J. Barnie Beasley, Jr., P.E.
Vice President

Southern Nuclear Operating Company, Inc.
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35201

Tel 205 992 7110
Fax 205 992 0341

SOUTHERN COMPANY
Energy to Serve Your World℠

February 3, 2003

NL-03-0286

Docket No.: 50-348

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Joseph M. Farley Nuclear Plant – Unit 1
Licensee Event Report 2002-004-00
Manual Reactor Trip on Loss of Both Steam Generator Feed Pumps

Ladies and Gentlemen:

Joseph M. Farley Nuclear Plant – Licensee Event Report (LER) No. 2002-004-00 is being submitted in accordance with 10 CFR 50.73(a)(2)(iv)(A).

There are no NRC commitments in this letter. If you have any questions, please advise.

Sincerely,

J. B. Beasley, Jr.

JBB/WAS/sdl

Enclosure:

cc: Southern Nuclear Operating Company
Mr. J. D. Woodard, Executive Vice President
Mr. D. E. Grissette, General Manager – Plant Farley
Document Services RTYPE: CFA04.054

U. S. Nuclear Regulatory Commission
Mr. L. A. Reyes, Regional Administrator
Mr. F. Rinaldi, NRR Project Manager – Farley
Mr. T. P. Johnson, Senior Resident Inspector – Farley

IE22

NRC FORM 366 (1-2001)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO 3150-0104 EXPIRES 6-30-2001

Estimated burden per response to comply with this mandatory information collection request 50 hours Reported lessons learned are incorporated into the licensing process and fed back to industry Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U S Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503 If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Joseph M. Farley Nuclear Plant - Unit 1	05000348	1 OF 4

TITLE (4) Manual Reactor Trip on Loss of Both Steam Generator Feed Pumps

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
12	10	2002	2002	– 004 –	00	02	03	2003		05000
									FACILITY NAME	DOCKET NUMBER

		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check all that apply) (11)			
OPERATING MODE (9)	1	20.2201(b)	20.2203(a)(3)(ii)	50 73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)
POWER LEVEL (10)	100	20.2201(d)	20 2203(a)(4)	50.73(a)(2)(iii)	50.73(a)(2)(x)
		20 2203(a)(1)	50 36(c)(1)(i)(A)	X 50 73(a)(2)(iv)(A)	73 71(a)(4)
		20.2203(a)(2)(i)	50 36(c)(1)(ii)(A)	50 73(a)(2)(v)(A)	73.71(a)(5)
		20 2203(a)(2)(ii)	50.36(c)(2)	50.73(a)(2)(v)(B)	OTHER Specify in Abstract below or in NRC Form 366A
		20 2203(a)(2)(iii)	50 46(a)(3)(ii)	50.73(a)(2)(v)(C)	
		20 2203(a)(2)(iv)	50 73(a)(2)(i)(A)	50 73(a)(2)(v)(D)	
		20.2203(a)(2)(v)	50.73(a)(2)(i)(B)	50 73(a)(2)(vii)	
		20 2203(a)(2)(vi)	50.73(a)(2)(i)(C)	50.73(a)(2)(viii)(A)	
		20 2203(a)(3)(i)	50 73(a)(2)(ii)(A)	50.73(a)(2)(viii)(B)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
D. E. Grissette, General Manager Nuclear Plant	334-899-5156

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

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 15 single-spaced typewritten lines) (16)

On December 10, 2002 at 0824, with the reactor at 100% power, Unit 1 was manually tripped due to loss of both Steam Generator Feed Pumps (SGFP's). Facilities personnel were removing a catch bag near the area of the 1A SGFP and the 120/208 Volt Miscellaneous Bus. An individual was applying force to break a tie-wrap which had been used to support the catch bag. When the tie-wrap broke, the individual momentarily lost his balance, reached out to steady himself, and inadvertently depressed a pushbutton on the local control panel for the 120/208 Volt Miscellaneous Bus. This resulted in deenergization of the Miscellaneous Bus and loss of control power to both SGFP's. The SGFP control valves closed resulting in loss of main feedwater to the Steam Generators. Operators manually tripped the reactor in accordance with Abnormal Operating Procedures. All safeguards equipment functioned as designed following the trip.

This event was caused by personnel error - a lack of awareness of the sensitivity of surrounding equipment and the consequences of inadvertent contact with such equipment. Contributing causes were failure to consider the consequences of actions prior to the event and failure to use the proper tool to safely remove the tie wrap. A protective barrier has been installed over the Unit 1 Miscellaneous Bus control panel pushbuttons to prevent inadvertent contact. Access to the Unit 2 panel has been barricaded until plant conditions permit barrier installation. The individuals directly and indirectly involved have been coached on specific human performance aspects of this event. A stand down meeting of facilities personnel was held to reinforce station expectations for human performance aspects of this event, including proper tool use, situational awareness of sensitive plant equipment, communications with Operations prior to performing activities near sensitive equipment, and prejob briefings.

