



November 9, 1999
LIC-99-0101

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Reference: Docket No. 50-285

Subject: Licensee Event Report 1999-003 Revision 0 for the Fort Calhoun Station

Please find attached Licensee Event Report 1999-003 Revision 0 dated November 9, 1999. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B). If you should have any questions, please contact me.

Sincerely,

S. K. Gambhir
Division Manager
Nuclear Operations Division

EPM/epm

Attachment

c: E. W. Merschoff, NRC Regional Administrator, Region IV
L. R. Wharton, NRC Project Manager
W. C. Walker, NRC Senior Resident Inspector
INPO Records Center
Winston and Strawn

IE22

NRC FORM 366 (6-1998)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001 <small>Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If 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.</small>
LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)		

FACILITY NAME (1) Fort Calhoun Nuclear Station Unit Number 1	DOCKET NUMBER (2) 05000285	PAGE (3) 1 OF 2
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TITLE (4)
 Pressurizer Safety Valve Outside Lift Setting Acceptance Range

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
10	11	1999	1999	-- 003 --	00	11	9	1999		05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9)	5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
POWER LEVEL (10)	0	20.2201(b)	20.2203(a)(2)(v)	<input checked="" type="checkbox"/>	50.73(a)(2)(i)	50.73(a)(2)(viii)				
		20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)	50.73(a)(2)(x)				
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)	73.71				
		20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)	OTHER				
		20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A				
20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)							

LICENSEE CONTACT FOR THIS LER (12)	
NAME James Geschwender Special Services Engineer	TELEPHONE NUMBER (Include Area Code) 402-533-6857

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 SUBMISSION DATE (15)		
YES (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>	NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

At 1331 hours on October 11, 1999, during a scheduled refueling outage, it was discovered that the "as-found" lift pressure of Pressurizer Safety Valve (PSV) RC-142 was outside its specified lift setting acceptance range. Fort Calhoun Station (FCS) Technical Specification (TS) 2.1.6(1) indicates that this valve is to have its lift setting adjusted to ensure valve opening at 2485 psig +/-1% (i.e., a range of 2460.2 to 2509.8 psig). The "as-found" lift pressure was 2516 psig, which is 1.25% above the nameplate set pressure. The other PSV, RC-141, was found to be within its acceptance range.

It was concluded that the root cause of this event was normal setpoint drift/scatter.

Corrective actions included disassembling, cleaning, inspecting, and refurbishing RC-142, followed by testing and adjustment to achieve an "as-left" lift setting within the +/-1% tolerance range.

LICENSEE EVENT REPORT (LER)
 TEXT CONTINUATION

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Fort Calhoun Nuclear Station Unit Number 1	05000285	1999	-- 003	-- 00	2 OF 2

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

BACKGROUND

Overpressure protection at the Fort Calhoun Station (FCS) is ensured by means of primary safety valves, secondary safety valves, and the Reactor Protection System. Technical Specification 2.1.6(1) specifies that the reactor shall not be made critical unless the two Pressurizer Safety Valves (PSVs)(EIS: RV) are operable with their lift settings adjusted to ensure valve opening at 2485 psig +/-1% and 2530 psig +/-1%. The two PSVs are RC-141 and RC-142. The lift setting criterion for RC-141 is 2530 psig +/-1% (i.e., a range of 2504.7 to 2555.3 psig), while the criterion for RC-142 is 2485 psig +/-1% (i.e., a range of 2460.2 to 2509.8 psig).

EVENT DESCRIPTION

During the 1999 Refueling Outage, PSVs RC-141 and RC-142 were removed from service and sent off-site to Wyle Laboratories for setpoint verification. On October 11, 1999, at 1331 hours, the "as-found" lift pressure for RC-142 was discovered to be 2516 psig (or 1.25% above the nameplate value). The next three lifts (at 2488, 2504 and 2497 psig respectively) were found to be within the required setpoint tolerance. The valve was subsequently disassembled, cleaned, inspected, and refurbished. No significant deficiencies were noted in the condition of the valve. The valve was reassembled and tested. The three "as-left" lifts (at 2476, 2489 and 2486 psig respectively) were within the required setpoint tolerance.

The "as-found" lift pressure for RC-141 was verified to be within the required +/-1% tolerance, with the first lift occurring at 2537 psig, followed by "as-left" lifts at 2535, 2510 and 2530 psig respectively.

This event is being reported pursuant to 10 CFR 50.73(a)(2)(i)(B).

SAFETY SIGNIFICANCE

The highest reactor coolant system pressure reached in any of the Updated Safety Analysis Report (USAR) accident analyses involves a postulated complete loss of turbine generator load. The USAR analysis concludes that assuming a +6% drift in PSV setpoint, the acceptance criterion for peak reactor coolant system pressure is satisfied. Despite RC-142 having an "as-found" lift pressure that was 1.25% higher than the nameplate setpoint, the "as-found" lift pressure was well within the USAR analysis. Therefore, it has been concluded that this event had minimal effect on plant/public safety.

CONCLUSION

It was concluded that the root cause of this event was normal setpoint drift/scatter. This conclusion was reached after disassembly, cleaning, and inspection of the valve by the vendor field service representative.

CORRECTIVE ACTIONS

RC-142 was disassembled, cleaned, inspected, and refurbished. The valve was subsequently reassembled and tested. The "as-left" lift pressures for both RC-141 and RC-142 met the Technical Specification 2.1.6(1) requirements.

SAFETY SYSTEM FUNCTIONAL FAILURE

This event did not result in a safety system functional failure in accordance with draft NEI 99-02, Rev. C.

PREVIOUS SIMILAR EVENTS

PSVs RC-141 and RC-142 "as-found" lift pressures have been found outside their +/-1% tolerance range on previous occasions as documented by LERs 76-038, 77-028, 83-001, 87-014, 92-023, 92-028, 93-013 and 96-009.