

Jeffrey B. Archie  
Vice President, Nuclear Operations  
803.345.4214



March 6, 2008

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

Dear Sir / Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS)  
DOCKET NO. 50-395  
OPERATING LICENSE NO. NPF-12  
LICENSEE EVENT REPORT (LER 2007-002-01)  
FAILURE TO FOLLOW ADMINISTRATIVE CONTROLS RESULTS IN  
LIMITING CONDITION FOR OPERATION (LCO) 3.6.4 VIOLATION

Attached is Licensee Event Report (LER) No. 2007-002-01, for the Virgil C. Summer Nuclear Station (VCSNS). The revised report describes the sequence of actions that led to a violation of VCSNS Technical Specification LCO 3.6.4. This report is submitted in accordance with 10 CFR 50.73(a)(2)(i)(B). Revisions are identified by vertical bars in the right side margin of the attached.

Should you have any questions, please call Mr. Bruce Thompson at (803) 931-5042.

Very truly yours,

Jeffrey B. Archie

JW/JT/JBA/cjm  
Attachment

c: K. B. Marsh  
S. A. Byrne  
N. S. Carns  
J. H. Hamilton  
R. J. White  
V. M. McCree  
R. E. Martin  
NRC Resident Inspector  
M. N. Browne  
K. M. Sutton

D. L. Abstance  
P. Ledbetter  
R. J. Schwartz  
EPIX Coordinator  
INPO Records Center  
J&H Marsh & McLennan  
NSRC  
RTS (CR-07-02894)  
File (818.07)  
PRSF (RC-08-0038)

IE22  
NRR

**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: 80 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.

<b>1. FACILITY NAME</b> Virgil C. Summer Nuclear Station	<b>2. DOCKET NUMBER</b> 05000 395	<b>3. PAGE</b> 1 OF 3
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**4. TITLE**  
Failure to Follow Administrative Controls Results in LCO 3.6.4 Violation

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	05	2007	2007	- 2 -	1	03	06	2008	FACILITY NAME	DOCKET NUMBER
										05000
										05000

<b>9. OPERATING MODE</b> Mode 1	<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</b>											
	<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)								
<b>10. POWER LEVEL</b> 100%	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)								
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)								
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)								
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)								
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)								
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)								
<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER									
<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A									

**12. LICENSEE CONTACT FOR THIS LER**

FACILITY NAME Virgil C. Summer Nuclear Station	TELEPHONE NUMBER (Include Area Code) (803) 931-5042
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**13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT**

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

<b>14. SUPPLEMENTAL REPORT EXPECTED</b>	<b>15. EXPECTED SUBMISSION DATE</b>	MONTH	DAY	YEAR
<input type="radio"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="radio"/> NO				

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

On October 5, 2007, while troubleshooting IFS1900A, Reactor Building Cooling Unit (RBCU) drain flow switch, the administrative controls for establishing demineralized water to the Reactor Building while in Mode 1 were not implemented as required by Limiting Condition for Operation (LCO) 3.6.4. The original plan to test IFS1900A included establishing demineralized water to the Reactor Building by opening normally locked closed containment isolation valves at penetration XRP0231. The administrative controls included stationing operators at the penetration isolation valves to administratively maintain containment isolation valve operability. During the implementation of the plan, the operators erroneously assumed that since penetration XRP0231 was declared inoperable because it was not in its drained condition, the administrative controls were not necessary. Subsequently, the operators stationed at the isolation valves were allowed to vacate their positions effectively terminating administrative control of containment isolation valve operability and violating LCO 3.6.4.

The root cause has been determined to be establishing demineralized water to the reactor building without a formal procedure.

Immediate corrective action was to drain and isolate XRP0231 and return the penetration to operability. In addition, a procedure will be developed for establishing demineralized water to the reactor building in Modes 1 through 4.