FACILITY NAME (1)	DOCKET (2) NUMBER	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Joseph M. Farley Nuclear Plant - Unit 1	05000348	2002	- 004	- 00	2 OF 4

NARRATIVE *(If more space is required, use additional copies of NRC Form 366A)* **(17)**

Westinghouse – Pressurized Water Reactor
Energy Industry Identification Codes are identified in the text as [XX]

Description of Event

On December 10, 2002 at 0824, with the reactor at 100% power, Unit 1 was manually tripped due to loss of both Steam Generator Feed Pumps (SGFP's)[SJ]. On the previous day, December 9, facilities personnel had been removing catch bags from areas in which leaks were no longer present. The individual assigned routine housekeeping activities in the turbine building on December 10 remembered that not all catch bag removal work was complete. A few feet outside the SGFP barrier, and directly behind the local control panel for the 120/208 Volt Miscellaneous Bus, a catch bag required removal. The individual did not discuss this activity with his supervision nor with Operations prior to commencing the work. He did not have the proper tools for tie-wrap removal, and decided to apply force to break a tie-wrap which had been used to support the catch bag. He stood on a narrow raised step immediately to the side of the control panel, and reached behind it to pull the tie wrap apart. When the tie-wrap broke, the individual momentarily lost his balance, reached out to steady himself, and inadvertently struck the main feeder breaker trip pushbutton on the local control panel for the 120/208 Volt Miscellaneous Bus[EC] with his hand. This button was raised above the panel surface, but not equipped with a protective guard. Striking the button tripped the main feeder breaker causing deenergization of the Miscellaneous Bus.

The SGFP control cabinet has primary and backup power supplies fed from separate distribution panels, but both panels are powered from the same 120/208 Volt Miscellaneous Bus. Therefore, loss of the Miscellaneous Bus resulted in loss of control power to both SGFP's. Upon loss of control power, all SGFP control valves closed and main control room SGFP indication was also lost. Loss of all main feedwater to the steam generators followed.

Operators manually tripped the reactor in accordance with Abnormal Operating Procedures. All safeguards equipment functioned as designed following the trip.

In addition to the loss of the SGFPs, non safety related components which contain a thermal overload relay powered from the affected Miscellaneous Bus ceased operating or did not start as designed. When the Miscellaneous Bus was reenergized, the equipment was restarted with no further problems.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2) NUMBER	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Joseph M. Farley Nuclear Plant - Unit 1	05000348	2002	- 004	- 00	3 OF 4

NARRATIVE *(If more space is required, use additional copies of NRC Form 366A)* **(17)**

Cause of Event

This event was caused by personnel error – a lack of awareness of the sensitivity of surrounding equipment and the consequences of inadvertent contact with such equipment and lack of situational awareness that the pushbuttons on breaker control panels can affect operations.

Contributing causes were failure to consider the consequences of actions prior to the event and failure to use the proper tool to safely remove the tie wrap.

Safety Assessment

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

This event does not represent a Safety System Functional Failure.

Corrective Action

A protective barrier has been installed over the Unit 1 Miscellaneous Bus control panel pushbuttons to prevent inadvertent contact. Access to the corresponding Unit 2 panel has been barricaded until plant conditions allow installation of a protective barrier over the pushbuttons.

The individuals directly and indirectly involved have been coached on the specifics of this event including station expectations for situational awareness, use of proper tools, communications with Operations, and prejob briefings.

A stand down meeting of facilities personnel was held to reinforce station expectations concerning human performance related to this event, including tool use, situational awareness, communications with Operations personnel prior to the start of activities near sensitive equipment, and prejob briefings.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2) NUMBER	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Joseph M. Farley Nuclear Plant - Unit 1	05000348	2002	- 004 -	00	4 OF 4

NARRATIVE *(If more space is required, use additional copies of NRC Form 366A)* **(17)**

Additional Information

A walkdown of the turbine building to identify other non recessed pushbuttons that could directly lead to a plant trip was conducted. None were identified.

The following LERs have been submitted in the past two years on reactor trips involving personnel error:

LER 2002-001-00 Unit 1 Reactor Trip Due to Inadvertent Electrical Contact During Recorder Maintenance

LER 2001-001-00 Unit 2 Reactor Trip Due to Main Generator Neutral Connecting Bolt Failure

LER 2001-002-00 Unit 2 Reactor Trip Due to Turbine Trip from Turbine Latch Mechanism Problem