

**ENERGY**  
**NORTHWEST**

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

October 21, 2003  
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U.S. Nuclear Regulatory Commission  
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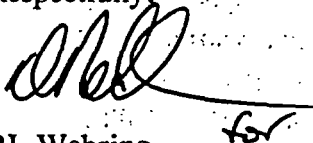
Subject: **COLUMBIA GENERATING STATION, DOCKET NO. 50-397**  
**LICENSEE EVENT REPORT NO. 2003-009-00**

Dear Sir or Madam:

Transmitted herewith is Licensee Event Report No. 2003-009-00 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  
Mail Drop PE04

Enclosure: Licensee Event Report 2003-009-00

cc: BS Mallett - NRC RIV  
BJ Benney - NRC-NRR  
INPO Records Center  
NRC Sr. Resident Inspector - 988C (2)  
RN Sherman - BPA/1399  
TC Poindexter - Winston & Strawn  
WB Jones - NRC RIV/fax

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<b>NRC FORM 366</b> (1-2001)		<b>U.S. NUCLEAR REGULATORY COMMISSION</b>		<b>APPROVED BY OMB NO. 3150-0104</b> Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington DC 20555-0001, or by Internet e-mail to <a href="mailto:bis1@nrc.gov">bis1@nrc.gov</a> , 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 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.		<b>EXPIRES 6-30-2001</b>				
<b>LICENSEE EVENT REPORT (LER)</b> (See reverse for required number of digits/characters for each block)										
<b>FACILITY NAME (1)</b> Columbia Generating Station				<b>DOCKET NUMBER (2)</b> 05000397		<b>PAGE (3)</b> 1 OF 3				
<b>TITLE (4)</b> Reactor Core Isolation Cooling Rendered Inoperable due to a 250 VDC Battery Cell not meeting TS Requirements										
<b>EVENT DATE (5)</b>			<b>LER NUMBER (6)</b>			<b>REPORT DATE (7)</b>			<b>OTHER FACILITIES INVOLVED (8)</b>	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
8	22	2003	2003	009	00	10	21	2003	FACILITY NAME	DOCKET NUMBER
<b>OPERATING MODE (9)</b> POWER LEVEL (10)		1 100	<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) (11)</b>							
			20.2201(b)			20.2203(a)(3)(ii)			50.73(a)(2)(ii)(B)	
			20.2201(d)			20.2203(a)(4)			50.73(a)(2)(iii)	
			20.2203(a)(1)			50.36(c)(1)(i)(A)			50.73(a)(2)(iv)(A)	
			20.2203(a)(2)(i)			50.36(c)(1)(ii)(A)			50.73(a)(2)(v)(A)	
			20.2203(a)(2)(ii)			50.36(c)(2)			50.73(a)(2)(v)(B)	
			20.2203(a)(2)(iii)			50.46(a)(3)(ii)			50.73(a)(2)(v)(C)	
			20.2203(a)(2)(iv)			50.73(a)(2)(i)(A)		X	50.73(a)(2)(v)(D)	
			20.2203(a)(2)(v)			50.73(a)(2)(i)(B)			50.73(a)(2)(vii)	
			20.2203(a)(2)(vi)			50.73(a)(2)(i)(C)			50.73(a)(2)(viii)(A)	
			20.2203(a)(3)(i)			50.73(a)(2)(ii)(A)			50.73(a)(2)(viii)(B)	
<b>LICENSEE CONTACT FOR THIS LER (12)</b>										
<b>NAME</b> Craig D. Sly								<b>TELEPHONE NUMBER (Include Area Code)</b> 509-377-8616		
<b>COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)</b>										
CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX		CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
<b>SUPPLEMENTAL REPORT EXPECTED (14)</b>								<b>EXPECTED SUBMISSION DATE (15)</b>	<b>MONTH</b>	<b>DAY</b>
YES (If yes, complete EXPECTED SUBMISSION DATE).						X	NO			
<b>ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)</b>										
<p>On August 22, 2003 at 0234 PDT, the Reactor Core Isolation Cooling system (RCIC) was isolated as a result of a battery cell in the Division 1 250 VDC battery (E-B2-1) not meeting Technical Specification (TS) battery cell parameter requirements. With E-B2-1 inoperable, TSs require the supported features of E-B2-1 to be immediately declared inoperable. RCIC-V-19, the RCIC pump minimum flow bypass valve, is a containment isolation valve. RCIC-V-19 is also supported by battery E-B2-1. RCIC-V-19 was declared inoperable, and was closed and deactivated to comply with plant TSs. Because RCIC-V-19 was inoperable, operators isolated the steam inlet valve (RCIC-V-1) to the RCIC turbine to prevent operation of the RCIC system.</p> <p>The isolation of the RCIC system is reported as an event or condition that could prevent the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.</p> <p>Upon replacement of the battery cell, E-B2-1 was restored to service, and the RCIC system was declared operable at 1700 PDT on August 22, 2003.</p>										

