Southern Nuclear Operating Company
Post Office Box 1295
Birmingham, Alabama 35201
Telephone 205 868 5086

J. D. Woodard
Vice President
Farley Project

Southern Nuclear Operating Company
the southern electric system

February 18, 1992

10 CFR 50.73

Docket No. 50-364

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Joseph M. Farley Nuclear Plant - Unit 2
Licensee Event Report No. LER 92-001-00

Gentlemen:

Joseph M. Farley Nuclear Plant, Unit 2, Licensee Event Report No. LER 92-001-00 is being submitted in accordance with 10 CFR 50.73. If you have any questions, please advise.

Respectfully submitted,

J. D. Woodard

JDW/BHW:map 1804

Enclosure

cc: Mr. S. D. Ebneter
Mr. G. F. Maxwell

IE22
1/1

NRC Form 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Joseph M. Farley Nuclear Plant - Unit 2	0 5 0 0 0 3 6 4	1 OF 3

TITLE (4)
Manual Reactor Trip Due To A Service Water Leak On An Exciter Cooling Water Line

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQ NUM	REV	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
										0 5 0 0 0
0 1	2 2	9 2	9 2	0 0 1	0 0	0 2	1 8	9 2		0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (11)							
POWER LEVEL	6 5		20.402(b)		20.405(c)	X	50.73(a)(2)(iv)		73.71(b)
			20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)
			20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER (Specify in Abstract below)
			20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		
			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)(x)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER	
	AREA CODE	
D. N. Morey, General Manager - Nuclear Plant	205	899-5156

COMPLETE ONE LINE FOR EACH FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORT TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORT TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (16)

At 0731 on 1-22-92 a manual reactor trip was initiated due to a service water (SW) leak on a main generator exciter cooling water line. Because of the leak, the unit was being ramped down at a rate of 25MW/min and was at 65 percent power when the trip was initiated. The leak was attributed to a gasket that was damaged during installation when the exciter cooling water lines were reassembled as part of the Fall 1990 refueling outage.

This event was caused by improper gasket installation due to lack of detailed information on reassembly of Victaulic couplings in the exciter cooler inspection procedure. The procedure is in the process of being revised to include specific instructions to facilitate proper mating and assembly of Victaulic couplings.

All accessible gaskets in the north (upper and lower) exciter coolers were inspected and replaced and verified to be leak free. All gaskets in the north and south coolers will be replaced during the March 1992 Unit 2 outage. Also, during each 54 month exciter inspection, the associated gaskets will be replaced.

Plant and System Identification

Westinghouse - Pressurized Water Reactor
Energy Industry Identification System codes are identified in the text as [XX].

Summary of Event

At 0731 on 1-22-92 a manual reactor trip was initiated due to a service water (SW) leak on a main generator exciter cooling water line. Because of the leak, the unit was being ramped down at a rate of 25MW/min and was at 65 percent power when the trip was initiated. The leak was attributed to a gasket that was damaged during installation when the exciter cooling water lines were reassembled as part of the Fall 1990 refueling outage.

Description of Event

At approximately 0645 on 1-22-92, the on-call Operations Manager was informed of a problem with the main generator exciter [KB]. He proceeded to the exciter and noticed water coming from between the exciter housing and the floor. Also, water was dripping from a cover plate on the upper section of the housing cover. Looking through the inspection window on the exciter housing, water could be seen streaming down the inside of the enclosure housing.

The decision was made to begin reducing power, from full power, in preparation to remove the generator and exciter from service. At the same time discussions were initiated with Westinghouse. At approximately 0730, with the unit at 65 percent power and based on recommendations from Westinghouse, the decision was made to manually trip the reactor to divert possible damage to the generator and exciter. This was accomplished at 0731.

Following the reactor trip, the operators implemented FNP-2-EEP-0.0 ("Reactor Trip or Safety Injection") and FNP-2-ESP-0.1 ("Reactor Trip Response"), ensuring the unit was safely in Mode 3 (Hot Standby).

Thorough visual inspections and electrical tests were performed on the exciter. The results of these inspections and tests revealed no damage to the exciter by moisture intrusion.

Cause of Event

This event was caused by improper gasket installation due to lack of detailed information on reassembly of Victaulic couplings in the exciter cooler inspection procedure. The procedure is in the process of being revised to include specific instructions to facilitate proper mating and assembly of Victaulic couplings.

Reportability Analysis and Safety Assessment

This event is reportable because of the manual actuation of the reactor protection system. After the trip, the following safety systems operated as designed:

- main feedwater was isolated by automatic closure of the flow control valves and bypass valves,
- auxiliary feedwater pumps started automatically and provided flow to the steam generators,
- source range nuclear detectors energized automatically, and
- pressurizer heaters and spray valves operated automatically as required to maintain system pressure.

There was no effect on the health and safety of the public.

Corrective Action

The procedure, EXCMCHR1, "Reassembly of Exciter," is in the process of being revised to include specific instructions to facilitate proper mating and assembly of Victaulic couplings. The revision will be complete by 04-01-92 and is applicable to both Unit 1 and Unit 2.

All accessible gaskets in the north (upper and lower) exciter coolers were inspected and replaced and verified to be leak free. All gaskets in the north and south coolers, including those mentioned above, will be replaced during the March 1992 Unit 2 outage.

In addition, the Farley Nuclear Plant Modular Performance Program is being revised to require the exciter cooler service water coupling gaskets to be replaced during each 54 month exciter inspection. The revision will be completed by 05-01-92.

Additional Information

No similar LER's have been submitted by Farley Nuclear Plant.

This event would not have been more severe if it had occurred under different operating conditions.

The unit was returned to power operation at 2035 on 1-23-92.