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Masoud Bajestani
Site Vice President
Sequoyah Nuclear Plant

December 14, 1999

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

10 CFR 50.73

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2 - DOCKET NOS. 50-327 AND 50-328 - FACILITY OPERATING LICENSES DPR-77 and DPR-79 - LICENSEE EVENT REPORT (LER) 50-327/1999003

The enclosed report provides details concerning the start of the Units 1 and 2 control room emergency ventilation system as a result of the smell of smoke in the control room. This event is being reported, in accordance with 10 CFR 50.73(a)(2)(iv), as a condition that resulted in the actuation of engineered safety features.

Sincerely,

M. Bajestani

Masoud Bajestani

Enclosure
cc: See page 2

IE22

PDR ADOCK 05000327

Enclosure
cc (Enclosure):

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NRC FORM 366 (6-1998) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

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.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Sequoyah Nuclear Plant (SQN) UNIT 1	05000327	1 OF 5

TITLE (4)
Control Room Emergency Ventilation System Start as a Result of the Smell of Smoke in the Control Room.

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
11	18	1999	1999	-- 003 --	00	12	14	1999	SQN Unit 2	05000328
									FACILITY NAME: NA	DOCKET NUMBER: 05000

OPERATING MODE (9)	1
POWER LEVEL (10)	100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

	20.2201(b)		20.2203(a)(2)(v)		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)	X	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	TELEPHONE NUMBER (Include Area Code)
J. W. Proffitt, Licensing Engineer	(423) 843-6651

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
X	IB	CAP	S250	N						

SUPPLEMENTAL REPORT EXPECTED (14)			EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
	YES (If yes, complete EXPECTED SUBMISSION DATE).	X NO				

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

On November 18, 1999, at approximately 1220, Eastern standard time (EST), with both units in power operation at approximately 100 percent, Operations personnel smelled smoke in the main control room. At 1225 EST, Operations personnel manually started the control room emergency ventilation system (CREVS) in accordance with plant procedures. Operations personnel determined that a 5-kilovolt ampere (kVA) annunciator inverter appeared to have a failed capacitor that was overheating. Operations personnel deenergized the 5-kVA annunciator inverter. After electrically isolating the failed capacitor, Operations personnel returned the CREVS to its normal configuration. The root cause of the event was the random failure of a capacitor in the 5-kVA annunciator inverter. The capacitor was replaced and the annunciator inverter returned to service.

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION	
Sequoyah Nuclear Plant (SQN) Unit 1	05000327	1999 --	003 --	00	2 OF 5

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

I. PLANT CONDITION(S)

Units 1 and 2 were in power operation at approximately 100 percent.

II. DESCRIPTION OF EVENT

A. Event:

On November 18, 1999, at approximately 1220, Eastern standard time (EST), Operations personnel smelled smoke in the main control room. At 1225 EST, Operations personnel manually started the control room ventilation system (CREVS) [EIIS Code VI] in accordance with plant procedures. Operations personnel determined that a 5-kilovolt ampere (kVA) annunciator inverter [EIIS Code ANN] appeared to have a failed capacitor that was overheating. Operations personnel deenergized the 5-kVA annunciator inverter. After electrically isolating the failed capacitor, Operations personnel returned CREVS to its normal configuration.

B. Inoperable Structures, Components, or Systems that Contributed to the Event:

None.

C. Dates and Approximate Times of Major Occurrences:

November 18, 1999, at 1220 EST	Operations personnel smelled smoke in the main control room.
at 1225 EST	Operations personnel manually started CREVS.
at 1234 EST	Operations personnel determined that a 5-kVA annunciator inverter appeared to have a failed capacitor that was overheating.

at 1258 EST	Operations personnel transferred the annunciator from its normal power supply to its alternate power supply.
at 1259 EST	Operations personnel deenergized the 5-kVA annunciator inverter.
at 1338 EST	Operations personnel returned CREVS to its normal configuration.

D. Other Systems or Secondary Functions Affected:

None.

E. Method of Discovery:

An operator smelled smoke in the main control room.

F. Operator Actions:

Control room operators responded to the condition as prescribed in the abnormal operating procedures and manually started CREVS.

G. Safety System Responses:

CREVS started and functioned as designed.

III. CAUSE OF THE EVENT

A. Immediate Cause:

The immediate cause for starting the CREVS was the smell of smoke in the main control room.

B. Root Cause:

The root cause of the event was the random failure of a capacitor in the Unit 1 5-kVA nonsafety related annunciator inverter. The oil from the overheating capacitor in the inverter was the source of the smoke. The failed capacitor lost approximately 0.8 ounce of oil.

IV. ANALYSIS OF THE EVENT

During normal modes of operation the control room is supplied by air cooling units with fresh make-up air that is mixed with the return air and filtered.

The equipment for emergency operation consists of isolation dampers on the normal control room supply and exhaust ducts, and two 100 percent capacity emergency pressurizing fans which provide outside air for maintaining a slight positive pressure to two 100 percent capacity filter and fan trains for filtration of the small amount of outside air mixed with the return air for cleanup of control room air. The air cleanup filter trains consist of a bank of four high-efficiency particulate air (HEPA) filters mounted in series with a bank of adsorber modules.

In the event of a safety injection signal and/or high radiation signal from either of the two radiation monitors located in the common intake duct, the control room supply and exhaust isolation dampers will automatically close; and a portion of the recirculated air, together with the small flow of outside air, will be automatically routed to the fully redundant emergency air cleanup fans and filter trains.

The CREVS was started as a precautionary measure and functioned as described in the Final Safety Analysis Report. There was no fire or smoke present in the control room. The amount of smoke in the room next to the control room was minimal. Therefore, this event did not adversely affect the health and safety of plant personnel or the general public and had no safety significance.

V. CORRECTIVE ACTIONS

A. Immediate Corrective Actions:

Operations personnel manually started the CREVS and promptly determined the source of the smoke. Operations personnel transferred the annunciator from its normal power supply to its alternate power supply and deenergized the failed 5-kVA annunciator inverter.

B. Corrective Actions to Prevent Recurrence:

This was a random failure of a capacitor in the 5-kVA annunciator inverter. The failed capacitor was replaced.

VI. ADDITIONAL INFORMATION

A. Failed Components:

Commutating Capacitor - part No. SCI-020400-1 for 5-kVA annunciator inverter manufactured by Solid State Controls, Inc., Model No. SV12050, Serial No. 5516-1.

B. Previous LERs on Similar Events:

A review of previous reportable events did not identify any events associated with the start of the CREVS as a result of the detection of smoke or the odor of smoke in the control room.

C. Additional Information:

None.

D. Safety System Functional Failure:

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

VII. COMMITMENTS

None.