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May 12, 2014
GO2-14-077

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. 2014-003-00

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2014-003-00 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,

[Handwritten signature: Alex L. Javorik] 5/18/14
FOR A. L. JAVORIK,

A. L. Javorik
Vice President, Engineering

Attachment: Licensee Event Report 2013-005-00

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

JE22
NRR

(1-2014)

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

Degraded Tornado Missile Barrier

5. EVENT DATE

MONTH	DAY	YEAR
3	12	2014

6. LER NUMBER

YEAR	SEQUENTIAL NUMBER	REV NO.
2014	003	0

7. REPORT DATE

MONTH	DAY	YEAR
5	12	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) |
| <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 |

10. POWER LEVEL

100

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME

M. 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☐ 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 March 12, 2014, it was identified that three manhole covers (E10, E11, and E 15) for vaults containing 4160 volt electric cables were missing the hold down bolts. The hold down bolts are required as part of the tornado missile barrier for the manhole cover for the underground electric vault. It was later determined that the hold down bolts for manhole cover E11 (Division 2 Service Water) had been identified as missing since September 6, 2013. When the bolts were identified as missing on September 6, 2013, the manhole cover and bolts were not recognized as a tornado missile barrier; because this information was not available in routinely used databases and procedures. No compensatory action was taken until March 12, 2014, when large concrete blocks were placed on top of the manholes to prevent the covers from potential removal in the event of a tornado. The degraded missile barrier is considered to have rendered the Division 2 Service Water system inoperable from September 6, 2013, to March 12, 2014. This is reportable as a condition prohibited by Technical Specifications.

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-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, 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.

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		2014	- 003	- 0	

NARRATIVE

PLANT CONDITIONS

Columbia was operating at 100% power. There were no inoperable plant systems at the time of discovery that contributed to this event.

EVENT DESCRIPTION

On March 12, 2014, it was identified that three manhole covers (E10, E11, and E 15) for vaults containing 4160 volt electric cables [CBL] were missing the hold down bolts. The electric cables in vaults E10 and E11 support the Division 2 Service Water [BI] system. The electric cables in vaults E15 support the Division 3 Service Water system. The hold down bolts are required as part of the tornado missile barrier for the manhole cover for the underground electric vault. It was later determined that the hold down bolts for manhole cover E11 (Division 2 Service Water) had been identified as missing in two condition reports on September 6, 2013, and again on December 3, 2013. When Operations performed an immediate operability determination for the September and December 2013 condition reports, the manhole cover and bolts were not recognized as a tornado missile barrier; therefore, no compensatory action was taken until March 12, 2014. The degraded missile barrier is considered to have rendered the Division 2 Service Water system inoperable from September 6, 2013, to March 12, 2014. This is reportable as a condition prohibited by Technical Specifications.

IMMEDIATE CORRECTIVE ACTION

It was verified through the Weather Service that no tornados were predicted for our area in the next 24 hours. Large concrete blocks were placed over the manhole covers on March 12, 2014, to prevent the cover from lifting in the event of a tornado.

The information fields in the master equipment list for the applicable manhole covers were completed identifying them as a tornado missile barrier.

CAUSE

The information in this section is based on the preliminary results of a root cause evaluation. If any significant changes in the cause or corrective actions are made in the final evaluation, a supplement will be submitted for this report.

The direct cause for the missing hold down bolts was not determined.

The root cause of the failure to recognize the manhole cover as a tornado barrier was that station procedures that implement the process to establish quality classifications for safety-related systems, structures, and components (SSCs) did not ensure accurate information was available in a timely manner for these components.

There are multiple methods available for determining the safety significance of a degraded component; however, the computerized master equipment list is typically the preferred method. The equipment plant numbers (EPNs) for the manhole covers had been entered into master equipment list in 2012, but no action was taken to complete the remaining data fields for the components to identify that the manhole covers fulfilled a tornado barrier function, and have the information verified and approved. The master equipment list that station personnel used identified these manhole covers as nonsafety-related.

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NARRATIVE

In the immediate operability determination process for the two Condition Reports in 2013, Operations personnel did not have information readily available to them to determine that the manhole cover was a tornado missile barrier. Most plant personnel, including Operations, did not recognize that the information in the computer master equipment list for the manhole covers was not at an approved status and should not be used. The manhole covers did not have any label indicating that it was a tornado missile barrier. Plant drawings did not identify the manhole covers as tornado missile barriers. Additionally, the station barrier impairment procedure did not list the manhole covers as a tornado missile barrier.

FURTHER CORRECTIVE ACTION

Work requests were initiated to repair/replace the missing bolts for the manhole covers.

Revise Engineering procedures to provide clear direction to establish Quality Classifications for safety-related SSCs within the Master Equipment List within a specific time frame. Ensure that procedures include timeliness requirements for establishing and upgrading/downgrading EPNs for installed plant equipment.

Apply a marking on the manhole covers that identify these covers as a tornado missile barrier.

Revise the station barrier impairment procedure to identify manhole covers as a tornado missile barrier.

ASSESSMENT OF SAFETY CONSEQUENCES

No actual tornados occurred during the time of interest. The Division 2 Service Water system remained capable of fulfilling its safety function during this time period. Additionally, at least one other division of Service Water was available during this time period (September 6, 2013 to March 12, 2014) to be able to fulfill the safety function; therefore, the actual safety consequence of this issue was minimal.

SIMILAR EVENTS

There have been no similar events at Columbia Generating Station in the last three years.

ENERGY INDUSTRY IDENTIFICATION SYSTEM (EIS) INFORMATION CODES

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

**ENERGY
NORTHWEST**