

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8812210064      DOC. DATE: 88/12/12      NOTARIZED: NO      DOCKET #  
 FACIL: 50-296 Browns Ferry Nuclear Power Station, Unit 3, Tennessee      05000296  
 AUTH. NAME      AUTHOR AFFILIATION  
 NAVE, E.D.      Tennessee Valley Authority  
 CAMPBELL, G.G.      Tennessee Valley Authority  
 RECIP. NAME      RECIPIENT AFFILIATION

SUBJECT: LER 88-006-00: on 881116, procedural deficiency causes failure to comply w/Tech Specs.

W/8      ltr.

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	ACRS WYLIE		1	1	AEOD/DOA		1	1
	AEOD/DSP/TPAB		1	1	AEOD/ROAB/DSP		2	2
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	NRR/DEST/ADS 7E		1	0	NRR/DEST/CEB 8H		1	1
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	NRR/DLPQ/QAB 10		1	1	NRR/DOEA/EAB 11		1	1
	NRR/DREP/RAB 10		1	1	NRR/DREP/RPB 10		2	2
	<u>NRR/DRIS/SIB 9A</u>		1	1	NUDOCS-ABSTRACT		1	1
	REG-ELLE 02		1	1	RES/DSIR/EIB		1	1
	RES/DSR/PRAB		1	1	RGN2 FILE 01		1	1
EXTERNAL:	EG&G WILLIAMS, S		4	4	FORD BLDG HOY, A		1	1
	H ST LOBBY WARD		1	1	LPDR		1	1
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	NSIC MAYS, G		1	1				
NOTES:			5	5				

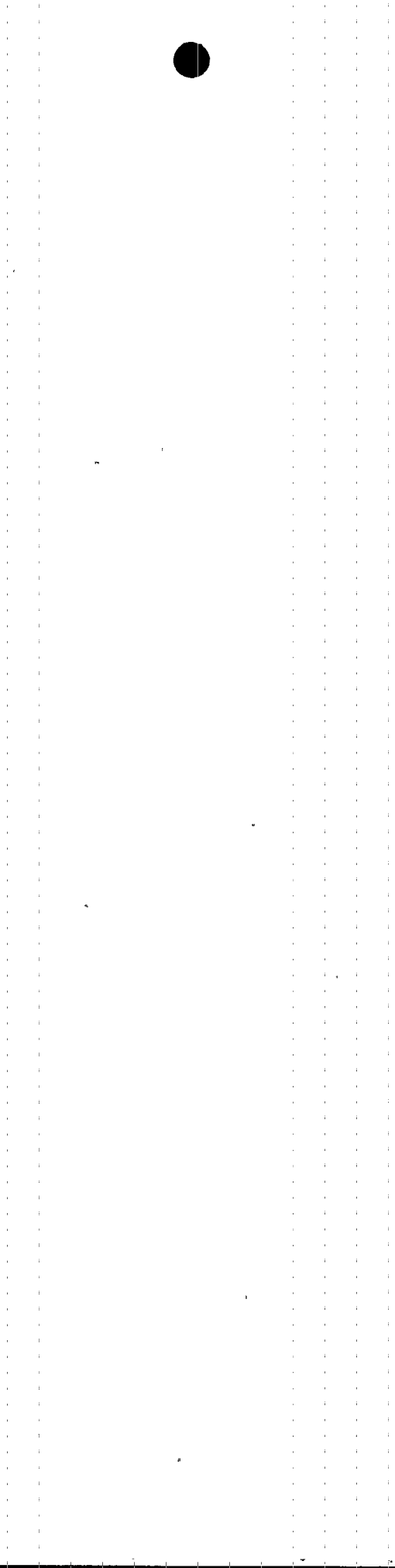
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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) <b>BROWNS FERRY UNIT 3</b>	DOCKET NUMBER (2) <b>0 5 0 0 0 2 9 6</b>	PAGE (3) <b>1 OF 0 4</b>
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TITLE (4)  
**PROCEDURAL DEFICIENCY CAUSES FAILURE TO COMPLY WITH TECHNICAL SPECIFICATIONS**

