



**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
GO2-13-040

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. 2012-006-01**

Dear Sir or Madam:

Transmitted herewith is Revision 1 to Licensee Event Report No. 2012-006 for Columbia Generating Station. This report is submitted pursuant to 10 CFR 50.73(a)(2)(v). The attached report discusses being in a condition that could have prevented the fulfillment of the safety function of systems that are needed to remove residual heat and to 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 2012-006-01

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

IE22
NRR

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| 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) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. FACILITY NAME Columbia Generating Station | | | | 2. DOCKET NUMBER 05000397 | | 3. PAGE 1 OF 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. TITLE Both Divisions of SDC Isolation Valves Made Inoperable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 09 | 19 | 2012 | 2012 - 006 - 01 | | | 03 | 08 | 2013 | DOCKET NUMBER 05000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | DOCKET NUMBER 05000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. OPERATING MODE 1 | | | 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: <i>(Check all that apply)</i> <table style="width:100%; border: none;"> <tr> <td><input type="checkbox"/> 20.2201(b)</td> <td><input type="checkbox"/> 20.2203(a)(3)(i)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)(C)</td> <td><input type="checkbox"/> 50.73(a)(2)(vii)</td> </tr> <tr> <td><input type="checkbox"/> 20.2201(d)</td> <td><input type="checkbox"/> 20.2203(a)(3)(ii)</td> <td><input type="checkbox"/> 50.73(a)(2)(ii)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(viii)(A)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(1)</td> <td><input type="checkbox"/> 20.2203(a)(4)</td> <td><input type="checkbox"/> 50.73(a)(2)(ii)(B)</td> <td><input type="checkbox"/> 50.73(a)(2)(viii)(B)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(i)</td> <td><input type="checkbox"/> 50.36(c)(1)(i)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(iii)</td> <td><input type="checkbox"/> 50.73(a)(2)(ix)(A)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(ii)</td> <td><input type="checkbox"/> 50.36(c)(1)(ii)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(iv)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(x)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(iii)</td> <td><input type="checkbox"/> 50.36(c)(2)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)(A)</td> <td><input type="checkbox"/> 73.71(a)(4)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(iv)</td> <td><input type="checkbox"/> 50.46(a)(3)(ii)</td> <td><input checked="" type="checkbox"/> 50.73(a)(2)(v)(B)</td> <td><input type="checkbox"/> 73.71(a)(5)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(v)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)(C)</td> <td><input type="checkbox"/> OTHER</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(vi)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)(B)</td> <td><input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)</td> <td>Specify in Abstract below or in NRC Form 366A</td> </tr> </table> | | | | | | | <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 checked="" 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 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 |
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| 10. POWER LEVEL 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12. LICENSEE CONTACT FOR THIS LER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FACILITY NAME Motley Hedges | | | | | | | TELEPHONE NUMBER <i>(Include Area Code)</i> 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 14. SUPPLEMENTAL REPORT EXPECTED <input type="checkbox"/> YES <i>(If yes, complete 15. EXPECTED SUBMISSION DATE)</i> <input checked="" type="checkbox"/> NO | | | | | | 15. EXPECTED SUBMISSION DATE <table style="width:100%; border: none;"> <tr> <td>MONTH</td> <td>DAY</td> <td>YEAR</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table> | | | | MONTH | DAY | YEAR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ABSTRACT <i>(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)</i> On September 19, 2012, Energy Northwest (EN) identified that both divisions of Residual Heat Removal (RHR) Shutdown Cooling (SDC) Reactor Vessel isolation valves were inappropriately made inoperable at the same time on multiple occasions in support of maintenance and surveillance testing during the 2011 refueling outage (R-20). This planned inoperability of the SDC isolation valves was performed using procedure SOP-RHR-SDC-BYPASS. SOP-RHR-SDC-BYPASS contains the specific steps for preventing the closure of each of the SDC isolation valves and the subsequent restoration steps. SOP-RHR-SDC-BYPASS did not contain guidance to allow both divisions SDC isolation valves to be inoperable at the same time. Since both divisions of SDC isolation valves were made inoperable without procedural guidance, this is being reported as a condition that could have prevented the fulfillment of the safety function of systems that are needed to remove residual heat and to mitigate the consequences of an accident. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**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 |
| | | 2012 – 006 – 01 | | | |