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

## Event Description

On August 22, 2003, at 0234 PDT, the Reactor Core Isolation Cooling (RCIC) system was isolated as a result of a battery cell in the Division 1 250 VDC battery (E-B2-1) not meeting Technical Specification (TS) battery cell parameter requirements. E-B2-1 had been declared inoperable due to failure of one battery cell to meet Technical Specification (TS) 3.8.6, Battery Cell Parameters, Table 3.8.6-1, Category C specific gravity limits.

With E-B2-1 inoperable, TS 3.8.4, DC Sources - Operating, Required Action C.1, requires the equipment supported by the inoperable battery to be immediately declared inoperable. RCIC-V-19, the RCIC pump minimum flow bypass valve, is a primary containment isolation valve (PCIV). RCIC-V-19 is also supported by battery E-B2-1. RCIC-V-19 was declared inoperable, and was closed and deactivated to comply with TS 3.6.1.3, Primary Containment Isolation Valves, Required Action C.1. Because RCIC-V-19 was inoperable, operators closed the steam inlet valve (RCIC-V-1) to the RCIC turbine to prevent operation of the RCIC system. Isolation of RCIC-V-1 removes RCIC from service.

## Cause of Event

The isolation and removal from service of the RCIC system was a result of declaring E-B2-1 and associated support features (including RCIC-V-19) inoperable, as required by the plant's Technical Specifications. To prevent operation of the RCIC system with RCIC-V-19 closed and deactivated, it was necessary to isolate the steam inlet valve (RCIC-V-1) to the RCIC turbine.

The reason for declaring E-B2-1 inoperable was the discovery that the specific gravity of the electrolyte in E-B2-1 cell number 166 did not meet the TS Table 3.8.6-1 Category C battery cell parameter requirements. This TS table specifies that no connected battery cell electrolyte specific gravity may be more than 0.020 below the average of all the connected cells of that battery. The root cause is thought to be less than adequate battery recharging following the 5-year modified discharge test during the most recent refueling outage.

## Safety Significance

The RCIC system is designed to operate either manually or automatically following a reactor pressure vessel (RPV) isolation accompanied by a loss of coolant flow from the feedwater system to provide adequate core cooling and control of RPV water level. Under these conditions, the High Pressure Core Spray (HPCS) and RCIC systems perform similar

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functions.

During the entire time the RCIC system was inoperable, the High Pressure Core Spray System was available. Therefore, it is concluded that this event posed no threat to the health and safety of the public or plant personnel.

This event is reportable under 10 CFR 50.73 (a)(2)(v)(D).

#### Corrective Actions

Upon replacement of the battery cell that did not meet the TS battery cell parameter requirements, the 250 VDC battery (E-B2-1) was restored to service, and the RCIC system was declared operable at 1700 PDT on August 22, 2003.

The battery discharge and quarterly operability surveillance procedures will be revised to include directions to place the battery on equalize for two 5-day periods (separated by a 2-day period) following performance of the surveillance.

#### Previous Similar Events

On July 8, 2003, the RCIC system was declared inoperable after one of its steam supply containment isolation valves was inadvertently closed during the performance of a surveillance test. The surveillance test was discontinued and plant operators verified that the High Pressure Core Spray system was operable. The RCIC system was restored to its normal standby lineup and declared operable within one hour. The details concerning this event are discussed in LER 397-2003-008.

#### EIIS Information

Text Reference	System	Component
Reactor Core Isolation Cooling System	BN	
High Pressure Core Spray System	BG	
RCIC-V-1	BN	V
RCIC-V-19	BN	ISV
250 VDC Battery	EJ	