



ENERGY NORTHWEST

W. Grover Hettel
Columbia Generating Station
P.O. Box 968, PE23
Richland, WA 99352-0968
Ph. 509.377.8311 | F. 509.377.4150
wghettel@energy-northwest.com

March 8, 2013
GO2-13-041

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. 2013-001-00**

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2013-001-00 for Columbia Generating Station. This report is submitted pursuant to 10 CFR 50.73(a)(2)(v)(C) and (D), which requires the reporting of any condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to: control the release of radioactive material and mitigate the consequences of an accident.

There are no commitments being made to the NRC by this letter. If you have any questions or require additional information, please contact Mr. ZK Dunham at (509) 377-4735.

Respectfully,

WG Hettel
Vice President, Operations

Attachment: Licensee Event Report 2013-001-00

cc: NRC Region IV Administrator
NRC NRR Project Manager
NRC Senior Resident Inspector/988C
AJ Rapacz – BPA/1399
WA Horin – Winston & Strawn

FE22
NRR

LICENSEE EVENT REPORT (LER)
(See reverse for required number of digits/characters for each block)

1. FACILITY NAME Columbia Generating Station	2. DOCKET NUMBER 05000397	3. PAGE 1 OF 3
--	-------------------------------------	--------------------------

4. TITLE
Secondary Containment Inoperable due to both Airlock Doors being Open

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
01	07	2013	2013 - 001 - 00			03	08	2013	FACILITY NAME	DOCKET NUMBER 05000
									FACILITY NAME	DOCKET NUMBER 05000

9. OPERATING MODE 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)										
	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)							
10. POWER LEVEL 100	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)							
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)							
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)							
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)							
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)							
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)							
<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)(C)	<input type="checkbox"/> OTHER								
<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A								

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME Mot Hedges	TELEPHONE NUMBER (Include Area Code) 509-377-8277
-----------------------------	--

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 <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE MONTH: _____ DAY: _____ YEAR: _____
--	--

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

On January 7, 2013, Columbia was operating at 100% power. At 1427 PST both doors of the 501 elevation airlock entrance of the Reactor Building were simultaneously opened for a short period of time. This was the result of the failure of the interlock between the outer door (R304), and the inner door (R305).

Maintenance personnel were moving scaffolding through the Reactor Building outer security door when an equipment operator opened the inner door to exit the Reactor Building. This equipment operator immediately closed the inner door and contacted the Main Control Room. The outer door was key locked closed until corrective actions could be implemented.

Having a condition where both doors in a Reactor Building airlock were opened simultaneously while not undergoing a planned evolution for maintenance or surveillance testing, results in an unintended entry into Technical Specification (TS) 3.6.4.1 Secondary Containment due to a failure to satisfy Surveillance Requirement (SR) 3.6.4.1.3. It was determined that this condition resulted in a loss of safety function (Secondary Containment) and was reported to the NRC (Event Notification 48656) at 1629 PST on January 7, 2013.

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

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Columbia Generating Station	05000397	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 3
		2013 - 001 - 00			

NARRATIVE

PLANT CONDITIONS

Columbia was operating at 100% power. Standby Gas Treatment (SGT) System "A" was in an operability run following corrective maintenance on an electric heater disconnect. This did not contribute to the event.

EVENT DESCRIPTION

On January 7, 2013, at 1427 PST both doors [EIS: DR] of the 501 ft. elevation airlock [EIS: AL] entrance of the Reactor Building [EIS: NG] were simultaneously opened for a short period of time. This was the result of the failure of the interlock [EIS: IMEC] between the outer door (R304), and the inner door (R305). Maintenance personnel were moving scaffolding through the Reactor Building outer door when an equipment operator opened the inner door to exit the Reactor Building. This equipment operator immediately closed the inner door and contacted the Main Control Room. It was estimated that door was only open for a few seconds. The outer door was key locked closed until corrective actions could be implemented.

Having a condition where both doors in a Reactor Building airlock were opened simultaneously while not undergoing a planned evolution for maintenance or surveillance testing, results in an unintended entry into Technical Specification (TS) 3.6.4.1 Secondary Containment Condition A due to a failure to satisfy Surveillance Requirement (SR) 3.6.4.1.3. SR 3.6.4.1.3 requires verification that each secondary containment access inner door or each secondary containment access outer door in each access opening is closed. It was determined that this condition resulted in a loss of safety function (Secondary Containment) and was reported to the NRC (Event Notification 48656) at 1629 PST on January 7, 2013.

The reactor building is maintained at a negative pressure to minimize potential leakage of radioactivity to the environment. During normal operations, the Reactor Building Ventilation System maintains this negative pressure. During a design basis accident, the Standby Gas Treatment System [EIS: BH] maintains this negative pressure. This brief opening of the doors had no measurable impact on the Reactor Building pressure.

IMMEDIATE CORRECTIVE ACTION

Access through the airlock was restricted by locking the outer door (R304) until Reactor Building airlock inner door R305 was repaired.

Access to and from the Reactor Building was restricted to two airlock doors on the 441 ft. elevation. Personnel were stationed at the doors to ensure Secondary Containment integrity was maintained.

A temporary modification was implemented installing warning lights on the outsides of both airlock doors and a buzzer to alert station personnel when an individual is transiting the airlock.

The surveillance procedure for SR 3.6.4.1.3 was updated to verify proper operation of airlock doors and interlocks without compromising Secondary Containment.

CAUSE

A root cause evaluation of the issue determined that there were two root causes.

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

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Columbia Generating Station	05000397	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 3
		2013	- 001	- 00	

NARRATIVE

First Root Cause: A legacy design weakness for the Secondary Containment airlock door interlocks allows conditions where both the inner and outer doors can be opened at the same time.

Second Root Cause: Implementation of TSTF-18-A, Rev 1, at Columbia changed the wording of TS Bases for SR 3.6.4.1.2 and SR 3.6.4.1.3, reducing the clarity of the description of conditions that define Secondary Containment operability.

FURTHER CORRECTIVE ACTION

A design change is being evaluated that includes replacing the existing mechanical locks on all Secondary Containment airlock inner doors with a more reliable door locking device, improving the interlock logic to eliminate current design imperfections, and installing warning lights on the outside of the airlock to warn personal when the airlock is in use.

The TS Bases for SR 3.6.4.1.2 and SR 3.6.4.1.3 is being revised to ensure that the wording clearly identifies that Secondary Containment operability requires that one door in each airlock be closed at all times when Secondary Containment is required.

ASSESSMENT OF SAFETY CONSEQUENCES

There was no equipment damage, injuries or dose exposure to station personnel. There was no change in plant status or operating condition and there was no actual risk to the public at any time. There was no impact to public health and safety as the Primary Containment was intact with Primary Containment Isolation Valves operable. The Reactor Building Ventilation System maintained the designed negative pressure for Secondary Containment during the event.

There was a potential significance if there had been an event where the Primary Containment failed to isolate concurrent with a loss of coolant accident such that radioactive materials were released to the Reactor Building. Having both Reactor Building airlock doors open would potentially provide a release path for radioactive materials to enter the external environment or would inhibit the ability to draw down Secondary Containment within the time frame assumed in the dose analysis.

SIMILAR EVENTS

A similar event occurred at Columbia on December 30, 2012 (Event Notification 48639) and reported in LER 2012-007-00.

ENERGY INDUSTRY IDENTIFICATION SYSTEM (EII) INFORMATION CODES

EII codes are bracketed [] where applicable in the narrative.