

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) <b>Turkey Point Unit 3</b>										DOCKET NUMBER (2) <b>0 5 0 0 0 2 5 0 1</b>										PAGE (3) <b>1 OF 0 2</b>	
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TITLE (4)  
**Reactor Trip Breakers**

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)															
									<b>Turkey Point Unit 4</b>						<b>0 5 0 0 0 2 5 1</b>															
<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>4</b>	<b>N/A</b>						<b>0 5 0 0 0</b>					

OPERATING MODE (9) <b>N</b>		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)																	
POWER LEVEL (10) <b>1 0 0</b>		20.402(b)				20.405(e)				50.73(a)(2)(iv)				73.71(b)					
		20.405(a)(1)(i)				50.36(e)(1)				50.73(a)(2)(v)				73.71(c)					
		20.405(a)(1)(ii)				50.36(e)(2)				50.73(a)(2)(vi)				<input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 356A)					
		20.405(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(vii)(A)				<b>Voluntary</b>					
		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)(ix)									

LICENSEE CONTACT FOR THIS LER (12)										TELEPHONE NUMBER									
NAME <b>Randall D. Hart, Licensing Engineer</b>										AREA CODE <b>3 0 5 2 4 5 - 2 9 1 0</b>									

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM
<b>B</b>	<b>J</b>	<b>C B K R</b>	<b>W I 2 0</b>	<b>Y</b>							

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 October 2, 1984, with Unit 4 at cold shutdown with refueling shutdown boron concentrations, and Unit 3 at 100% power, the following conditions were found during routine surveillance and testing of the Westinghouse DB-50 reactor and bypass trip breakers on Unit 4: 1) undervoltage trip attachment (UVTA) coil tape damaged, 2) cracked insulating (operating) link, 3) manual closing mechanism bracket (cracked braze), 4) manual closing mechanism, failed bearing.

Immediate corrective action included inspection and functional testing of the Unit 3 reactor trip/bypass trip breakers. All the trip breakers successfully completed functional tests. The inspection of the breakers revealed the following conditions: 1) manual closing bracket (cracked braze), 2) manual closing mechanism, failed bearing. Westinghouse was contacted to evaluate the impact on safety of the cracked braze joints on the manual closing mechanism bracket and the failed bearing in the manual closing mechanism. The Westinghouse evaluation stated the cracked braze joint or bearing failure would not impact the electrical closing and opening of the breaker functions. The safety function of the breakers would not be compromised.

Long term corrective action included replacement of the failed bearings prior to the start-up of Unit 4 and Westinghouse is evaluating the failure mode of the bearings and is providing a repair procedure for the cracked braze joints. The health and safety of the public were not affected. This LER is being submitted as a voluntary report because of the safety significance implications of the reactor trip breakers and the generic nature of the failures. Similar occurrences: None.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104  
EXPIRES: 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Turkey Point Unit 3	05000250	84	027	00	02	OF	02

TEXT (If more space is required, use additional NRC Form 365A's) (17)

On October 2, 1984, with Unit 4 at cold shutdown with refueling shutdown boron concentrations and Unit 3 at 100% power, the following conditions were found during routine surveillance of the Unit 4 reactor trip and reactor trip bypass breakers:

- 1 Undervoltage trip attachment (UVTA) coil tape damaged,
- 1 cracked insulating (operating) link,
- 4 cracks at the brazed connection for the support brace in the mechanism assembly,
- 1 failed bearing in the manual closing mechanism

Unit 3 reactor trip and reactor trip bypass breakers were also functionally tested and inspected. The following results were found:

- 1 crack at the brazed connection for the support brace in the mechanism assembly.
- 1 failed bearing in the manual closing mechanism.

Reactor trip breaker functional tests were performed on all the reactor and bypass trip breakers and all breakers passed 10 cycle functional tests.

Since all the breakers passed the functional tests, the health and safety of the public was not affected and all breakers were capable of performing their intended function. Westinghouse was contacted for evaluations and recommendations on the above conditions. The following is a summary of the solutions to the referenced failures:

- UVTA Coil: The UVTA was replaced by a new coil at the 4B reactor trip breaker; this failure of the tape was considered minor, and since the rest of the breakers do not show a similar condition, it was determined to be an isolated case.
- Cracked Insulating (Operating) Link: This link failed during maintenance activities. The link was replaced by a new one. No future problems are expected in this area.
- Cracks at the Brazed Connection for the Support Brace in Mechanism Assembly: Westinghouse stated that the electrical closing and opening of the breaker functions will not be compromised. Westinghouse will forward a procedure for repairs, which will be reviewed by our Engineering Department. Necessary repairs, if any, will be performed expeditiously.
- Failed Bearing Closing Mechanism: All the referenced breakers were inspected for bearing failures; four bearings were replaced and the breakers tested. These bearings are used in the manual closing operation, and according to Westinghouse, they do not compromise the safety functions of the breaker.

Westinghouse will provide a report on the failed bearings. An entry will be made in the INPO Network to make other facilities aware of the potential problem. The other nuclear plants in Florida Power and Light's system will be made aware of the potential problem.

November 1, 1984  
L-84-310

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

Gentlemen:

Re: Reportable Event 84-27  
Turkey Point Unit 3  
Date of Event: October 2, 1984  
Reactor Trip Breakers

The attached Licensee Event Report is being submitted pursuant to the requirements of 10 CFR to provide notification of the subject event.

Very truly yours,

*for* *Chas. W. Williams, Jr.*  
J. W. Williams, Jr.  
Group Vice President  
Nuclear Energy

JWW/JEM/js

Attachment

cc: J. P. O'Reilly, Region II, USNRC  
Harold F. Reis, Esquire  
File 933.1  
PNS-LI-84-389-1

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