

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Browns Ferry - Units 1, 2, and 3	DOCKET NUMBER (2) 0 5 0 0 0 0 2 5 9	PAGE (3) 1 OF 02
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TITLE (4)  
Failure to Meet Design Basis for Paralleling Diesel-Generators

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	5	05	8	4	02	0	5	25	Browns Ferry Unit 2		0 5 0 0 0 2 6 0
									Browns Ferry Unit 3		0 5 0 0 0 2 9 6

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

OPERATING MODE (9) N	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 1 0 0	20.406(a)(1)(i)	50.38(c)(1)	50.73(a)(2)(v)	73.71(c)
	20.406(a)(1)(ii)	50.38(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)
	20.406(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.406(a)(1)(iv)	X 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 David Smith	TELEPHONE NUMBER
	AREA CODE: 2 0 5      7 2 9 - 0 8 6 5

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPPDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)       NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

Browns Ferry's FSAR Section 8.5 requires the ability to parallel three Units 1 and 2 diesel-generators with three Unit 3 diesel-generators for long-term operation after a design basis accident. Due to a design error when a modification was installed in 1976, paralleling the Units 1 and 2 diesel-generators with Unit 3 in the presence of an accident signal was not possible. This error was found by TVA's design group in the Appendix R Analysis Review and reported by a nonconformance report. Immediate corrective action was taken by placing administrative controls over defeating the accident signal lockout feature. A modification to complete corrective action is in progress and should be completed by August 15, 1984.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		

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

During normal operation, Unit 1 was at 100-percent power, Unit 2 was at 60-percent power, and Unit 3 was in a refueling outage.

TVA's design group discovered present design was not in accordance with Section 8.5.2.3 of the FSAR. The section states,

"For the long-term (greater than ten minutes), three of the Units 1 and 2 diesel-generators, paralleled with the three respective Unit 3 diesel-generators, shall be adequate to supply all required loads for the safe shutdown and cooldown of all three units in the event of loss of offsite power and a design basis accident in any one unit."

Contrary to the above, in the presence of an accident signal, paralleling is not possible with the configuration installed by a 1976 modification. It was believed by the designer at that time that an accident signal would not be present for longer than ten (10) minutes and for the initial ten (10) minutes a single diesel-generator (EK) could support its required shutdown board (ECDB) load. Current analysis assumes this common accident signal might not be cleared within ten minutes and therefore the sustained signal would prevent parallel operation. For periods over ten (10) minutes in a worse case situation, a single diesel-generator can be overloaded and it would be necessary to parallel diesel-generators. In addition, there is no documented evidence the diesel-generators can handle the long-term load requirements for a loss of offsite power combined with design basis accident without paralleling the diesel-generators.

Plant instructions Emergency Operating Instruction 36 and Operating Instruction 57 were revised to include a temporary administrative procedure that will defeat the lockout feature of the accident signal by use of a relay (RLY) contact inhibit (this would be installed to facilitate long-term load requirements following a loss of coolant accident). A modification to make this feature automatic is in progress and should be complete by August 15, 1984.

This error was found by TVA's design group in the Appendix R Analysis Review and this review is ongoing.

Responsible Plant Section - ED

Previous Similar Events - None

TENNESSEE VALLEY AUTHORITY  
Browns Ferry Nuclear Plant  
P. O. Box 2000  
Decatur, Alabama 35602

May 25, 1984

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

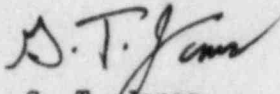
Dear Sir:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 - DOCKET  
NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - REPORTABLE OCCURRENCE  
REPORT BFRO-50-259/84020

The enclosed report provides details concerning failure to meet design  
basis for paralleling diesel-generators. This report is submitted in  
accordance with 10 CFR 50.73 (a)(2)(ii).

Very truly yours,

TENNESSEE VALLEY AUTHORITY



G. T. Jones  
Power Plant Superintendent  
Browns Ferry Nuclear Plant

Enclosure

cc (Enclosure):  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
Region II  
101 Marietta Street, Suite 2900  
Atlanta, GA 30303

NRC Inspector, Browns Ferry Nuclear Plant

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