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TENNESSEE VALLEY AUTHORITY  
1750 Chestnut Street: Tower II

OFFICIAL COPY

July 23, 1981

Mr. James P. O'Reilly, Director  
U.S. Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
Region II  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303



Dear Mr. O'Reilly:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 - DOCKET  
NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - REPORTABLE OCCURRENCE  
REPORT BFRO-50-259/81033

This letter supercedes my letter to you on the above subject dated July 10, 1981.

The enclosed report provides details concerning the total "as found" primary containment leak rate which exceeded the allowable leak rate. This report is submitted in accordance with Browns Ferry unit 1 Technical Specification 6.7.2.b(4).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*J. A. Green*  
H. J. Green  
Director of Nuclear Power

Enclosure (3)

cc (Enclosure):

Director (3)  
Office of Management Information and Program Control  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Director (40)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Mr. Bill Lavallee  
Nuclear Safety Analysis Center  
Palo Alto, California 94303

Mr. R. F. Sullivan, NRC Inspector, Browns Ferry

*IE22  
5/11*

# LICENSCE EVENT REPORT

U.S. NUCLEAR REGULATORY COMMISSION

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

IDENTIFICATION BLOCK										(1)																
0	1	A	L	B	R	F	1	2	0	0	-	0	0	0	0	0	0	0	3	4	1	1	1	1	4	5
LICENSE NUMBER										LICENSE TYPE										57 CAT 58						

0	1	L	0	5	0	0	0	2	5	9	0	6	1	4	8	1	8	0	7	1	0	8	1	9
DOCKET NUMBER										EVENT DATE										REPORT DATE				

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

During refueling operation, the total "as found" primary containment leak rate exceeded T.S.4.7.A.2g allowable leak rate of 60 percent of La of 655.9 SCFH. Total primary containment "as found" leak rate was 5997.5373 SCFH. There was no danger to the health or safety of the public. There were no redundant systems. Previous similar events: BFRO-50-259/80022, 79003; 260/78009, 79014, 80049; 296/79017.

SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE		VALVE SUBCODE			
S	A	E	B	V	A	L	V	E	X	X	X	X			
EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.							
8	1	0	3	3	0	3	L	0							
ACTION TAKEN		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER	
B	B	Z	Z	Z	0	0	0	0	Y	N	L	Z	9	9	9

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (21)

Leakage was caused by deterioration of valve seating surfaces during operation. Prior to returning to power, valves will be repaired and retested until satisfactory leakage rates are obtained. Investigation of better methods to control leakage continues, such as different valve seating materials, seating pressures, and closing times.

FACILITY STATUS		POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION	
H	0	0	0	NA	B	Surveillance testing			
ACTIVITY CONTENT		AMOUNT OF ACTIVITY		LOCATION OF RELEASE					
Z	Z	NA	NA						
MEASURABLE EXPOSURES		DESCRIPTION		NA					
0	0	0	NA						
PERCENTAGE DEFECTS		DESCRIPTION		NA					
0	0	0	NA						
LOSS OF OR DAMAGE TO FACILITY		DESCRIPTION		NA					
Z	NA								
PUBLICLY		DESCRIPTION		NA					
N	NA								

NAME OF PROPRIETOR

PHONE:

*dupl 8108030191*

U.S. NUCLEAR REGULATORY COMMISSION

LER SUPPLEMENTAL INFORMATION

BFRO-50-259 / 81033 Technical Specification Involved 4.7.A.2.g  
Reported Under Technical Specification 6.7.2.b (4) \*Date due NRC: 7/14/81  
Date of Occurrence 6/14/81 Time of Occurrence 1000 Unit 1

Identification and Description of Occurrence:

The total "as found" primary containment leak rate exceeded the 60 percent of La allowable leak rate of 655.9 SCFH. Refer to attachment 2 which details primary paths and leakage rates.

Conditions Prior to Occurrence:

Unit 1 - In refueling outage.

Unit 2 - At 71%.

Unit 3 - At 98%.

Action specified in the Technical Specification Surveillance Requirements met due to inoperable equipment. Describe.

None

Apparent Cause of Occurrence:

Deterioration of valve seating surfaces during operation.

Analysis of Occurrence:

There was no danger to the health or safety of the public, no release of activity, no damage to the plant or equipment, and no resulting significant chain of events.

Corrective Action:

Valves will be repaired and retested until satisfactory leakage rates are obtained. Investigation of better methods to control leakage continues, such as different valve seating materials, seating pressures, and closing times.

Failure Data:

BFRO-50-259/80022, 79003: 260/78009, 79014, 80049; 296/79017

Retention: Period - Lifetime; Responsibility - Document Control Supervisor

\*Revision:

*ALL*

LER BFRO-50-259/81033

Attachment 2

<u>Path</u>	<u>Valve</u>	<u>(Path Leak Rate (SCFH))</u>
X-7A	1-14/15	333.8026
X-7B	1-26/27	18.0526
X-7C	1-37/38	43.6265
X-7D	1-51/52	481.2574
X-8	1-55/56	5.5055
X-22	32-336/2163	3.8089
X-42	63-525/526	4.1790
X-25	64-17/18/19/76-24	239.1828
X-231	64-29/30/32/33/841 <sup>9</sup>	3591.6890
X-37C	68-508	0.2445
X-212	71-14/580	40.5000
X-214	73-23/603	97.2000
X-19	77-15A/15B	343.2539
X-205	84-8C/1603	12.4481
X-50	90-257A/257B	433.0948