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October 9, 2014
GO2-14-146

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. 2014-004-00

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2014-004-00 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 by this letter. If you have any questions or require additional information, please contact Mr. J.R. Trautvetter, Regulatory Compliance Supervisor, at (509) 377-4337.

Respectfully,

W. G. Hettel
Vice President, Operations

Enclosure: Licensee Event Report 2014-004-00

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

IEZZ
NRR

LICENSEE EVENT REPORT (LER)(See Page 2 for required number of
digits/characters for each block).

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 Internet e-mail to infocollections.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOS-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

TS Surveillance 3.7.1.1 Compliance, UHS Spray Pond Level

5. EVENT DATE

MONTH	DAY	YEAR
08	14	2014

6. LER NUMBER

YEAR	SEQUENTIAL NUMBER	REV NO.
2014	004	00

7. REPORT DATE

MONTH	DAY	YEAR
10	09	2014

8. OTHER FACILITIES INVOLVED

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)
<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)

10. POWER LEVEL

100

<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 type="checkbox"/> 50.73(a)(2)(V)(C)	<input type="checkbox"/> OTHER
<input type="checkbox"/> 20.2203(a)(2)(VI)	<input checked="" type="checkbox"/> 50.73(a)(2)(I)(B)	<input 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**

Desirée Wolgramm

TELEPHONE NUMBER (Include Area Code)

509-377-4792

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 August 14, 2014 it was discovered that Columbia Generating Station's (Columbia) method of complying with Technical Specification (TS) Surveillance Requirement (SR) 3.7.1.1 for Ultimate Heat Sink (UHS) spray pond level was inadequate. The SR requires level in each spray pond to be verified to be greater than or equal to the minimum water level whereas procedures allowed for an arithmetic average of the two ponds to be taken when a single Service Water (SW) pump is in operation which creates a differential between the pond levels. The two spray ponds that make up Columbia's UHS are connected by a siphon line to allow water to be shared between the two ponds. Columbia's original TS did not specify that a minimum water level be checked in each pond and a procedural note was added to clarify compliance with the TS SR during single SW pump operation. When Columbia upgraded the TSs in 1997 the word 'each' was introduced to the TS. Corrective actions include a TS amendment submitted to the NRC on August 22, 2014.

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

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-6 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.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Columbia Generating Station	05000 397	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 3
		2014	- 004	- 00	

NARRATIVE**Plant Conditions**

At the time of the event the plant was operating in Mode 1 at 100% power. This event documents an administrative issue with TS compliance, therefore no structures, systems, or components were inoperable that contributed to this event.

Event Description

On August 14, 2014 it was discovered that Columbia Generating Station's (Columbia) method of complying with Technical Specification (TS) Surveillance Requirement (SR) 3.7.1.1 for Ultimate Heat Sink (UHS) [BS] spray pond level was inadequate.

Columbia's UHS consists of two concrete spray ponds. These spray ponds provide suction and discharge points for the redundant pumping and spray facilities of the Service Water (SW) [BI] system. SW loop A draws water from pond A and discharges through a spray ring into pond B for heat dissipation. Similarly, SW loop B draws water from pond B and discharges through a spray ring into pond A. The water then returns to the initial pond through a siphon line. During operation with one SW pump running, a differential level develops between the ponds until flow through the siphon line equalizes with the running SW pump. The spray ponds remain with this differential level until the running pump is stopped and flow through the siphon line equalizes the spray pond levels. The ponds were licensed such that the combined water volume of the spray ponds is adequate to provide cooling water for 30 days of operation, assuming maximum evaporation and drift losses.

Prior to implementation of improved TS (ITS) in June of 1997, there were separate TS for SW and UHS. The UHS TS contained a SR to verify the UHS water level was within its limit of 432 ft 9 inches mean sea level at a frequency of 24 hours. The operations surveillance procedure contained a note to take an arithmetic average of the spray pond levels if only one loop of SW was in operation. In March 1997, Columbia received license amendment 149 for ITS with a full implementation date of June 30, 1997. The ITS combined the SW and UHS into one TS. The UHS water level surveillance requirement was changed to require the level in each spray pond to be within the limit of 432 ft 9 inches. Due to the design of the spray ponds and SW system, it is difficult to meet this requirement in each pond when only one SW pump is in operation.

This discrepancy between the new TS SR and how it is implemented in operations surveillance procedures was identified in 1997 and license document changes were initiated to change the TS SR and the TS Bases to allow for an arithmetic average of the two ponds when a single pump is in operation. The TS Bases change was processed; however the TS SR change was not completed. The reason why the TS SR wasn't completed and submitted to the NRC for approval is undocumented and unknown.

Cause

The cause of this event is that although it was recognized in 1997 that Columbia was out of verbatim compliance with TS SR 3.7.1.1. Columbia's licensing document change process in 1997 allowed for changes to the TS SR and TS Bases to be processed separately. This allowed the TS Bases change to be implemented while the TS SR change was never completed or approved by the NRC.

LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Columbia Generating Station	05000 397	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 3
		2014 --	004	-- 00	

NARRATIVE

Extent of Condition

An extent of condition review determined that there have been multiple instances when SW would need to be declared inoperable based on spray pond level as it is common practice to operate individual service water pumps based on plant needs. The 12 hour Limiting Conditions for Operation per TS 3.7.1 was exceeded on August 13, 2014 with additional occurrences since implementation of the ITS on June 30, 1997.

Immediate Corrective Action

Once it was discovered that the operations procedure was not compliant with the TS SR all oncoming operations crews were briefed on the correct implementation of the TS SR. Guidance was also given to start both SW pumps if one is required to run. The operations surveillance procedure was also updated to remove the wording which allowed for the arithmetic average of the two ponds when a single pump is in operation.

Columbia has submitted a TS change to the NRC to allow verification that the average water level in the UHS spray ponds is within the limit. The licensing change process is being updated to ensure processing of TS SR changes with TS Bases changes if related.

Operating Experience & Previous Occurrences

No previous occurrences have been found to have the same cause of a license amendment change not processed. One event reported under LER-12-004-02 was a failure to enter a TS action statement due to conflicting information between the associated TS Bases and the surveillance procedure. Corrective actions focused on operability determinations for equipment removed from service. It also included a focused self-assessment to review TS Bases and TS SRs. The self-assessment did not identify the discrepancy described in this LER, and therefore a re-review of the work performed by this individual is being completed to ensure no other discrepancies between TS SR, TS Bases and implementing procedures exist.

Further Corrective Actions

A review of all TS Bases amendments was conducted to identify whether any other Licensing Document Changes were issued that introduced conflicts with the literal wording in the TS.

Assessment of Safety Consequences

There were no actual safety consequences associated with this event as during periods of SW single loop operation when one pond level was below TS minimum the actual inventory of the UHS was unaffected. The combined inventory between the two ponds remained above the licensed amount required to provide adequate cooling for 30 days of operation.

Energy Industry Identification System (EIIIS) Information

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