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)
1	1	1 6 8 8	8 8	0 0 6	0 0	1	2	1 2 8 8	BROWNS FERRY UNIT 1		0 5 0 0 0 2 5 9
									BROWNS FERRY UNIT 2		0 5 0 0 0 2 6 0

OPERATING MODE (9) <b>N</b>	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) <b>0 1 0 1 0</b>	<input type="checkbox"/> 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"/> 50.36(c)(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"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
	<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)(x)								

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME <b>Earl D. Nave, Engineer, Plant Assessment Section</b>		AREA CODE <b>2 0 5</b>	<b>7 2 9 1 - 2 5 3 1 7</b>

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

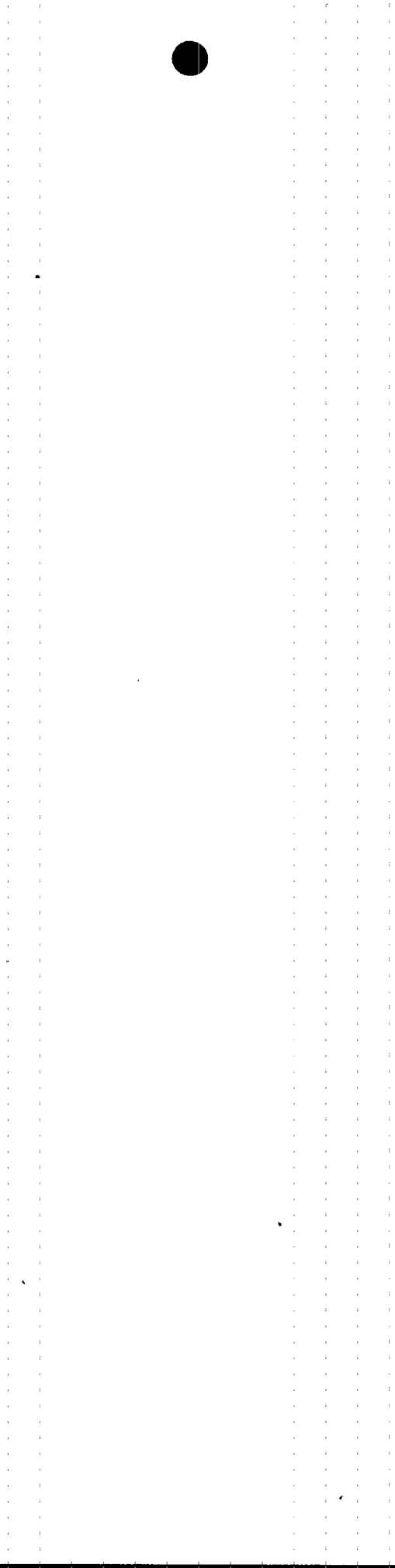
SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO				

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

On November 16, 1988, at 0900 hours, and again on November 18, 1988, at 0240 hours, with all three units defueled, it was discovered that compensatory sampling required by technical specifications (TS) was erroneously discontinued. Sampling was required due to raw cooling water (RCW) effluent radiation monitors being out of service. These events were caused by a procedural deficiency which led to a communications problem between the chemistry section and operations. In each event, sampling was reinitiated immediately upon discovery. Corrective action will be procedure revision. Activity of samples taken before and after each event were below maximum permissible levels. There was no indication that any radiation release rates were exceeded.

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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   8	-   0   0   6	-   0   0	0   2	OF	0   4

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

Description of Event

Two similar events involving missed compensatory sampling for out-of-service radiation monitors occurred due to deficient procedures which contributed to poor communication. Browns Ferry units 1, 2, and 3 were defueled during these events. Unit 3 was affected by these events.