NARRATIVE

Plant Conditions:

Event Description:

On September 19, 2012, Energy Northwest (EN) identified that both divisions of Residual Heat Removal (RHR) Shutdown Cooling (SDC) [EIS: BO] Reactor Vessel isolation valves [EIS: ISV] were inappropriately made inoperable at the same time on multiple occasions in support of maintenance and surveillance testing during the 2011 refueling outage (R-20). This issue was identified and entered into the Columbia Generating Station (Columbia) corrective action program following review of the NRC Operating Experience Smart Sample (OpESS) 2012/02, Revision 1. All required Technical Specification (TS) Conditions for inoperable primary containment isolation valves were entered when the valves were made inoperable, and compliance with TS Actions was maintained. No operations with a potential to drain the reactor vessel were in progress. Columbia was in Mode 5 with the vessel flooded up. During R-20, EN implemented a plant modification to change the Group 1 containment isolation valves [EIS: ISV] isolation signal of reactor water level from level 2 to level 1. The NRC granted permission for this change to TS in a letter dated August 18, 2009 (TAC NO. MD9598). This planned inoperability of the SDC isolation valves, in support of the maintenance and surveillance activities associated with the modification to change the isolation signal from level 2 to level 1, was performed using procedure SOP-RHR-SDC-BYPASS. SOP-RHR-SDC-BYPASS contains the specific steps for preventing the closure of each of the SDC isolation valves and the subsequent restoration steps. SOP-RHR-SDC-BYPASS did not contain guidance to allow both divisions of SDC isolation valves to be inoperable at the same time. Since both divisions of the SDC isolation valves were made inoperable and the approved procedure did not provide specific guidance for removal of both divisions at the same time, this is being reported as a condition that could have prevented the fulfillment of the safety function of systems that are needed to remove residual heat and to mitigate the consequences of an accident. This condition is reportable under 10 CFR 50.73(a)(2)(v)(B) and 50.73(a)(2)(v)(D).

Extent of Condition:

An extent of condition review was performed. In the last three years, both divisions of RHR SDC isolation valves being inoperable at the same time was during R-20. There were multiple instances in which this occurred in R-20.

A similar issue occurs during transfer of a Reactor Protection System bus. Both divisions of containment isolations valves for RHR SDC and Reactor Water Cleanup [EIS: CE] are made inoperable.

Immediate Corrective Action:

No immediate corrective action was required.

Cause:

Apparent Cause: The operating crews inappropriately de-energized both divisions of RHR SDC isolation valves in the effort to minimize the potential for the loss of shutdown cooling without adequate procedural guidance.

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NARRATIVE

Operating Experience & Previous Occurrences:

This had not previously occurred at Columbia.

A similar issue was discussed in Operating Experience Smart Sample (OpESS) 2012/02, Revision 1.

Further Corrective Actions:

Training for Licensed Operators will be conducted on the requirement of TS bases 3.0.2 for intentionally entering TS Actions as identified by the Performance Analysis. Selected plant procedures will be revised to discuss "Operational Convenience".

Assessment of Safety Consequences:

Each occurrence took place when the plant was in Mode 5 with the reactor vessel in a flooded condition. No operations with a potential to drain the vessel were in progress. The inoperability of the RHR SDC isolation valves was not due to equipment failure. If a loss of reactor level was detected, the isolation valves could be quickly restored to an operable condition. All required TS conditions were entered. Compliance with all TS actions was maintained. There was no significant impact on safety consequences.

Energy Industry Identification System (EIIIS) Information

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