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July 10, 2006

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U. S. Nuclear Regulatory Commission  
Washington, DC 20555

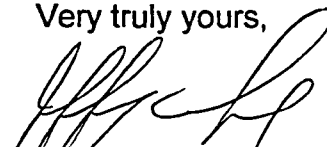
Ladies and Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION  
DOCKET NO. 50-395  
OPERATING LICENSE NO. NPF-12  
LICENSEE EVENT REPORT (LER 2006-001-00)  
SECURING EMERGENCY RECIRCULATION OF CONTROL ROOM  
VENTILATION WHILE ASSOCIATED RADIATION MONITOR WAS OUT  
OF SERVICE

Attached is Licensee Event Report (LER) No. 2006-001-00, for the Virgil C. Summer Nuclear Station (VCSNS). The report describes a violation of a Technical Specification requiring that the Control Room ventilation operate in the emergency recirculation mode when the associated radiation monitor is out of service.

Should you have any questions, please call Mr. Robert G. Sweet at (803) 345-4080.

Very truly yours,



Jeffrey B. Archie

MWD/JBA/dr  
Attachment

c: K. B. Marsh  
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NSRC  
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File (818.07)  
DMS (RC-06-0121)

JE22

## LICENSEE EVENT REPORT (LER)

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

Estimated burden per response to comply with this mandatory 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 and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@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.

## 1. FACILITY NAME

Virgil C. Summer Nuclear Station

## 2. DOCKET NUMBER

05000 395

## 3. PAGE

1 OF 3

## 4. TITLE

Securing Emergency Recirculation of Control Room Ventilation While Associated Radiation Monitor was out of Service

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	DOCKET NUMBER		
05	18	2006	2006	1	0	07	10	2006		05000		
9. OPERATING MODE 1			11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)								DOCKET NUMBER 05000	
											DOCKET NUMBER 05000	
10. POWER LEVEL 100%			<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)								OTHER Specify in Abstract below or in NRC Form 366A	

## 12. LICENSEE CONTACT FOR THIS LER

## FACILITY NAME

Robert G. Sweet, Manager, Nuclear Licensing

## TELEPHONE NUMBER (Include Area Code)

(803) 345-4080

## 13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
A									

## 14. SUPPLEMENTAL REPORT EXPECTED

☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☒ NO15. EXPECTED  
SUBMISSION  
DATE

MONTH	DAY	YEAR

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

On 5/18/06, at approximately 2117, 'B' train Control Room (CR) ventilation was in the emergency recirculation mode of operation as required by Technical Specification (TS) 3.3.3.1, Action 29. This Technical Specification action requires that the CR ventilation be in the emergency recirculation mode of operation when the radiation monitor RMA 1 is out of service. RMA 1 was out of service while being calibration tested using Surveillance Test Procedure (STP) 360.031. Confusion with a step in the STP resulted in the operator securing the CR ventilation from the emergency recirculation mode of operation thus violating TS 3.3.3.1, Action 29.

When the operator attempted to restart 'B' train CR ventilation, a fan appeared to fail to start, thus prolonging the amount of time in violation of TS 3.3.3.1, Action 29. Troubleshooting revealed that indicator bulbs for the fan start switch were burned out. The 'B' train CR ventilation was subsequently restarted in the emergency recirculation mode. The station was in violation of TS 3.3.3.1, Action 29 for approximately 19 minutes.

**LICENSEE EVENT REPORT (LER)**

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

**PLANT IDENTIFICATION**

Westinghouse – Pressurized Water Reactor

**EQUIPMENT IDENTIFICATION**

Control Room Ventilation

**IDENTIFICATION OF EVENT**

On 5/18/06, at approximately 2117, 'B' train Control Room (CR) ventilation was in the emergency recirculation mode of operation as required by Technical Specification (TS) 3.3.3.1, Action 29. This technical specification action requires that the CR ventilation be in the emergency recirculation mode of operation when the radiation monitor RMA 1 is out of service. RMA 1 was out of service while being calibration tested using Surveillance Test Procedure (STP) 360.031. Confusion with a step in the STP resulted in the operator securing the CR ventilation from the emergency recirculation mode of operation thus violating TS 3.3.3.1, Action 29.

