NRC Form 366 (9-93) LICENSEE EVENT REPORT (LER)														NUCLEAR REGULATORY COMMISSION APPROVED OMB NO. 3150-0104 EXPIRES: 8/31/85								
FACILITY	CILITY NAME (1)															DOCKET NUMBER (2)			PAGE (3)			
Sequoyah, Unit 1														0 15 10 10	0 5 0 0 0 3 2			F 0 2				
TITLE (4)	-									-		-					-					
Pr	essur	rize	r	Safe	ty	Reli	ief	Va	lve	Inop	erabl	Le										
Pressurizer Safety Relief Valve I EVENT DATE (5) LER NUMBER (6)																R FACILITIES INVOLVED (8)						
MONTH	DAY	YEAR	1	YEAR	5				REVISION	MONTH	DAY	T	YEAR		FACILITY NAMES			KET NUMBE	A(S)	I(S)		
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OPERATING MODE (8)				THIS REPORT IS SUBMITTED PURSUANT TO							20.406(c)				X 50.73(a)(2)(iv)			73.71(b)				
	POWER LEVEL (10) 010 0			20.405(a)(1)(i) 20.405(a)(1)(ii)					50.38(e)(1) 50.38(e)(2)					50.73(a)(2)(v) 50.73(a)(2)(vii)			73.71(c) OTHER (Specify in Abstract					
1010 6				20.405(a)(1)(iii) X 20.405(a)(1)(iv) 20.405(a)(1)(v)									E	50.73(a)(2)(viii)(A) 50.73(a)(2)(viii)(B) 50.73(a)(2)(x)			below and in Text, NRC Form 366.A)					
				1					-	ICENSE	CONTAC	T F	OR THIS	LER (12)	10.00							
NAME				7								-				100	TELEPHONE NUMBER					
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						COMPL	ETE C	INE L	NE FOR	EACH C	OMPONE	NT F	FAILURE	DESCRIBI	ED IN THIS REFO	9RT (13)						
CAUSE	SYSTEM	STEM COMP		NENT MANUFACTURES			REPORTABLE TO NPRDS					CAUSE	SYSTEM	COMPONENT MANUFAC- TURER		REPORTABLE TO NPROS						
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						SUPP	LEMEN	ITAL	REPORT	EXPECT	TED (14)					EXPECT	ED.	MONT	DAY	YEAR		
YES	(If yes, c									-	X NO		County I			SUBMISS	SUBMISSION DATE (16)					

At 1800 CST on 05/05/84, unit 1 initiated a plant shutdown required by technical specifications due to an inoperable pressurizer safety relief valve. The unit was in mode 3 (547 degrees F, 2235 psig) just prior to initiation of shutdown. On 05/06/84 at 0117 CST with the unit in mode 4 (330 degrees F, 600 psig), a reactor trip occurred cn low-low steam generator level in the number 1 steam generator.

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U.S. NUCLEAR REGULATORY COMMISSION LICENSEE EVENT REPORT (LER) TEXT CONTINUATION APPROVED OMB NO. 3150-0104 EXPIRES 8/31/85 FACILITY NAME (1) DOCKET NUMBER (2) LER NUMBER (6) PAGE (3) SEQUENTIAL YEAR Sequoyah, Unit 1 0 |5 |0 |0 |0 |3 |2 10 0 12 OF 0 12

TEXT (If more spec: 1 required, use additional NRC Form 366A's) (17)

At 1725 CST on 05/05/84 with unit 1 in mode 3 (547 degrees F, 2235 psig), pressurizer safety relief valve 1-SRV-68-565 lifted. The required lift setpoint of the valve is 2485 psig + 1%. Plant shutdown to mode 4 as required by technical specification LCO 3.4.3.1 was initiated at 1800 CST.

Later on 05/06/84 at 0117 CST with the unit in mode 4 (330 degrees F, 600 psig), steam generator auxiliary feedwater bypass level control valve 1-LCV-3-164A failed to open sufficiently to maintain level in the number one steam generator resulting in actuation of an automatic reactor trip on low-low level in the number one steam generator.

The premature lifting of the pressurizer safety relief valve has been determined to be due to seat leakage. The spring force calculations to maintain closure of the relief valve are based on cross sectional area of the seat and zero leakage. If leakage occurs, the cross sectional area is effectively increased allowing a lower system pressure to lift the valve. The Crosby valve Model No. GM6-HB-BP-86 was replaced and the failed valve was shipped to Wyle Labs for repair and inspection.

Inspection of the level control valve 1-LCV-3-164A revealed a failed current to pressure converter in the valve control instrumentation. The converter was replaced, and the valve was returned to service.

All other equipment and personnel responded as expected during the event. There was no effect on public health or safety.

For 1984, this was the first occurrence of a pressurizer safety relief valve lifting prematurely. There have been four previous reactor trips on low-low steam generator level, but this is the first occurrence in mode 4 and caused by a failed level control valve.

TENNESSEE VALLEY AUTHORITY

Sequoyah Nuclear Plant Post Office Box 2000 Soddy Daisy, Tennessee 37379

June 1, 1984

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

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNIT 1 - DOCKET NO. 50-327 - FACILITY OPERATING LICENSE DPR- / - REPORTABLE OCCURRENCE REPORT SQR0-50-327/84031

The enclosed licensee event report provides details concerning a required plant shutdown following premature lifting of a pressurizer safety relief valve. This event is reported in accordance with 10 CFR 50.73, paragraph a.2.i and a.2.iv.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

C. C. Mason

Power Plant Superintendent

Enclosure cc (Enclosure):

James P. O'Reilly, Director U.S. Nuclear Regulatory Commission Suite 2900 101 Marietta Street, NW Atlanta, Georgia 30303

Records Center Institute of Nuclear Power Operations Suite 1500 1100 Circle 75 Parkway Atlanta, Georgia 30339

NRC Inspector, NUC PR, Sequoyah