ENERGY NORTHWEST

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August 26, 2010
GO2-10-125

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. 2010-001-00

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2010-001-00 for Columbia Generating Station. This report is submitted pursuant to 10 CFR 50.73(a)(2)(i)(B). The enclosed report discusses items of reportability and corrective actions taken related to the inability to fully close a secondary containment isolation valve. This condition was discovered on June 30, 2010.

There are no commitments being made to the NRC herein. If you have any questions or require additional information, please contact Mr. D.W. Gregoire at (509) 377-8616.

Respectfully,

for S. Oxenford

W.S. Oxenford
Vice President, Nuclear Generation & Chief Nuclear Officer

Enclosure: Licensee Event Report 2010-001-00

cc: NRC Region IV Administrator
NRC NRR Project Manager
NRC Senior Resident Inspector/988C
R.N. Sherman – BPA/1399
W.A. Horin – Winston & Strawn

IE22
NRR

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION
(9-2007)

APPROVED BY OMB NO. 3150-0104 EXPIRES 08/31/2010

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 Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@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.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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4. TITLE

Failure of a Secondary Containment Isolation Valve to Fully Close

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
										05000
06	30	2010	2010 – 001 – 00			08	30	2010	FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE
1

10. POWER LEVEL
100

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

☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
☐ 20.2203 (a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(C)	☐ OTHER
☐ 20.2203(a)(2)(vi)	☒ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER *(Include Area Code)*
Cherie D. Sonoda, Licensing Engineer	509-377-8697

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
D	WK	V	B350	Y					

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

ABSTRACT

On June 30, 2010, Columbia Generating Station (Columbia) discovered a condition prohibited by Technical Specifications (TS). An Air Operated Valve (AOV) diagnostic test was performed on Secondary Containment Isolation Valve (SCIV) FDR-V-219, contained in the Floor Drain Radioactive (FDR) system. Results showed that the valve was not fully closing. This valve must be capable of closing and staying closed to be considered operable. Unknowingly, Columbia has operated with this valve inoperable since 1994, a condition prohibited by LCO 3.6.4.2, Conditions A and C. Upon discovery of the inoperable status, the TS required actions for this condition were completed. Subsequently, the valve stroke has been adjusted and the valve has been declared operable.

The direct cause occurred on July 4, 1994. During the replacement of the valve actuator for SCIV FDR-V-219, the actuator stroke was set with the valve not fully closed and seated. Position limit switches were set based on the incorrect stroke length and did not provide any indication of the problem to the control room operators. The root cause of the event was inadequate work instructions that failed to verify that the valve was fully closed and seated prior to setting the actuator stroke.

No similar events have been reported by Columbia.

Plant Condition

The plant was operating in Mode 1 at 100% power.

Event Description

On June 30, 2010, diagnostic testing of FDR-V-219 [WK] was completed and a condition prohibited by LCO 3.6.4.2, Conditions A and C, was discovered. Results of the testing showed that the valve close stroke was approximately 1 inch from being fully closed and seated. This valve is an SCIV and must be capable of closing and staying closed to be considered operable. Upon discovery of the inoperable status, the TS required actions for this condition were completed by closing FDR-V-220 and isolating the flow path. Subsequently, the actuator was replaced, the valve stroke was adjusted, and the valve was declared operable.

The discrepant condition occurred on July 4, 1994 when the valve actuator was replaced. The work instructions directed that the valve packing be tightened to hold the valve disk in place without verifying that the valve was closed and seated. The valve actuator was installed and the valve stroke was set with the valve disk unseated and partially open. Subsequently, the position limit switches were set based on the incorrect stroke length. This did not allow indication of the problem to be observed by control room operators. Routine maintenance also failed to identify this condition. The required two-year visual verification and the quarterly surveillance on FDR-V-219 do not provide positive verification of the valve's ability to stop flow.

Immediate Corrective Actions

Upon discovery, the affected penetration flow path was isolated by closing FDR-V-220 (the valve in series with FDR-V-219), and a once per 31 day action was established to verify isolation of the affected penetration flow path. This met the TS 3.6.4.2 (Condition A) required actions for an inoperable SCIV. FDR-V-220 was verified closed through AOV diagnostic testing.

Causes

The direct cause of the valve not being able to fully close automatically was due to incorrectly setting the actuator. The root cause of the event was inadequate work instructions to verify that the valve was fully closed and seated prior to setting the actuator stroke.

Further Corrective Actions

On July 9, 2010, AOV diagnostic testing was performed after the repair of FDR-V-219, to ensure that the valve was fully closing. Additional corrective actions to address contributing causes, extent of cause, and recurrence prevention include: (1) improved testing using AOV diagnostics, (2) procedure revisions to the post maintenance testing process, and (3) preventative maintenance clarifications.

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Assessment of Safety Consequences

A review was conducted of work orders concerning FDR-V-219 and FDR-V-220 during the time period when FDR-V-219 was discrepant. This review concluded that FDR-V-220 was either closed and deactivated or operable. Consequently, the affected penetration flow path was either isolated or capable of being isolated. Therefore, this event did not involve an event or condition that alone could have prevented the fulfillment of any safety function described in 10 CFR 50.73(a)(2)(v).

Similar Events

No similar events have been reported by Columbia Generating Station.

Energy Industry Identification System (EIIS) Information

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