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CONTINUATION SHEET**

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Virgil C. Summer Nuclear Station	05000	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 3
		2007	- 002	- 01	

**NARRATIVE**

**PLANT IDENTIFICATION**

Westinghouse - Pressurized Water Reactor

**EQUIPMENT IDENTIFICATION**

XRP0231 Reactor Building Penetration

**IDENTIFICATION OF EVENT**

On October 5, 2007, while troubleshooting on IFS1900A, RBCU drain flow switch, the administrative controls for establishing demineralized water to the Reactor Building while in Mode 1 were not implemented as required by the Limiting Condition for Operation (LCO) 3.6.4. Therefore, when both the inner and outer containment isolation valves were open between 1027 and 1342 hours, the administrative controls were not met.

Condition Report CR-07-02894 was initiated to address this event.

**EVENT DATE**

10/05/2007

**REPORT DATE**

12/04/2007

**REVISION DATE**

03/06/08

**CONDITIONS PRIOR TO EVENT**

Mode 1, 100% Power

**DESCRIPTION OF EVENT**

Troubleshooting on IFS1900A, Reactor Building Cooling Unit drain flow switch was to be performed on October 5, 2007. As part of the troubleshooting plan, demineralized water was to be established to the Reactor Building. A thorough plan was developed to ensure the containment isolation valves were opened under administrative control and to ensure the containment penetration was returned to operable status after the valves were closed.

On the date of the event, the original plan was not strictly followed. Due to stay time considerations, a specific operator was not assigned to the containment isolation valve inside the Reactor Building, although personnel were inside the Reactor Building and had identified the valve location. Since the penetration was declared inoperable, the operating crew erroneously assumed that the administrative controls did not have to be maintained. The administrative controls on the containment isolation valve outside the Reactor Building were relaxed by transferring containment isolation responsibilities to a non-dedicated operator. This resulted in both containment isolation valves being open without administrative controls in place. This violated LCO 3.6.4.

U.S. NUCLEAR REGULATORY COMMISSION

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		2007	- 002	- 01	

**NARRATIVE**

**CAUSE OF EVENT**

The root cause has been determined to be establishing demineralized water to the reactor building without a formal procedure. Although confusion existed on the application of VCSNS Technical Specification 3.6.4, the preplanned administrative controls were not formalized in an approved document, so the operating crew was allowed to deviate from the plan without a comprehensive review.

The demineralized water penetration is normally kept drained to prevent overpressurization when it is isolated. The operators confused the fact that the penetration would be declared inoperable when it was not in its drained condition, with the fact that the original plan included administrative requirements to maintain the penetration isolation valves operable when the valves were open. Once this confusion occurred, operators thought that the administrative requirements to allow opening the valves were no longer needed and that the only action required was to isolate the penetration within four hours as required by LCO 3.6.4.c. LCO 3.6.4 describes actions to perform if a containment isolation valve is inoperable, not an entire penetration. In this case, LCO 3.6.4.c did not apply. Since the preplanned administrative controls were not formalized in an approved document, the operators deviated from the preplan without a comprehensive review. They displayed "group-think" in that they believed once the "penetration" was inoperable, there was no need for administrative controls. They relaxed these controls and believed that LCO 3.6.4.c would compensate, but did not realize that the first section of the actions require at least one penetration isolation valve to be operable, which they did not have in this case.

**ANALYSIS OF EVENT**

Although administrative controls of the containment isolation valves was not continuously maintained, the risk incurred from this evolution was not significant. A Probabilistic Risk Assessment evaluation determined that penetration XRP0231 does not constitute a Large Early Release Frequency (LERF) pathway based on NEI 00-04 section 6.2 and Regulatory Guide 1.201. This penetration satisfies the NEI 00-04 section 6.2 criterion for low safety significance based on a size of less than two inches. This penetration is not considered a potentially significant source of leakage. Two inches is also the established LERF criterion for containment penetration size in the VCSNS PRA. Based on this, there is no change in LERF associated with XRP0231 valves. In addition, in the event of an accident, operators were available to isolate the penetration flowpath in a short period of time.

**CORRECTIVE ACTIONS**

Immediate corrective action was to drain XRP0231 and return the penetration to operable status. In addition, a procedure will be developed for establishing demineralized water to the reactor building in Modes 1 through 4. Also, due to the similarity between the demineralized water and service air penetrations, a procedure will be developed for establishing service air to the reactor building in Modes 1 through 4.

**PRIOR OCCURRENCES**

There have been no recent occurrences of inadequate administrative control leading to Technical Specification violations.