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January 20, 2004 GO2-04-009

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. 2001-003-00

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2001-003-00 for the Columbia Generating Station. This report is submitted pursuant to 10 CFR 50.73(a)(2)(v)(D). The enclosed report discusses items of reportability and corrective actions taken.

If you have any questions or require additional information, please contact Ms. CL Perino at (509) 377-2075.

Respectfully,

RL Webring

Vice President, Nuclear Generation

alebi

Mail Drop PE04

Enclosure

cc: BS Mallet - NRC RIV

BJ Benney - NRC-NRR

INPO Records Center

NRC Sr. Resident Inspector – 988C (2)

- RN Sherman - BPA/1399

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TE22

NRC FORM 366 (7-2001)

FACILITY NAME (1)

F-1

U.S. NUCLEAR REGULATORY
COMMISSION

APPROVED BY OMB NO. 3150-0104

EXPIRES 7-31-2004

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LICENSEE EVENT REPORT (LER)

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

DOCKET NUMBER (2)

PAGE (3)

Columbia Generating Station

05000397

1 of 3

TITLE (4)

Inoperable High Pressure Core Spray (HPCS) System due to Low System Pressure

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)			
МО	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	мо	DAY	YEAR	FACILITY NAME		DOCKET NUMBER	
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OPERATING		3	TI	IIS REPORT IS	SUBMIT	TED PUR	SUANT T	O THE RE	QUIR	EMENTS OF 10 CFR §: (Check all that apply) (11)	
MODE (9)			20.	2201(b)		20.	2203(a)(3)(ii) 🚤 🚤		.50.73(a)(2)(ii)(B)		
POWER LEVEL (10)		000	20.	2201(d)		20.	2203(a)(4	4)	<u> </u>	50.73(a)(2)(iii)	50.73(a)(2)(x)	
			20.2203 (a)(1)			50.36(c)(1)(i)(A)		50.73(a)(2)(iv)(A)		73.71(a)(4)		
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			20.	2203(a)(2)(iii)		50.	.46(a)(3)(ii)			50.73(a)(2)(v)(C)	Specify in Abstract below or	
			20.	2203(a)(2)(iv)		50.	73(a)(2)(i)(A)	X	50.73(a)(2)(v)(D)	in NRC Form 366A	
			20.	2203(a)(2)(v)		50.	73(a)(2)(i)(B)		50.73(a)(2)(vii)	プロログル E E E E E E E E E E E E E E E E E E E	
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LICENSEE CONTACT FOR THIS LER (12)

NAME R Brownlee TELEPHONE NUMBER (Include Area Code)

509-377-2085

•		COMPLETE OF	NE LINE FOR EA	CH COMPONE	NT F	AILURE DES	CRIBED IN TH	IS RE	PORT (1	3)	
CAUSE	SYSTEM	COMPONENT	MANU- FACTURER	REPORTABLE TO EPIX	15	CAUSE	SYSTEM	COMPONENT		MANU- FACTURER	REPORTABLE TO EPIX
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	SUPPLEMENTAL REPORT EXPECTED (14))	MONT	H DAY	YEAR
YES (I	YES (If yes, complete EXPECTED SUBMISSION DATE).					NO	SUBMISSION DATE (15)	N			

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

At 1247 on May 21, 2001, Columbia Generating Station was in Mode 3 when the HPCS pump (HPCS-P-1) and the HPCS System were declared inoperable due to low pressure in the HPCS water leg pump discharge piping. Operations was in the process of transferring water from the condensate storage tanks to the suppression pool when the suction path to HPCS-P-1 was isolated. HPCS-P-1 was immediately secured. HPCS System discharge pressure subsequently dropped to the low-pressure alarm setpoint, requiring Operations to declare HPCS-P-1 inoperable. After filling and venting the HPCS System, HPCS-P-1 and the HPCS System were declared operable at 1322 on May 21, 2001.

This condition is reportable under 10 CFR 50.73 (a)(2)(v)(D) because HPCS is a single train safety system that was unable to perform its required safety function for approximately 35 minutes. The plant remained in compliance with technical specifications, and was in a condition where both low pressure coolant injection and low pressure core spray were capable of providing flow to the reactor pressure vessel. Although this event occurred over two years ago, Energy Northwest did not discover that the event should have been reported as a single train safety system failure until November 20, 2003.

NRC FORM 366A (1-2001) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)		PAGE (3)		
Columbia Composition Station	05000397	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
Columbia Generating Station			2001-003-00	2013	

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17) Event Description

On May 21, 2001, with the plant in Mode 3, the High Pressure Core Spray (HPCS) System [BG] was being used to transfer water from the condensate storage tanks (CSTs) [KA] to the suppression pool as part of planned outage water management activities. An expected HPCS pump suction switchover from the CSTs to the suppression pool occurred due to high suppression pool level. When HPCS-V-15 (HPCS pump suction from the suppression pool) reached its full open position, an operator attempted to override the switchover by taking the HPCS-V-15 control switch to close. HPCS-V-1 (HPCS pump suction from the CST) was closing when the operator then attempted to open HPCS-V-1 by taking the HPCS-V-1 control switch to open. HPCS-V-15 fully closed, as expected. However, HPCS-V-1 continued to travel from the intermediate to the closed position, isolating the HPCS-P-1 suction path. HPCS-P-1 was immediately secured by the operator. With the suppression pool test return valve (HPCS-V-23) throttled open for the water transfer, HPCS system discharge pressure dropped rapidly to the low-pressure alarm setpoint, at which time HPCS-P-1 and the HPCS System were declared inoperable. HPCS-P-1 control power fuses were also removed.

Immediate Corrective Action

HPCS-V-1 was opened to reestablish a suction flow path for HPCS-P-1. The HPCS System was filled and vented, and the system was declared operable approximately 35 minutes after declaring HPCS-P-1 inoperable.

Cause of Event

The primary cause of this event was inadequate procedural guidance for overriding the expected HPCS pump suction switchover from the CSTs to the suppression pool.—Plant—procedures did not warn the operators of the potential loss of the HPCS pump suction path if the operators did not first verify the suction switchover was complete (HPCS-V-15 open and HPCS-V-1 closed), prior to closing HPCS-V-15, and opening HPCS-V-1. A contributing cause to this event was that the pre-job brief performed by the operators was not thorough in that it did not recognize the suction switchover logic.

Additional Corrective Action

A HPCS operating procedure was modified to ensure that the suppression pool high-level HPCS suction switchover is complete, prior to overriding the switchover by re-positioning HPCS-V-15 and HPCS-V-1.

NRC FORM 366A (1-2001) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
Columbia Consensing Station	05000397	YEAR SEQUENTIAL REVISION NUMBER NUMBER			3 OF 3
Columbia Generating Station	05000597	20			

Assessment of Safety Consequences

There is minimal safety significance associated with this event. The plant remained in compliance with technical specifications, and was in a condition where both low-pressure coolant injection [BO] and low-pressure core spray [BM] were capable of providing flow to the reactor pressure vessel during the 35 minutes the HPCS System was inoperable.

Similar Events

On October 7, 2003, with the plant in Mode 1, a depressurization of the HPCS System occurred while the HPCS System water leg piping was isolated during an unscheduled maintenance activity to replace the power frame on the water leg pump. System pressure unexpectedly decreased to below the low-pressure alarm point requiring plant operators to declare the HPCS System inoperable. After performing a system fill and vent procedure, the HPCS System was declared operable. This event is documented in LER 2003-010-00.