

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
Sequoyah, Unit 2DOCKET NUMBER (2)
0 5 0 0 0 3 2 8 1 OF 0 2

TITLE (4)

Standby Diesel Generator

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 NAMES		DOCKET NUMBER(S)
0 3	2 6	8 4	8 4	0 0 4	0 0	0 4	2 4	8 4			0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) 1 10 10	20.402(b)	20.406(e)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	73.71(b)					
	20.406(a)(1)(i)	50.36(e)(1)		50.73(a)(2)(v)	73.71(c)					
	20.406(a)(1)(ii)	50.36(e)(2)		50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)					
	20.406(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)						
	20.406(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)						
	20.406(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(x)						

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Glenn Duggin, Compliance Section Engineer	6 1 5 8 7 0 - 6 1 4 6

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC- Turer	REPORTABLE TO NPDs	CAUSE	SYSTEM	COMPONENT	MANUFAC- Turer	REPORTABLE TO NPDs

SUPPLEMENTAL REPORT EXPECTED (14)

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

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space type written lines) (16)

The loss of a 6.9kV unit board, causing undervoltage on a 6.9kV shutdown board, resulted in the standby diesel generators starting. Investigation revealed that unit boards 1A and 1C lost power due to a C-phase to ground fault on a 500kV breaker which cleared the 500kV switchyard bus section 2.

In two other incidents, personnel bumped a cell switch while working on a 6.9kV unit board breaker, and personnel checked operation of a relay without first performing a required wire lift which resulted in starting the diesel generators.

These incidents had no effect on public health or safety, and no plant safety margins were exceeded.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1) Sequoyah, Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 2 8	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 4	- 0 0 4	- 0 0	0 2	OF	0 2

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

This LER involves three separate incidents. The first diesel generator (D/G) start occurred at 0854C on 03/26/84 while unit 2 was in mode 1 (100% power, 2240 psig, 578 degrees F) and unit 1 was in mode 6 (0% power, 14 psig, 95 degrees F) and was returned to normal at 1110C on 03/26/84. The second incident (D/G start) occurred at 1026C on 04/02/84 while unit 2 was in mode 1 (100% power, 2235 psig, 578 degrees F) and unit 1 was in mode 5 (0% power, 35 psig, 113 degrees F) and was returned to normal at 1126C on 04/02/84. The third D/G start occurred at 0836C on 04/03/84 while unit 2 was in mode 1 (100% power, 2235 psig, 578 degrees F) and unit 1 was in mode 5 (0% power, 175 psig 113 degrees F) and was returned to normal at 1130C on 04/03/84. All associated equipment and personnel responded and performed as expected during the diesel generator starts. The operator responded to the diesel start and loss of voltage alarms and determined that all equipment had transferred power sources correctly. The diesel generators did not have to actually pick up load at any time. Maintenance personnel were notified to check the diesels and the boards. Power was reestablished to the boards that lost voltage, power supplies were realigned to normal, and the diesel generators were stopped and reset.

In the first incident, two 6.9kV unit boards 1A and 1C were being backfed from the 500kV switchyard to maintain two offsite power sources per technical specifications. The boards were fed through the unit station service transformers. Start bus 1A was being worked on; therefore, it was deenergized and grounded. Start bus 1A is the alternate feeder for unit boards 1A and 1C. 500kV breaker 5028 had a C-phase to ground fault which resulted in the loss of the unit station service transformers and the loss of unit boards 1A and 1C. These unit boards tried to transfer to their alternate feeder, start bus 1A, but with the 1A start bus deenergized, they were unable to. The 6.9kV shutdown board 1B-B was able to transfer to its alternate feeder, start bus 1B through unit board 1D. The diesel generators started due to momentary low voltage on the shutdown board, but did not pick up load. Failed breaker 5028 was isolated and breaker 5038 was closed to reenergize the unit boards. Breaker 5028 probably failed due to flashover between corona shields. It is being repaired at this time.

In the second incident, maintenance personnel were working on a 6.9kV unit board 1C breaker and accidentally bumped the cell switch which caused the 6.9kV unit board to lose power. 6.9kV unit board 1C was the normal feed for 6.9kV shutdown board 1B-B. When unit board 1C lost power, the shutdown board 1B-B transferred to its alternate feed, 6.9kV unit board 1D, and the diesel generators started. The diesels were stopped and reset. Personnel were reminded of the necessity of being extremely careful when working on the 6.9kV unit boards.

In the third incident, maintenance personnel were troubleshooting the operation of the auto relay that starts the D/G room exhaust fans when the local start relay for the diesel generator was inadvertently actuated due to personnel not lifting a wire. The diesels were stopped and reset. Troubleshooting and maintenance was subsequently completed. Personnel were reminded to be more cognizant in troubleshooting activities and to assure proper configuration and wire lifts are complete prior to equipment actuation.

There was no effect on public health or safety, and no plant safety margins were exceeded. There was no interruption of power to plant equipment.

Previous occurrences - none.

TENNESSEE VALLEY AUTHORITY

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

April 24, 1984

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

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNIT 2 - DOCKET NO.
50-328 - FACILITY OPERATING LICENSE DPR-79 - REPORTABLE OCCURRENCE REPORT
SQRO-50-328/84004

The enclosed licensee event report provides details concerning the starting of the standby diesel generators due to the loss of a 6.9kV unit board and two starts attributed to personnel errors. This event is reported in accordance with 10 CFR 50.73, paragraph a.2.iv.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



C. C. Mason
Power Plant Superintendent

Enclosure
cc (Enclosure):

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NRC Inspector, NUC PR, Sequoyah

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