NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Browns Ferry Nuclear Plant - Unit 1	0 5 0 0 0 2 5 9	1 OF 0 2

TITLE (4)

Reactor Scram From Turbine Generator Trip

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 6	0 2	8 4	8 4	0 2 4	0 0	0 6	2 2	8 4		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	1 0 0	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
David L. Smith	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 NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

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

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

Increase in conductance of the stator cooling water Teflon insulating connector tubing caused a turbine generator trip. This, in turn, caused a reactor scram with all engineered safety systems performing as designed.

An investigation gave a probable cause of interior superficial deposit of iron and copper onto the Teflon lining of the connector tubing. Inline system filters are rated for 30 microns and were replaced with 10 micron filters. This, along with a thorough system flush, should remedy this type of conductance problem.

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

During normal operation unit 1 was operating at 100-percent power, unit 2 at 60-percent power, and unit 3 was in a refueling outage. This event affects unit 1 only.

At 1739 hours, the unit 1 reactor scrammed due to its turbine generator (TA, TB) automatically tripping from increased conductance in the stator cooling water Teflon insulating connector tubing (TJ). (If current to ground reaches 30 milliamps the generator will automatically trip; this is to prevent possible generator rotor damage from overcurrent.) All engineered safety systems functioned as designed with no unusual events occurring. Inspection of the unit 1 Teflon tubes revealed an interior superficial deposit of iron and copper. This deposit is the most probable reason for the increase in conductance through the Teflon tubes.

Sample analysis indicated that the contaminant was primarily solid iron and copper particles in the 6-20 micron range. Current inline system filters (FLT) are rated at 30 microns. These filters were replaced by 10 micron filters in a current unit 1 short outage. Also, the unit 1 stator cooling water storage tank (TK) was drained and its associated piping along with the Teflon tubing (TBG) flushed.

The above actions are expected to preclude any future problems of this sort. Unit 1 had previously experienced two similar type scrams in 1982 and at the time the scram cause was unknown.

Previous Similar Events - As described above.

Respon ble Plant Section - N/A

TENNESSEE VALLEY AUTHORITY

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

June 22, 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-50-259/84024

The enclosed report provides details concerning reactor scram from turbine-generator trip. This report is submitted in accordance with 10 CFR 50.73 (a)(2)(iv).

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

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

NRC Resident Inspector, BFN

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