ENERGY NORTHWEST

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GO2-12-039

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. 2012-002-00

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2012-002-00 for Columbia Generating Station. This report is submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

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

Respectfully,

BJ Sawatzke
Vice President, Nuclear Generation & Chief Nuclear Officer

Enclosure: Licensee Event Report 2012-002-00

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

IE22
NRR

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION
(10-2010)

APPROVED BY OMB NO. 3150-0104 EXPIRES 10/31/2013

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 Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet 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.

LICENSEE EVENT REPORT (LER)

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

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4. TITLE

Technical Specification Non-Compliance Due to Inadequate Procedure Guidance

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
01	17	2012	2012	– 002 –	00	03	15	2012	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)*
Lisa L. Williams - Principal Licensing Engineer	(509)377-8148

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 January 16, 2012, at 0505 hours, the Division 1 Control Room Emergency Filtration filter unit was declared inoperable in preparation for performing a number of maintenance activities. Technical Specification (TS) Action Statement 3.7.3.B was entered for one or more subsystems inoperable due to an inoperable control room envelope (CRE). TS 3.7.3.B.2 requires an evaluation be performed within 24 hours to verify that the mitigating actions ensure CRE occupant exposures to radiological hazards will not exceed limits. The plant procedure for control of breaches to the CRE specified the required mitigating actions. It was subsequently determined that the mitigating actions specified by the procedure were not adequate to ensure the dose to control room occupants would remain below design basis accident consequences. Thus, TS 3.7.3.C should have been entered on January 17, 2012, for the Required Action and Associated Completion Time of Condition B not met. This TS Action Statement was not entered and the Required Action was not completed. The cause of the event was determined to be inadequate procedure guidance for implementing the revised TS Bases requirements. A stop work order was issued on all planned CRE breaches until planned corrective actions are completed. Planned corrective actions will revise guidance for performing maintenance on the CRE.

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NARRATIVE

Plant Conditions

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 and contributed to the event.

Event Description

On January 16, 2012, at 0505 hours PST, the Division 1 Control Room Emergency Filtration (CREF) [VI] air handling unit [AHU], which includes filters [FLT] and a fan [FAN], was declared inoperable in preparation for performing a number of maintenance activities on the filter unit. The maintenance activities involved opening an access panel on the filter unit thereby breaching the control room envelope (CRE). Technical Specification Action Statement (TSAS) 3.7.3.B was entered for one or more CREF subsystems inoperable due to inoperable CRE boundary in Mode 1, 2, or 3. TSAS 3.7.3.B.1 requires actions be taken to implement mitigating actions immediately. The plant procedure for control of breaches to the CRE, PPM 1.3.57 "Barrier Impairment" was used to identify the mitigating actions. The specific barrier impairment permits for the work activities specified the required mitigating actions to be a dedicated individual stationed at the access panel in constant communication with the Control Room with the supplies necessary to close up the panel if boundary integrity is required. TSAS 3.7.3.B.2 requires an evaluation be performed within 24 hours to verify that the mitigating actions ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits. Since the procedure specified the mitigating actions, plant personnel assumed that the requirements of TSAS 3.7.3.B.2 had been met. On January 22, 2012, at 0202 hours PST, the Division 1 CREF air handling unit was declared operable and the associated TSAS were exited.

On January 31, 2012, Quality Assurance personnel discovered that, for a period of approximately 10 minutes on January 18, 2012, the duties of the dedicated individual had been delegated to an individual unfamiliar with the job requirements. As part of the investigation into this issue, it was subsequently determined that the mitigating actions specified by PPM 1.3.57 were not adequate to ensure the dose to control room occupants would remain below design basis accident (DBA) consequences documented in the Final Safety Analysis Report (FSAR). Thus, even if the dedicated individual position had been properly staffed throughout the maintenance activities, the mitigating measures still would have been inadequate to meet the requirements of TSAS 3.7.3.B.2. In this case, TSAS 3.7.3.C should have been entered no later than January 17, 2012, at 0505 hours PST, for the Required Action and Associated Completion Time of Condition B not met in Mode 1, 2 or 3. This TSAS was not entered and the Required Actions were not completed as required.

Immediate Corrective Action

A stop work order was issued on February 10, 2012, on all planned CRE breaches until planned corrective actions are completed.

Cause

The root cause of the event was determined to be that PPM 1.3.57 did not adequately implement the TS Bases requirements. A contributing cause was identified to be that Revision 23 of PPM 1.3.57 in November 2008 failed to implement the TS requirements due to misinterpretation of the TS Bases requirements. On June 30, 2008, the NRC approved adoption of TS Task Force (TSTF) traveler TSTF-448, "Control Room Habitability," Revision 3 at Columbia.

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NARRATIVE

Further Corrective Actions

Planned corrective actions include clarifying the requirements for continuous communication and the duties of the dedicated individual and specifying a maximum timeframe for restoring the CRE boundary as supported by the existing DBA calculations. Those work activities that may not be able to meet the restoration time requirements will be evaluated to determine the required actions prior to being worked. Other planned corrective actions include revising PPM 1.3.57 and providing training to affected personnel.

A review was performed on other barrier impairments which were opened since TSTF-448 was implemented at Columbia and which affected the control room ventilation boundary. No other cases were found in which the Required Actions and Completion Times of TSAS 3.7.3.B were not met.

Assessment of Safety Consequences

There were no actual safety consequences associated with this event since no events involving radiological hazards were experienced during the work activities. If a radiological event had occurred during the maintenance activities, the Division 2 CREF system would have started as required. Since there was communication between the two divisions of CREF on the outlet side during the maintenance, there would be a delay in pressurizing the control room due to air flow out the breach. However, there would not be an increase in unfiltered in-leakage. Engineering calculations establish that adequate time was available to close the access panel prior to control room occupant exposures reaching the 10 CFR 50.67 limit of 5 rem TEDE. In addition, engineering analysis indicates that the access panel could be installed with a minimum of four bolts to restore the CRE boundary.

Similar Events

LER 2004-001-00 reported the unanticipated inoperability of both CREF subsystems when common ducts for both CREF subsystems were breached multiple times by removing duct access panels to install and remove test equipment. The cause is attributed to inadequate guidance in the Columbia Generating Station barrier impairment procedure. The cause of the inadequate guidance in the procedure was a lack of understanding of regulatory guidance associated with barrier impairments.

LER 2003-012-00 reported unanticipated inoperability of both CREF subsystems when the normal and both remote outside air intakes for the CREF system were manually isolated for a period of approximately 4 hours during testing to measure control room in-leakage. The cause of this event is attributed to inadequate preparation and review of the test procedure used to measure control room in-leakage.

Energy Industry Identification System (EIIS) Information

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