NRC Form 366

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3150-0104 EXPIRES: 8/21/88

1

4

뻷

	Destalation of the second				Mary and the second second			anaahan internationalise				
FACILITY NAME (1)									DOCKET NUMB	ER (2)	12.5.0 PAGE	(3)
Browns Ferry	Unit I			an 1 ma (constants			-		0 5 0	0 0	12 5 9 1 OF	012
Inoperable Ha	and Cont	rol Valv	ve Block	s Hig	gh Pre	ssure	C001	ant Injec	ction To	rus	Water Supply	
EVENT DATE (5)		ER NUMBER (5)	REF	PORT CATE	E (7)		OTHER	FACILITIES IN	VOLVE	D (8)	
MONTH DAY YEAR	YEAR	SEQUENTIAL	REVISION	MONTH	DAY	YEAR	episionistical, sindependent	FACILITY NA	MES	00	CHET NUMBER(S)	
·····		HUMBER	NOMBER							0	151010101 1	1
						. 1		86 - Ban Yang Kalendar, Kalendar Sanata (Kalendar) 196 - Ban Yang Kalendar, Kalendar Sanata (Kalendar)	an analysi an		aker arkun arken ander ander en de	
0 9 1 5 8	7 8 7	0 2 7	0 0	1 0	1 3	87				0	1510101011	1
OPERATING	THIS REPOR	T IS SUBMITTE	D PURSUANT T	O THE RI	EQUIREME	NTS OF 10	CFR \$: /0	Check one or more	of the following)	(11)		
MODE (B)	20.402(b)		20.405(0)			50.73(a)(2)(iv)			73.71(b)	
LEVEL 0. 0.	20.406	a)(1)(i)		50.38(c)	(1)		V	60.73(a)(2)(v)			73.71(c)	
	20.4061	#)(1)(0)		50.36(c)	(2)		2	50.73(a)(2)(vii)	41		DELOW and in Text, NRC	Form
	20.4060	a)(1)(iv)		50.73(s)	(2)(11)			50.73(a)(2)(viii)(a)		300M/	
	20.406	a)(1)(v)		50.73(a)	(2)(iii)			50.73(a)(2)(x)				
aldian na konon mining ana apak, aga apagana an				CENSEE	CONTACT	FOR THIS	LER (12)		and and community of provide		en an	
NAME						and the second				TEL	EPHONE NUMBER	
									AREA CO	DE		0.0
Stephen B. Jo	ones, En	gineer,	Plant O	perat	ions	Revie	w Sta	fi	12 1 01	5 7	12191-13171	8 8
		COMPLETE	ONE LINE FOR	EACH CO	DMPONENT	CALURE	DESCRIBE	D IN THIS REPOR	нт (13) Т			
CAUSE SYSTEM COM	PONENT	MANUFAC- TURER	REPORTABLE TO NPRDS		******	CAUSE	SYSTEM	COMPONENT	MANUFAC) P	TO NPROS	****6#****
K 7 3 F	I C V A	15 0 7	Y									
			L							1	I	
	od foga oda na versen a debe ka na sto	SUPPLEME	NTAL REPORT	EXPECTE	D (14)	*****			EXPE	CTED	MONTH DAY	YEAR
YES (If yes, complete	EXPECTED SUB	MISSION DATE	,	-	NO				DAT	E (15)	014 310	81.8
ABSTRACT (Limit to 1400	speces, i.e., eppro	ximately fitteen	single-space type	written lin	es) (16)			ar olde voor ander het van die een aander bekende de				
On Septem unit 1 it pressure separated Control E cutting t cannot be internals inspectio required	aber 15, was dis coolant from th quipment he valve determine will be on result on simil	1987, a scovered injecti he valve t, Inc, e out of ined. W e inspec ts will lar valv	t 1000 that a on suct disc a hand co the li hen the ted to be used es.	hours 16-i ion 1 nd co ntrol ne, t valv deter to d	, whi nch h ine f uld n valv he ex e is mine eterm	le pe and c rom t ot be e can act c remov the f ine i	rform ontro he to open not b ause ed fr ailur f cor	ing layup l valve i rus had t ed. Sinc e dissass of the st om the li e mechani rective a	o mainte in the h the valv te the A sembeled tem fail ne, the sm. Th action i	nanc igh e st ssoc wit ure e s	e on em iated hout	
87 PDI 5	1020035 ADDC	60 8710 64 0500	13 0259 PDR								IEZZ V.	