On November 16, 1988, at 0900 hours, it was discovered that compensatory sampling required by Technical Specifications (TS) 3.2.D.2-3, due to the unit 3 raw cooling water (RCW)(ELIS identifier KG) effluent radiation monitor (EIIS identifier IL) being inoperable, had not been initiated upon the RCW return to service. Chemistry was notified on November 15, 1988, at 2311 hours, the 3A reactor building (RBCCW) heat exchanger (EIIS identifier CL) was placed in service with RCW flow and the 3B heat exchanger was still out-of-service. Chemistry began compensatory sampling per Surveillance Instruction (SI) 4.2.D.-3B on the 3A heat exchanger only. At 0500 hours, on November 16, 1988, Chemistry personnel observed that the 3B heat exchanger had RCW flow and initiated sampling at that time. The RBCCW 3B heat exchanger was still not in service on the RBCCW side.

On November 18, 1988, at 0240 hours, it was discovered that compensatory sampling required by TS 3.2.D.2-3 had been erroneously discontinued. Sampling was terminated at 0430 hours on November 16, 1988, when Operations notified Chemistry that the spare RBCCW heat exchanger serving unit 3 was taken out-of-service. Chemistry personnel believed that the RCW had also been secured which was not the case. Sampling was reinitiated on November 18, 1988, at 0302.

Cause of Event

Both events were caused by a communication problem between the chemistry lab shift supervisor and the unit operator. This problem was due to inadequate Operating Instructions (OI). The OI for the RBCCW system (OI-70) requires that Chemistry be notified when an RBCCW heat exchanger is placed in or removed from service along with the status of the RCW flow to the heat exchanger. However, the OI for placing the RCW in service to the heat exchanger does not require similar notification.

In the first event, the RCW to the 3B heat exchanger was placed back in service per OI-24 after maintenance outage, however, the 3B RBCCW heat exchanger was not placed in service. The RCW side status was not communicated to Chemistry. The second event occurred when the spare RBCCW heat exchanger, in service to unit 3, was taken out-of-service but Chemistry was not aware that the RCW flow to the heat exchanger remained in service. Although OI-70 requires Operations to notify Chemistry of changes to both the RBCCW and RCW sides of the heat exchanger, it is not clear that Chemistry should be advised of RCW status even when only the RBCCW side status changes.



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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   8	-   0   0   6	-   0   0	0   3	OF	0   4

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

Analysis of Event

There is no indication that any radiation release limits were exceeded for either event.

For the first event, the 3A RBCCW heat exchanger being sampled indicated activity below maximum permissible concentration. After initiation of sampling on the 3B RBCCW heat exchanger neither 3A nor 3B indicated activity above maximum permissible concentration. Since the RBCCW flow was isolated from the 3B heat exchanger, there would have been no increased consequences to this event had unit 3 been operating at full power.

