

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)  
Browns Ferry - Unit 3

DOCKET NUMBER (2)  
0 5 0 0 0 2 1 9 1 6

PAGE (3)  
1 OF 0 1 2

TITLE (4)  
Manual Scram of Unit 3

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	1	0	7	8	5	8	5	0	0	2	0	0	0	2	0	5	0	0	0			

OPERATING MODE (8)  N

POWER LEVEL (10) 1 0 1 0

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

20.402(b)	<input type="checkbox"/>	20.405(c)	<input type="checkbox"/>	50.73(a)(2)(iv)	<input type="checkbox"/>	73.71(b)	<input type="checkbox"/>
20.405(a)(1)(i)	<input type="checkbox"/>	50.38(e)(1)	<input type="checkbox"/>	50.73(a)(2)(v)	<input type="checkbox"/>	73.71(c)	<input type="checkbox"/>
20.405(a)(1)(ii)	<input type="checkbox"/>	50.38(e)(2)	<input type="checkbox"/>	50.73(a)(2)(vii)	<input type="checkbox"/>	OTHER (Specify in Abstract below and in Text, NRC Form 388A)	<input type="checkbox"/>
20.405(a)(1)(iii)	<input checked="" type="checkbox"/>	50.73(a)(2)(i)	<input type="checkbox"/>	50.73(a)(2)(viii)(A)	<input type="checkbox"/>		
20.405(a)(1)(iv)	<input type="checkbox"/>	50.73(a)(2)(ii)	<input type="checkbox"/>	50.73(a)(2)(viii)(B)	<input type="checkbox"/>		
20.405(a)(1)(v)	<input type="checkbox"/>	50.73(a)(2)(iii)	<input type="checkbox"/>	50.73(a)(2)(ix)	<input type="checkbox"/>		

LICENSEE CONTACT FOR THIS LER (12)

NAME Alan W. Gordon

TELEPHONE NUMBER

AREA CODE 2 0 5

7 2 9 - 2 5 3 7

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

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)

A breaker (BKR) supplying power to an instrument panel tripped when maintenance personnel inadvertently allowed the power cable on a temperature transmitter (TT) to short to ground. Temperature control valve (TCV) logic from several panels was interrupted and a subsequent reduction of raw cooling water (RCW) to both recirculation pump motor-generator (MG) set oil coolers caused the MG sets to trip. By the time power and RCW flow was restored, the temperature difference between the dome and bottom head drain was in excess of that permitted by the technical specification for restarting the recirculation pumps so the reactor was manually scrammed.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)  Browns Ferry - Unit 3	DOCKET NUMBER (2)  0 5 0 0 0 2 9 6	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8 5	- 0 0 2	- 0 0	0 2	OF 0 2

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

During normal operation, unit 1 was operating at 97 percent, unit 2 was in a refueling outage, and unit 3 was operating at 100 percent. Only unit 3 was affected by this event.

While performing maintenance on a temperature transmitter to reactor feedwater, the power cable accidentally shorted to ground, tripping a breaker that supplies several instrument panels. The loss of power to the panels controlling raw cooling water flow to recirculation pump MG set "A" and "B" oil coolers caused the electrical to pressure (E/P) converters to give a false signal to the temperature controllers. As a result, the temperature control valves went full closed. Additionally, the raw cooling water temperature control valves for reactor building closed cooling water heat exchangers "A" and "B" closed due to a loss of power to their panel. The licensed unit operator began venting the drywell after increased temperature and pressure were noted. Ultimately, both recirculation pump MG sets tripped on high oil temperature. At this point, the licensed unit operator inserted control rods to reduce the load.

By the time the breaker was reset and the raw cooling water flow reestablished, the temperature difference between the dome and bottom head drain was in excess of that permitted by the technical specification for restarting the recirculation pumps. When it became apparent that this temperature difference could not be restored within limits of operating conditions and that manipulating the rod pattern to an acceptable sequence for controlled shutdown would be very difficult without recirculation pumps, the decision was made to manually scram the reactor.

The breaker trip should have caused an alarm in the control room, which would have shortened the response time. The alarm circuit for the breaker was checked, and a bad card was found. Appropriate maintenance people will be briefed on the cause of this event. No safety limits were exceeded, and no further corrective action is planned.

Responsible Plant Section - NA

Previous Similar Events - None

TENNESSEE VALLEY AUTHORITY

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

February 5, 1985

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

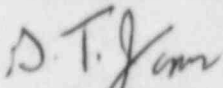
Dear Sir:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT (BFN) UNIT 3 -  
DOCKET NO. 50-296 - FACILITY OPERATING LICENSE DFR-68 - REPORTABLE  
OCCURRENCE REPORT BFRO-50-296/85002

The enclosed report provides details concerning the manual scram of  
unit 3. This report is submitted in accordance with 10 CFR 50.73  
(a)(2)(i).

Very truly yours,

TENNESSEE VALLEY AUTHORITY



G. T. Jones  
Plant Manager  
Browns Ferry Nuclear Plant

Enclosures

cc (Enclosures):

Regional Administrator  
U. S. Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
Region II  
101 Marietta Street, Suite 2900  
Atlanta, Georgia 30303

INPO Records Center  
Suite 1500  
1100 Circle 75 Parkway  
Atlanta, Georgia 30339

NRC Resident Inspector, BFN

1122  
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