L. Javorik  
Columbia Generating Station  
P.O. Box 968, MD PE04  
Richland, WA 99352-0968  
Ph. 509-377-8555 | F. 509-377-4150  
aljavorik@energy-northwest.com

August 24, 2017  
GO2-17-154

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. 2017-003-00**

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2017-003-00 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 24<sup>th</sup> day of August, 2017.

Respectfully,

A. L. Javorik  
Vice President, Engineering

Attachment: Licensee Event Report 2017-003-00

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 FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to [Infocollects.Resource@nrc.gov](mailto: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.

**1. FACILITY NAME**

Columbia Generating Station

**2. DOCKET NUMBER**

05000 397

**3. PAGE**

1 OF 3

**4. TITLE**

Momentary loss of Secondary Containment due to Weather

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
6	26	2017	2017	003	00	8	24	2017		05000
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE		11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)								
1	<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)						
10. POWER LEVEL	<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

Richard Wynegar, Licensing Engineer

TELEPHONE NUMBER (Include Area Code)

(509) 377-8362

**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 June 6, 2017 at 1756 PDT hours Secondary Containment pressure exceeded the Technical Specification (TS) limit during a period of inclement weather. At 1756 PDT Secondary Containment was declared inoperable and operations personnel entered TS Action Statement 3.6.4.1.A and subsequently exited at 1800 PDT. Secondary Containment pressure was restored automatically by system response and operator action was not required.

The direct cause of the momentary loss of Secondary Containment was due to slow system response to maintain a vacuum in Secondary Containment during a period of inclement weather. The interim planned corrective action is to verify proper operation and tuning of the Secondary Containment instrumentation. Additionally Columbia Generating Station is pursuing the change to TS requirements by adopting TSTF-551, Revise Secondary Containment Surveillance Requirements.

This condition is being reported under 10 CFR 50.73(a)(2)(v)(C) and 10 CFR 50.73(a)(2)(v)(D) for an event or condition that could have prevented fulfillment of a safety function needed to control the release of radioactive material and to mitigate the consequences of an accident.



**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/>)

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, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to [Infocollects.Resource@nrc.gov](mailto: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.

1. FACILITY NAME  Columbia Generating Station	2. DOCKET NUMBER  05000-  397	3. LER NUMBER		
		YEAR  2017	SEQUENTIAL NUMBER  003	REV NO.  00

**NARRATIVE**

**PLANT CONDITIONS**

At the time of the event, Columbia Generating Station (Columbia) was in Mode 1 operating at 98% reactor power. There were no structures, systems, or components that were inoperable that contributed to the event.

**EVENT DESCRIPTION**

On June 26, 2017 at 1756 PDT Secondary Containment (Reactor Building) [NG] pressure was not maintained at a vacuum greater than 0.25 inches water gauge (inwg) during a period of inclement weather. The Secondary Containment alarm was received and Secondary Containment pressure peaked at 0.08 inwg. Secondary Containment vacuum was restored to greater than 0.25 inwg by system response and operator action was not required.

**EXTENT OF CONDITION**

The extent of condition for Secondary Containment vacuum momentarily dropping below the required value is specific to the Reactor Building Heating Ventilation and Air Cooling (HVAC) [VA] and Standby Gas Treatment (SGT) [BH] systems, and their capability to establish and maintain Secondary Containment vacuum. No other systems were affected as a result of this condition.

**IMMEDIATE CORRECTIVE ACTION**

The Reactor Building Exhaust Air (REA) flow in-service differential pressure controller (DPIC) automatically restored Secondary Containment vacuum to greater than 0.25 inwg.

**CAUSE**

The sudden change in wind speed and direction has been shown to cause pressure transients on the exterior walls of the Secondary Containment. When wind direction changes and wind speed increases, the auctioneering function designed into the Secondary Containment differential pressure controller will select the lowest differential pressure input. The direct cause was Secondary Containment HVAC not responding quickly enough to maintain a vacuum of greater than 0.25 inwg during a period of inclement weather.

**PLANNED CORRECTIVE ACTION**

The interim planned corrective action is to verify proper operation and tuning of Secondary Containment differential pressure controller.

Additionally, Energy Northwest plans to submit a license amendment request to adopt TSTF-551, Revise Secondary Containment Surveillance Requirements, to address TS 3.6.4.1 Surveillance Requirement (SR) 3.6.4.1.1.

**ASSESSMENT OF SAFETY CONSEQUENCES**

This event resulted in an unplanned entry into Technical Specification (TS) Action Statement 3.6.4.1 Condition A, in which Secondary Containment vacuum was less than 0.25 inwg for approximately four minutes. The peak Secondary Containment pressure during this event was 0.08 inwg. While the actual vacuum was beyond the range allowed by TS the



**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/>)

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, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to [Infocollects.Resource@nrc.gov](mailto: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.

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
Columbia Generating Station	05000-	YEAR	SEQUENTIAL NUMBER	REV NO.
	397	2017	003	00

**NARRATIVE**

purpose of maintaining a slight vacuum is to assist in drawdown of Secondary Containment to support accident response of the safety related 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 Reactor Building HVAC did in fact restore Secondary Containment vacuum, and there was no loss of safety function or potential for radiological release.

**PREVIOUS OCCURENCES**

A loss of the ability to maintain Secondary Containment vacuum greater than required by TS has occurred at Columbia three times in the past two years as reported in LERs 2015-007-00, 2016-002-00, and 2016-003-00.

**ENERGY INDUSTRY IDENTIFICATION**

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