. .

W. H. CONSALS

T Cart .

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104 EXPIRES: 8/31/88

Form 366/

FACILITY NAME (1)	DOCKET NUMBER (2)						LER NUNSER (6)							PAGE (3)					
								YE	AR		SEQUE	NTIAL		NUMBER					1
Browns Ferry Unit 1	0	5	0	0	0	2	5 9	8	7		0 2	7		010	0	2	OFD	12	23
TEXT (If more space is required, use additional NRC Form 386A's) (17)						CY CLEARINGER						APC La mote pa		determinently second	B. Source of the local		Constantine of the second		7

Description of Event

At the time of the event all three units were defueled. This condition only affected unit 1.

On September 15, 1987, layup procedures were being performed on the motor operated valve (MOV) in the torus supply piping to the high pressure coolant. injection (HPCI) (EIIS identifier BJ). Because of difficulty isolating the MOV from the torus with a hand control valve (HCV) positioned between the MOV and the torus, a boroscope was used to inspect the HCV internals. The HCV was observed to be fully closed. Since the torus ring header had been isclated from the torus, maintenance requested operations to open the valve while they observed the valve internals. At 1000 hours, the operator opened the valve but maintenance did not observe any disc motion. This indicated that the valve stem had been separated from the valve disc. The shift engineer was immediately notified. The HCV is a 16-inch butterfly valve manuactured by Associated Control Equipment, Inc.

Corrective Action

The design of the valve does not permit disassembly. Until the valve internals can be inspected, the exact cause of the condition cannot be determined.

A design change has been initiated to replace the HCV. When the valve is removed, an inspection of the internals will be performed to determine the cause of the failure. The inspection results will then be used to determine if similar valves on units 2 and 3 will be replaced. If the inspection results do not warrant replacement or physical inspection of similar valves, the disc of similar valves will be confirmed to be in the proper position prior to the respective unit startup.

Analysis of Event

The condition did not affect the safety of the plant in its current condition. Since the valve cannot be inspected, it cannot be determined when the valve stem separated from the valve disc. The HPCI pump normally takes suction from the condensate storage tanks but will automatically switch to the torus if the condensate storage tank level is low or if the water level in the torus is high. If an event requiring the torus to supply HPCI had occurred during previous plant operation, the system would not have performed. This flow path is not routinely tested. This condition, loss of HPCI, is addressed in the plant operating procedures, and alone would not have prevented a safe shutdown.

Previous Events - None

Commitments	- 1.	Determine cause of valve failure	
and a family of the second		2.	Replace or repair unit 1 valve

Verify similar valves on all units are positioned as 3. required.

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

OCT 1 5 1987

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

Deat Sir:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 - DOCKET NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - REPORTABLE OCCURRENCE REPORT EFRO-50-259/87027

The enclosed report details a condition that blocks the unit 1 high pressure coolant injection system torus water supply. This report is submitted in accordance with 10 CFR 50.73 (a)(2)(vii).

Very truly yours,

TENNESSEE VALLEY MUTHORITY

Walker Plant Manager

Browns Ferry Nuclear Plant

Enclosures cc (Enclosures): Regional Administration U.S. Nuclear Regulatory Commission Office of Inspection and Enforcement Rogion II 101 Marietta Street, Suite 2900 Atlanta, Georgia 30303

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

NRC Resident Inspector, Browns Ferry Nuclear Plant

1981 OCT 20 A 9

w

USNRC-I