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SUBJECT: LER 88-033-00: on 881202, Tech Spec violation due to  
 inoperable CSIP caused by failure to perform ST.

W/8 ltr.

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 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: Application for permit renewal filed.

05000400

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## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Shearon Harris Nuclear Power Plant Unit 1										DOCKET NUMBER (2) 0   5   0   0   0   4   0   0				PAGE (3) 1   OF   0   4								
TITLE (4) Technical Specification Violation Due to Inoperable Charging Safety Injection Pump Caused by Failure to Perform Surveillance Testing.																						
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	2	0	2	8	8	8	8	0	3	3	0	0	0	1	0	3	8	9	0   5   0   0   0			
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																				
1		20.402(b)				20.405(c)				50.73(a)(2)(iv)				73.71(b)								
POWER LEVEL (10)		20.406(a)(1)(i)				50.36(c)(1)				50.73(a)(2)(v)				73.71(c)								
1   0   0		20.406(a)(1)(ii)				50.36(c)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)								
20.406(a)(1)(iii)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(A)														
20.406(a)(1)(iv)				50.73(a)(2)(iii)				50.73(a)(2)(viii)(B)														
20.406(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(x)														
LICENSEE CONTACT FOR THIS LER (12)																						
NAME Joseph R. Johnson Senior Specialist - Regulatory Compliance										TELEPHONE NUMBER AREA CODE 9   1   9   3   6   2   -   2   0   8   3												
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																						
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs												
SUPPLEMENTAL REPORT EXPECTED (14)												EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR						
YES (If yes, complete EXPECTED SUBMISSION DATE)												X NO										

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

ABSTRACT:

On November 25, 1988, at 0345, the 1B Charging Safety Injection Pump (CSIP) was declared inoperable to perform corrective maintenance. The 1C CSIP was placed in service at 0110 on November 26, 1988. On December 2, 1988, during a review of the plant status, the Shift Technical Advisor discovered that all the ESF response testing requirements may not have been completed on the 1C CSIP. An engineering evaluation was immediately performed to determine operability of the 1C CSIP. It was determined that 1C CSIP should not have been considered operable because certain required surveillance testing had not been completed. As a result, the surveillance requirements of Technical Specifications were not performed at the required interval. The pump was declared inoperable at 1430 on December 2, 1988.

The event occurred because the 1C CSIP was not adequately covered in ESF response surveillance test procedures. Personnel did not realize that all the 18 month surveillance requirements had not been met. The surveillance tests will be revised to ensure that all required testing of the 1C CSIP is performed.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1) Shearon Harris Nuclear Power Plant Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 0 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 8	0 3 3	0 0	0 2	OF	0 4

TEXT (If more space is required, use additional NRC Form 368A's) (17)

DESCRIPTION:

On November 25, 1988, the plant was operating in Mode 1, Power Operation, at 100% reactor power. At 0345, the 1B Charging Safety Injection Pump (CSIP) (E1IS:BQ:P) was declared inoperable. A 72 hour Limiting Condition for Operation (LCO) began in accordance with Technical Specification 3.5.2, Action "A". The 1B CSIP was removed from service to repair a leak on the equalizing line on the pump casing. When it appeared that the repair could not be completed within 72 hours, the decision was made to align the 1C CSIP to replace the 1B pump. The 1C CSIP was placed in service at 0110 on November 26, 1988. The 1C CSIP is a "swing" pump which may be manually connected to either the 1A-SA or 1B-SB electrical bus. The design of the plant prohibits the "swing" pump from being in service unless the pump it is replacing is out of service. This configuration provides redundant backup for both the 1A and 1B CSIP during maintenance and provides increased operational flexibility. The two systems which include "swing" pumps are Safety Injection and Component Cooling Water.

On December 2, 1988, during a review of the plant status, a Shift Technical Advisor discovered that all the applicable Technical Specification surveillance testing requirements may not have been completed on the 1C CSIP. An engineering evaluation was immediately performed to investigate the operability status of the 1C CSIP. The evaluation determined that two surveillance requirements were not met: A test to ensure that the 1C CSIP breaker would trip upon a loss of off-site power (T.S. 4.8.1.1.2.f), and a test to measure the response time from the breaker closure signal until the pump reaches full operating pressure (T.S. 4.3.2.2).

