

**ENERGY  
NORTHWEST**

P.O. Box 968 ■ Richland, Washington 99352-0968

January 12, 2001  
GO2-01-004

Docket No. 50-397

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

Gentlemen:

Subject: **COLUMBIA GENERATING STATION, OPERATING LICENSE NPF-21  
LICENSEE EVENT REPORT NO. 2000-008-00**

Transmitted herewith is Licensee Event Report No. 2000-008-00 for WNP-2. This report is submitted pursuant to 10 CFR 50.73 and discusses the items of reportability and corrective action taken.

Should you have any questions or desire additional information pertaining to this report, please call me or PJ Inserra at (509) 377-4147.

Respectfully,



GO Smith  
Vice President, Generation  
Mail Drop 988V

Attachment

cc: EW Merschoff - NRC RIV  
JS Cushing - NRC NRR  
INPO Records Center  
WB Jones - NRC RIV/fax

NRC Senior Resident Inspector - 988C (2)  
DL Williams - BPA/1399  
TC Poindexter - Winston & Strawn

IE02

**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1) <b>Columbia Generating Station</b>	DOCKET NUMBER (2) <b>50-397</b>	PAGE (3) <b>1 OF 3</b>
---	------------------------------------	---------------------------

TITLE (4)  
**UNEXPECTED LOW PRESSURE IN THE CONTAINMENT INSTRUMENT AIR SYSTEM RESULTS IN ACTUATION OF SAFETY RELATED BOTTLED NITROGEN SOURCE TO MAINTAIN OPERATING PRESSURE FOR THE AUTOMATIC DEPRESSURIZATION SYSTEM**

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV. NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
12	14	00	2000	008	00	01	12	2001	FACILITY NAME	DOCKET NUMBER

OPERATING MODE <b>1</b>	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)										
POWER LEVEL <b>100</b>	20.402(b)			20.405(c)			×		50.73(a)(2)(iv)		73.71(b)
	20.405(a)(1)(i)			50.36(c)(1)					50.73(a)(2)(v)		73.71(c)
	20.405(a)(1)(ii)			50.36(c)(2)					50.73(a)(2)(vii)		OTHER
	20.405(a)(1)(iii)			50.73(a)(2)(i)					50.73(a)(2)(viii)(A)		
	20.405(a)(1)(iv)			50.73(a)(2)(ii)					50.73(a)(2)(viii)(B)		
	20.405(a)(1)(v)			50.73(a)(2)(iii)					50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)

NAME <b>R.N. Sherman, Licensing Engineer</b>	TELEPHONE NUMBER (Include Area Code) <b>(509) 377-8616</b>
---	---

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)					EXPECTED	MONTH	DAY	YEAR
YES (If yes, completed EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>					

**ABSTRACT:**

On December 14, 2000 the plant was at 100% power. Containment Instrument Air (CIA) system quarterly sampling was in progress. The pressure in CIA header 'A' and header 'B' began to decrease at approximately 2051. At approximately 2128 the pressure in the CIA system dropped to approximately 160 psig and caused the generation of a valid isolation signal to the 'B' CIA supply valve, CIA-V-39B, and the valve closed. This isolated the 'B' CIA header from the normal non safety-related nitrogen supply portion of the system. The closure of the isolation valve, in combination with the low pressure in the system, caused the safety-related portion of the CIA system to initiate and supply nitrogen gas to the system from the associated bank of nitrogen bottles. The pressure in header 'B' increased to 184 psig (normal) within 3 minutes. This engineered safety feature (ESF) actuation provided the pneumatic supply to maintain operating pressure for the 'B' nitrogen supply header for the Automatic Depressurization System. No other plant safety features were affected. The CIA system pressure dropped to a minimum pressure of approximately 156 psig. The 'A' CIA header did not isolate as the supply valve, CIA-V-39A, did not close when the system reached 160 psig. The as-found closure setpoint for CIA-V-39A was 154 psig. Subsequent to the event, the CIA quarterly sampling procedure was successfully completed. The cause regarding the failure of the non safety-related portion of the system to maintain system nitrogen supply and pressure has not been identified. Additional component testing is planned. Failures of the non safety-related portions of the system have minimal safety significance and will not cause plant transients. The ESF portion of the system actuated and maintained the pneumatic supply and pressure as designed. There were no safety consequences associated with this event.