When the operator attempted to restart 'B' train CR ventilation, a fan appeared to fail to start, thus prolonging the amount of time in violation of TS 3.3.3.1, Action 29. Troubleshooting revealed that indicator bulbs for the fan start switch were burned out. The 'B' train CR ventilation was subsequently restarted in the emergency recirculation mode. The station was in violation of TS 3.3.3.1, Action 29 for approximately 19 minutes. Condition Evaluation Report (CER) 06-1648 was generated to document the event and perform an apparent cause evaluation to determine the appropriate corrective actions.

**EVENT DATE**

05/18/06

**REPORT DATE**

07/10/06

**CONDITIONS PRIOR TO EVENT**

Mode 1, 100% Power

**DESCRIPTION OF EVENT**

On 5/17/06, 'B' train Control Room (CR) ventilation was in the emergency recirculation mode of operation as required by Technical Specification (TS) 3.3.3.1, Action 29, because the radiation monitor, RMA 1, was out of service for calibration testing. Surveillance Test Procedure (STP) 360.031 was being used for the calibration testing. During the calibration test, an oil leak on a sample pump was discovered. The calibration test was stopped until the oil leak was repaired, but the test was not recorded as unsatisfactory as required by Station Administrative Procedure (SAP) 134.

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

## DESCRIPTION OF EVENT continued....

The 'B' train CR ventilation was still in the emergency recirculation mode when the calibration test procedure resumed on the following day (05/18/06). By procedure, RMA 1 was deenergized to test that the standby train of CR ventilation ('A' train) would start in the emergency recirculation mode. Upon completion of this step, the procedure required that the operator verify that 'A' train CR ventilation started in the emergency recirculation mode. When RMA 1 was subsequently reenergized; the procedure then required the operator to "verify" that 'A' train CR was in the normal mode of operation; however, the intent of this step is to have the operator actually align 'A' train CR ventilation to the normal mode of operation. Instead, the operator referred to System Operating Procedure (SOP) 505 to place 'A' train CR ventilation to the normal mode. SOP-505 had no guidance for the configuration required by STP-360.031. Using SOP-505, the operator aligned 'A' train CR ventilation to the normal mode of operation and secured 'B' train CR ventilation. At this point, the station was in violation of TS 3.3.3.1, Action 29 because there was no train of CR ventilation aligned for emergency recirculation mode of operation while RMA 1 was out of service for calibration testing.

When the operator attempted to restart 'B' train CR ventilation, a fan appeared to fail to start, thus prolonging the amount of time that the station was in violation of the technical specification. Troubleshooting revealed that indicator bulbs for the fan start switch were burned out. The 'B' train CR ventilation was subsequently restarted in the emergency recirculation mode at 2136 placing the station in compliance with TS 3.3.3.1. The station was in violation of TS 3.3.3.1, Action 29 for approximately 19 minutes.

## CAUSE OF EVENT

The failure to follow procedures is the primary factor contributing to misaligning the CR ventilation from the required mode. Per the provisions of SAP-134, the discovery of the sample pump oil leak should have resulted in the surveillance test being declared unsatisfactory. By declaring the test unsatisfactory, Operations would have had to reauthorize the test which would have entailed another prejob briefing. This would have ensured that the performers were briefed a day after the initial start of the test when the test was resumed. A contributing factor was the vague guidance in the step in STP-360.031 directing setup of 'A' train ventilation. Because of the confusion with this step, the operator chose to refer to another procedure (SOP-505). If reference to another procedure is required, it is stated in the current procedure step. The operator should have informed the Control Room Supervisor prior to deviating from the test procedure.

## ANALYSIS OF THE EVENT

In the emergency recirculation mode of operation, the CR ventilation is required to remove particulates and radioiodines such that access to and occupancy of the control room under accident conditions and for the duration of the accident does not result in personnel exposures in excess of 5 REM whole body, in accordance with 10 CFR 50 Appendix A, General Design Criteria 19. During the 19 minutes that the CR Ventilation was secured from the emergency mode of operation, RMA 1 bypass switch was not in 'Bypass'; therefore, the radiation monitor was available to perform its design function of starting the CR ventilation in the emergency mode on an actuation signal.

## CORRECTIVE ACTIONS

Condition Evaluation Report (CER) 06-1648 was generated to document the event and perform an apparent cause evaluation to determine the appropriate corrective actions. The Manager of Operations met with Operations department personnel to reinforce expectations for procedural adherence, questioning attitude, and timeouts for unexpected conditions. Enhancements to various procedures are being considered.

## PRIOR OCCURENCES

A review of operating history did not identify any previous events related to this event.