NRC Form 366 (9-83)			LIC	ENSEE EVEN	T RE	PORT	(LER)	U.S. NU A	CLEAR REGULAT	ORY COMMISSION 0 3150-0104			
FACILITY NAME	(1)						10	OCKET NUMBER	(2)	PAGE (8			
McGuire Nuclear Station, Unit 2						0   5   0   0	0 3 7 1	0 1 OF 013					
R	eactor Tr	in Breaker	on Tra	in B was O	pened	Duri	ng Breake	r Time R	esponse '	festing			
EVENT DAT	EVENT DATE (6) LER NUMBER (6) REPORT DATE (7) OTHER						OTHER	ACILITIES INVOI	VED (8)	0			
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MODE (9)	1 21	0.402(b)		20,406(c)		X	80.73(a)(2)(iv)		73.71(b)				
LEVEL (10)	1819	0.406(a)(1)(ii)		50.36(e)(1) 50.73(a)(2)(v) 50.36(e)(2) 50.73(a)(2)(v)			50.73(a)(2)(vii)	- 1 de 1	Specify in Abstract				
	2	0.406(a)(1)(iii)		50.73(e)(2)(i)			50.73(e)(2)(viii)(A	U III	below and 366A)	in Text, NRC Form			
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	3	0.406(a)(1)(v)		S0.73(a)(2)(iii)	OR THIS	LER (12)	50.73(a)(2)(x)						
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Phillip B. Nardoci, Licensing Engineer						AREA CODE							
		COMPLETE	ONE LINE FOR	EACH COMPONENT	FAILURE	DESCRIBE	D IN THIS REPOR	T (13)	3/13/-	1/14/3/2			
CAUSE SYSTEM	COMPONENT	MANUFAC- TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MONUFAC	REPORTABLE	•			
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NRC Form 568 (9-83) LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION APPROVED OMB NO. 3150-0104

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FACILITY NAME (1)	DOCKET NUMBER (2)		LER NUMBER (6)						PAGE (3)		
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McGuire Nuclear Station, Unit 2	1										
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A Unit 2 reactor trip was initiated on February 2, 1984 at illl during performance of the "Solid State Protection System (SSPS)[EIIS:JC] Periodic Test Above Reactor Coolant System [EIIS:AB] Pressure of 1955 PSI." The trip occurred when an Instrument and Electrical [IAE] Specialist, who was preparing to place the Train B bypass breaker [EIIS:BRK] in the "TEST" position, mistakenly opened the compartment for the Train B reactor trip breaker and accidently pushed the red TRIP pushbutton. Unit 2 was in Mode 1 at 89% when this incident occurred.

The reactor trip switchgear consists of two reactor trip breakers, RTA for Train A and RTB for Train B, and two bypass breakers, BYA for Train A and BYB for Train B. The reactor trip breakers are connected in series with the motor-generator sets so that opening either trip breaker interrupts power to the rod drive mechanisms, permitting the rods to drop into the core. SSPS Train A controls RTA and Train B controls RTB. The bypass breakers are used during testing of the reactor trip breakers. The bypass breaker, BYA for reactor trip breaker RTA, is controlled by Train B, while BYB for reactor trip breaker RTB is controlled by Train A.

The "Solid State Protection System Periodic Test Above Reactor Coolant System Pressure of 1955 PSI" is performed monthly to functionally test the SSPS. Section 10.6 of this procedure tests the response time of the reactor trip breakers. Initially both RTA and RTB are closed, and BYA and BYB are open. When RTA is tested, BYA is placed in "CONNECT" and closed and BYB is placed in "TEST". (Continuity is maintained during the test with BYA closed and RTB closed). A test signal then trips open RTA, which is timed, and BYB, which is verified to open.

Restoration is accomplished by closing RTA, racking out BYB (which is tripped) to "DISCON-NECT", and then disconnee ing BYA. In order to disconnect BYA, the TRIP pushbutton must be depressed to allow access to the racking mechanism. The IAE Specialist was preparing to perform a step of the procedure which requires placing BYB in the "TEST" position. He mistakenly opened the compartment for the Train B reactor trip breaker. The Specialist was talking through parts of the procedure for a Technical Training Center (TTC) representative and intended only to instruct him how to place the bypass breaker (BYB) in and out of "TEST" position. As no action was intended at this time, independent verification had not yet been performed. As the IAE Specialist touched the red TRIP pushbutton (presumably while describing the steps necessary to restore the bypass breaker to "DISCONNECT" after the test), he was unaware that he was in the wrong breaker compartment. In reality, he depressed the TRIP pushbutton for reactor trip breaker for Train B, causing the reactor to trip.

After the unit was tripped due to inadvertent opening of the Train B reactor trip breaker, the unit was stabilized and fast recovery was initiated. The unit experienced no unexpected transient behavior.

The reactor tripped when the Train B trip breaker was inadvertently opened, followed by the turbine trip. Reactivity was properly controlled by the reactor trip. Pressurizer pressure dropped to a minimum of ~2030 psig and then recovered to its expected post-trip value of 2235 psig. The pressurizer power operated relief valves and code safety valves [EIIS:V] were not challenged. Reactor coolant average temperature stabilized at 555°F, near its expected no-load value of 557°F. Pressurizer level responded properly, control-

NHC Form 368A

NRC Form 366A (9-83)	E EVENT REPO	RT (LER) TEXT CONTIN	UATIO	N		U.S.	APPI	EAR REGULATORY COMMISSION ROVED OMB NO. 3150-0104 (RES. 8/31/85						
FACILITY NAME (1)		DOCKET NUMBER (2)	LER NUMBER (5)						PAGE (3)					
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Steam generator pressure peaked at  $\circ$ 1110 psig. The main steam safety values were not challenged. Steam generator level was properly controlled. Main feedwater was isolated shortly after the trip, as expected, on reactor trip with coincident low reactor coolant average temperature. Auxiliary feedwater initiated on low-low steam generator level and was used to restore level.

Engineered Safety Features systems were not demanded.

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

The health and safety of the public were not affected by this event.

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## DUKE POWER COMPANY P.O. BOX 33189 CHARLOTTE, N.C. 28242

HAL B. TUCKER VICE PRESIDENT SUCLEAR PRODUCTION

March 5, 1984

TELEPHONE (704) 373-4531

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

Subject: McGuire Nuclear Station, Unit 2 Docket No. 50-370 LER 370/84-05

Gentlemen:

Pursuant to 10 CFR 50.73 Sections (a)(1) and (d), attached is Licensee Event Report 370/84-05 concerning the Reactor Trip Breaker on Train B being opened inadvertently during Breaker Time Responce Testing which is submitted in accordance with §50.73(a)(2)(iv). Initial Lotification of this event was made (pursuant to §50.72 Section (b)(2)(ii)) with the NRC Operations Center via the ENS on February 2, 1984. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

Hal B. Tucker

PBN:glb

Attachment

cc: Mr. James P. O'Reilly
Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Records Center Institute of Nuclear Power Operations 1100 Circle 75 Parkway, Suite 1500 Atlanta, Georgia 30339 Mr. W. T. Orders NRC Resident Inspector McGuire Nuclear Station