**LICENSEE EVENT REPORT (LER)**

**UNEXPECTED LOW PRESSURE IN THE CONTAINMENT INSTRUMENT AIR SYSTEM RESULTS IN ACTUATION OF SAFETY RELATED BOTTLED NITROGEN SOURCE TO MAINTAIN OPERATING PRESSURE FOR THE AUTOMATIC DEPRESSURIZATION SYSTEM**

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Columbia Generating Station	50-397	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		00	008	00	

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

Event Description

On December 14, 2000, the plant was at 100% power. Containment Instrument Air (CIA) [LD,LK] system quarterly sampling was in progress. The pressure in CIA header 'A' and header 'B' began to decrease at approximately 2051. At approximately 2128 the pressure in the CIA system dropped to approximately 160 psig and caused the generation of a valid isolation signal to the 'B' CIA supply valve, CIA-V-39B [ISV], and the valve closed. This isolated the 'B' CIA header from the normal non safety-related nitrogen supply portion of the system. The closure of the isolation valve, in combination with the low pressure in the system, caused the safety-related portion of the CIA system to initiate and supply nitrogen gas to the system from the associated bank of nitrogen bottles. The pressure in header 'B' increased to 184 psig (normal) within 3 minutes. This engineered safety feature (ESF) actuation provided the pneumatic supply to maintain operating pressure for the 'B' nitrogen supply header for the Automatic Depressurization System [SB]. No other plant safety features were affected. The CIA system pressure dropped to a minimum pressure of approximately 156 psig.

The 'A' CIA header did not isolate as the supply valve, CIA-V-39A, did not close when the system reached 160 psig.

There were no safety consequences associated with this event. This event is being reported in accordance with 10CFR50.73(a)(2)(iv) as an event or condition that resulted in an automatic actuation of an ESF. The actuation occurred while the isolation system was in service.

The NRC Operations Center was notified of the unexpected ESF actuation by means of the Emergency Notification System (ENS) at 0053 hours on December 15, 2000. The Event Number is 37599.

Immediate Corrective Action

The quarterly test of the CIA system was secured.

Further Evaluation

An incident review board (IRB) was established to investigate the event. The CIA sampling test equipment was inspected. The IRB determined the test equipment was configured as required by the test procedure. In addition, the testing was conducted in strict compliance with the test procedure. No abnormal nitrogen leakage or high use was detected.

The IRB determined the 'A' CIA header isolation valve, CIA-V-39A, did not close at 160 psig due to the as-found closure setpoint to be 154 psig. The administrative limit for the setpoint is 158-165 psig. The as-found setpoint value was above the technical specification minimum allowable value of 151.4 psig.

The IRB also determined that a heater contactor on the nitrogen make-up trim vaporizer had failed. This failure caused the vaporizer to fail to maintain the nitrogen gas at or above 70°F. However, this failure alone should not have caused the nitrogen gas pressure reduction in the CIA system during this event. The heater contactor for the nitrogen gas make-up vaporizer was replaced on December 15, 2000. The CIA quarterly sampling procedure was successfully completed.

**LICENSEE EVENT REPORT (LER)**

**UNEXPECTED LOW PRESSURE IN THE CONTAINMENT INSTRUMENT AIR SYSTEM RESULTS IN ACTUATION OF SAFETY RELATED BOTTLED NITROGEN SOURCE TO MAINTAIN OPERATING PRESSURE FOR THE AUTOMATIC DEPRESSURIZATION SYSTEM**

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Columbia Generating Station	50-397	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
		00	008	00	

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

Cause

The cause regarding the failure of the non safety-related portion of the system to maintain pneumatic supply and pressure has not been identified. Additional component testing is planned. An investigation into the event did not reveal a reason for the system pressure decrease.

Further Corrective Action

The closure setpoint for valve CIA-V-39A was reset to its normal trip point of 160 psig.

The need for further corrective action will be assessed based on component test results.

Assessment of Safety Consequences

There were no safety consequences associated with this event. Failures of the non safety-related portions of the system have minimal safety significance and will not cause plant transients. The ESF portion of the system actuated and maintained the pneumatic supply and pressure as designed. The event did not involve a loss of intended safety function. In addition, the event did not involve an event or condition that alone could have prevented the fulfillment of any safety functions described in 10CFR50.73(a)(2)(v).

Similar Events

There has not been a similar event within the last five years.