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November 11, 2006

Document Control Desk
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 2006-002-00)
SECURING AN ASSOCIATED RADIATION MONITOR WHILE THE REACTOR BUILDING ALTERNATE PURGE SYSTEM WAS IN SERVICE

Attached is Licensee Event Report (LER) No. 2006-002-00, for the Virgil C. Summer Nuclear Station (VCSNS). The report describes a violation of a Technical Specification requiring that two channels of reactor building atmospheric radiation monitors be in service while reactor building purging operations are in progress.

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

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IE22

NRC FORM 366 (6-2004) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 06/30/2007

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.

LICENSEE EVENT REPORT (LER)

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

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4. TITLE

Securing an Associated Radiation Monitor While the Reactor Building Alternate Purge System Was in 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
10	06	2006	2006	- 2 -	0	11	11	2006		05000
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE

1

10. POWER LEVEL

80%

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*

☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(C)	☐ OTHER
☐ 20.2203(a)(2)(vi)	☑ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER *(Include Area Code)*
Robert G. Sweet, Manager, Nuclear Licensing	(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
D					A				

14. SUPPLEMENTAL REPORT EXPECTED

○ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ◉ NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

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

On 10/06/06, the Reactor Building Alternate Purge system was in service to provide cleanup for the reactor building atmosphere in preparation for the refueling outage (RF-16). Technical Specification (TS) 3.3.2, Table 3.3-3, Item 3.c.2 requires two radiation monitors to be available to automatically and independently isolate reactor building purging operations in the event of high containment activity. While purging was in progress, operators commenced steps in Surveillance Test Procedure (STP) 0144.001 to stroke-test the containment isolation valves for Radiation Monitor RMA 2. On 10/06/06 at 2030, the sample pump was secured per the STP, which made RMA 2 inoperable. At this point, the station had only one of the two required radiation monitors available during purging operations and thus was no longer in compliance with TS 3.3.2. Upon receiving the trouble alarm on RMA 2, personnel in the control room recognized that RMA 2 was inoperable coincident with the ongoing purging operations. Subsequently, the sample pump for RMA 2 was restarted which brought the station back into compliance with TS 3.3.2. The station was in violation of TS 3.3.2 for approximately one minute. During this time, Radiation Monitor RMA 4 was operable and available to isolate reactor building purging operations in the event of high containment activity.

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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

Radiation Monitoring

IDENTIFICATION OF EVENT

On 10/06/06, the Reactor Building Alternate Purge system was in service to provide cleanup for the reactor building atmosphere in preparation for the refueling outage (RF-16). Technical Specification (TS) 3.3.2, Table 3.3-3, Item 3.c.2 requires two radiation monitors to be available to automatically and independently isolate reactor building purging operations in the event of high containment activity. While purging was in progress, operators commenced steps in Surveillance Test Procedure (STP) 0144.001 to stroke-test the containment isolation valves for Radiation Monitor RMA 2. On 10/06/06 at 2030, the sample pump was secured per the STP, which made RMA 2 inoperable. At this point, the station had only one of the two required radiation monitors available during purging operations and thus was no longer in compliance with TS 3.3.2. Upon receiving the trouble alarm on RMA 2, personnel in the control room recognized that RMA 2 was inoperable coincident with the ongoing purging operations. Subsequently, the sample pump for RMA 2 was restarted which brought the station back into compliance with TS 3.3.2. The station was in violation of TS 3.3.2 for approximately one minute. During this time, Radiation Monitor RMA 4 was operable and available to isolate reactor building purging operations in the event of high containment activity.

EVENT DATE

10/06/06

REPORT DATE

11/11/06

CONDITIONS PRIOR TO EVENT

Mode 1, 80% Power

DESCRIPTION OF EVENT

On 10/06/06, the Reactor Building Alternate Purge system was in service to provide cleanup for the Reactor Building atmosphere in preparation for the refueling outage (RF-16). Technical Specification (TS) 3.3.2, Table 3.3-3, Step 3.c.2 requires two radiation monitors to be available to automatically and independently isolate reactor building purging operations in the event of high containment activity. The on-duty operations shift had just returned to work their first of four nights after being away from shift. When they were previously on shift, the station was at 100 % power with no reactor building purging in progress. When they returned to shift, the plant was at 80% power with purging in progress. While purging was in progress, operators commenced steps in Surveillance Test Procedure (STP) 0144.001 to stroke-test the containment isolation valves for Radiation Monitor RMA 2. There is no precaution in STP0144.001 concerning performance of this test during reactor building purging operations. Also, the STP was reviewed by the Control Room Supervisor (CRS) and by an Control Room Supervisor Under Instruction (CRSUI) for impact and determined that there was no impact. On 10/06/06 at 2030, the sample pump was secured per the STP, which made RMA 2 inoperable. At this point, the station had only one of the two required radiation monitors available during purging operations and thus was no longer in compliance with TS 3.3.2. Upon receiving the trouble alarm on RMA 2, personnel in the control room recognized that RMA 2 was inoperable coincident with the ongoing purging operations. Subsequently, the sample

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

DESCRIPTION OF EVENT continued....

pump for RMA 2 was restarted, which brought the station back into compliance with TS 3.3.2. The station was in violation of TS 3.3.2 for approximately one minute. During this time, RMA 4 was operable and available to isolate reactor building purging operations in the event of high containment activity to prevent a radioactive release to the environment.

CAUSE OF EVENT

Inadequate procedural guidance is the primary factor contibuting to securing RMA 2 during reactor building purging operations. There was no caution in STP0144.001 concerning the requirement for the operability of RMA 2 during purging operations. Another contributing factor is the incomplete evaluation of plant conditions by the operating shift prior to commencing this STP.

ANALYSIS OF THE EVENT

RMA 2 was inoperable for approximately one minute during reactor building purging operations. During this time, RMA 4 was operable and available to isolate reactor building purging operations in the event of high containment activity to prevent a radioactive release to the environment.

CORRECTIVE ACTIONS

Condition Evaluation Report (CER) 06-3273 was generated to document the event and perform an apparent cause evaluation to determine the appropriate corrective actions. The immediate corrective action of restoring the operability of RMA 2 was performed in approximately one minute. The operating shift then verified the validity of the release permit for purging operations. Main Control Board (MCB) indicating tags were subsequently hung to indicate that reactor building purge was in progress. An enhancement to STP0144.001 is being considered that would insert a caution concerning radiation monitoring requirements during purging operations. Another enhancement being considered would proceduralize the hanging of the MCB indicating tags on RMA 2 and RMA 4, and their respective channel modules, whenever purging operations are in progress.

PRIOR OCCURENCES

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