The pump was declared inoperable at 1430 on December 2, 1988. A 72 hour Limiting Condition for Operation (LCO) began in accordance with Technical Specification 3.5.2, Action "A". The 1B CSIP repair was subsequently completed and the 1B CSIP was returned to service at 1600 on December 3, 1988.

CAUSE:

The preoperational testing performed in 1986 demonstrated, through a series of overlapping tests, that the "swing" pumps performed satisfactorily when aligned to either safety bus. Since the "swing" pumps are normally inoperable, they were not included in the methodology for establishing the 18 month surveillance testing of the 1A and 1B pumps. The 18 month surveillance tests do not include specific acceptance criteria for the actuation logic to the "swing" components. With no specific acceptance criteria, this discrepancy in the operability of the 1C CSIP was not flagged for tracking. As a result, administrative controls did not identify a need to perform special testing on the actuation logic prior to declaring the pump operable.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT (If more space is required, use additional NRC Form 368A's) (17)

CAUSE: (continued)

The pump was placed in service in accordance with operating procedures and tested for operability in accordance with Operations Surveillance Test (OST) 1007. This test demonstrated the proper response to an actuation by the control switch and pump performance in accordance with acceptance criteria of the Inservice Testing Program.

ANALYSIS OF EVENT:

This event is being reported as a violation of Technical Specifications in accordance with 10CFR73.(a)(2)(i)(B).

Although the 1C CSIP was inoperable due to failure to perform certain Technical Specifications Surveillance requirements, the pump did operate satisfactorily in its normal charging pump mode, and could reasonably have been expected to perform its safety function if an ESF actuation had occurred. A special test to verify the 1C CSIP response time was successfully completed on December 15, 1988, and a test to verify proper load shedding was completed on December 21, 1988. The 1A CSIP was operable throughout this period. For these reasons, the event had no significant safety consequences or implications.

Plant records were reviewed to identify when the "swing" pumps were previously operable in Modes 1-4, and to determine if the 18 month surveillance testing requirements were satisfied in those circumstances. The 1C CSIP was placed in service at 2138 on February 21, 1987, and remained in service until 1724 on May 20, 1987. The 1C Component Cooling Water Pump was placed in service at 1345 on February 28, 1987, and remained in service until 1344 on March 2, 1987. In these cases, the surveillance requirements were satisfactorily met by the preoperational tests, and the performance dates of the tests were such that the required surveillance test intervals were not exceeded.

There have been no previous similar events.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Shearon Harris Nuclear Power Plant Unit 1	DOCKET NUMBER (2)  0   5   0   0   0   4   0   0	LER NUMBER (6)			PAGE (3)		
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		8   8	-   0   3   3	-   0   0	0   4	OF	0   4

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

CORRECTIVE ACTION:

1. A special test to verify the 1C CSIP response time was successfully completed on December 15, 1988, and a test to verify proper load shedding was successfully completed on December 21, 1988. These test results, along with other applicable tests, document satisfactory completion of the applicable surveillance requirements.
2. Administrative controls are currently tracking the inoperability of the 1C CSIP until completion and approval of necessary surveillance tests.
3. Applicable surveillance test procedures will be revised to ensure that all required testing of the 1C CSIP will be performed.
4. Similar actions will be taken to preclude a similar event involving the 1C Component Cooling Water Pump.



Carolina Power & Light Company

HARRIS NUCLEAR PROJECT  
P.O. Box 165  
New Hill, NC 27562

JAN 03 1989

File Number: SHF/10-13510C  
Letter Number: HO-880250 (0)

U.S. Nuclear Regulatory Commission  
ATTN: NRC Document Control Desk  
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SHEARON HARRIS NUCLEAR POWER PLANT UNIT 1  
DOCKET NO. 50-400  
LICENSE NO. NPF-63  
LICENSEE EVENT REPORT 88-033-00

Gentlemen:

In accordance with Title 10 to the Code of Federal Regulations, the enclosed Licensee Event Report is submitted. This report fulfills the requirement for a written report within thirty (30) days of a reportable occurrence and is in accordance with the format set forth in NUREG-1022, September 1983.

Very truly yours,

R. A. Watson  
Vice President  
Harris Nuclear Project

JRJ:dj

Enclosure

cc: Mr. W. H. Bradford (NRC - SHNPP)  
Mr. B. Buckley (NRR)  
Mr. M. L. Ernst (NRC - RII)