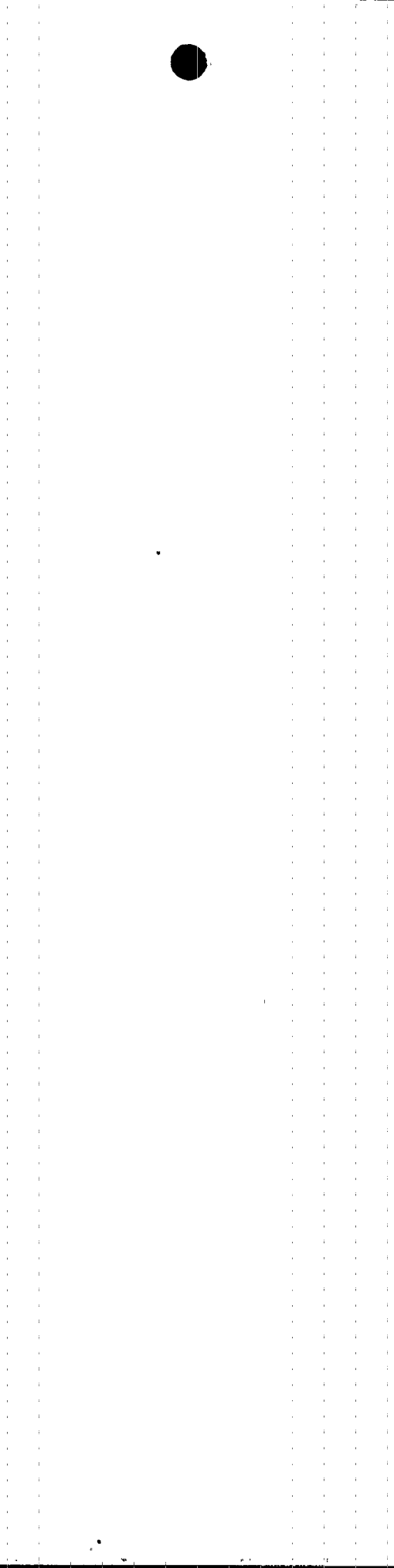
For the second event, samples taken prior to the event at 0309 hours on November 16, 1988, from the outlet of the spare RBCCW heat exchanger and after the event at 0302 hours on November 18, 1988, both showed effluent count rates below the lower limit of detection. The 3A and 3B RBCCW heat exchangers were in service and compensatory samples were taken at their outlets during this time. All radiation measurements were below detectable levels. The radiation level of RCW samples has been consistently below detectable levels in the past. Since the RBCCW flow was isolated from the spare heat exchanger, there would have been no increased consequences to this event had unit 3 been operating at full power.

Corrective Action

For both events, the immediate corrective action was to resume the required compensatory sampling.

Procedures which control operations which have the potential for creating the need for compensatory sampling have been reviewed. It was determined that the procedures were adequate with the exception of the OIs for RCW and RBCCW systems. They will be revised to ensure that notifications to Chemistry when an RBCCW heat exchanger is placed in or removed from service clearly includes the status of RCW flow. Additionally, SI 4.2.D-3B will be revised to ensure that all RBCCW heat exchanger RCW samples are included in a composite of each unit's heat exchanger discharge by requiring sampling at the monitor sample point when available. When the sample point at the monitor is unavailable, all unit heat exchangers will be assumed to have RCW flow and sampled for inclusion in a composite sample. A copy of this LER will be included in the required reading for all licensed operators.

Previous Similar Events - BFRO-50-259/88010





LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8   8	-   0   0   6	-   0   0	0   4	OF	0   4

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

Commitments

Revise the OI for both RBCCW and RCW systems to ensure that the Chemistry Laboratory is notified specifically of RCW status when an RBCCW heat exchanger is removed from service and of an RCW status change for an out-of-service RBCCW heat exchanger. Procedures changes will be complete by February 17, 1989.

Revise SI 4.2.D-3B to require that all RBCCW heat exchangers be sampled and combined if the preferred sample point (monitor) is not available. Procedure change will be complete by February 17, 1989.

Include a copy of this LER in the required reading package for all licensed operators. The review will be complete by February 17, 1989.



TENNESSEE VALLEY AUTHORITY

Browns Ferry Nuclear Plant  
Post Office Box 2000  
Decatur, Alabama 35602

DEC 15 1986

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

Dear Sir:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 3 - DOCKET  
NO. 50-296 - FACILITY OPERATING LICENSE DPR-68 - REPORTABLE OCCURRENCE REPORT  
BFRO-50-296/88006

The enclosed report provides details concerning the procedural deficiency  
resulting in failure to comply with technical specifications. This report is  
submitted in accordance with 10 CFR 50.73 (a)(2)(i).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

Guy G. Campbell  
Plant Manager  
Browns Ferry Nuclear Plant



Enclosures  
cc (Enclosures):

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NRC Resident Inspector, Browns Ferry Nuclear Plant

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