Dave Morey
Vice President
Farley Project

Southern Nuclear
Operating Company, Inc.
Post Office Box 1295
Birmingham, Alabama 35201

Tel 205.992.5131

SOUTHERN COMPANY
Energy to Serve Your World℠

March 29, 2000

Docket No.: 50-348 **NEL-00-0092**

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

Joseph M. Farley Nuclear Plant
Unit 1 Licensee Event Report 2000-002-00
Unplanned Auxiliary Feedwater
Actuation Upon Shutdown Of Both Steam Generator Feed Pumps

Ladies and Gentlemen:

Joseph M. Farley Nuclear Plant – Unit 1 Licensee Event Report (LER) No. 2000-002-00 is being submitted in accordance with 50.73(a)(2)(iv). There are no NRC commitments in the LER.

If you have any questions, please advise.

Respectfully submitted,

DM Morey

Dave Morey

EWC/maf unplauxfdw.doc
Attachment

IE22

cc: Southern Nuclear Operating Company
Mr. L. M. Stinson, General Manager - Farley

U. S. Nuclear Regulatory Commission, Washington, D. C.
Mr. L. M. Padovan, Licensing Project Manager – Farley

U. S. Nuclear Regulatory Commission, Region II
Mr. L. A. Reyes, Regional Administrator
Mr. T. P. Johnson, Senior Resident Inspector – Farley

NRC FORM 366 (6-1998)

U.S.NUCLEAR REGULATORY COMMISSION

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	0 5 0 0 0 3 4 8	1 OF 4

TITLE (4)

Unplanned Auxiliary Feedwater Actuation Upon Shutdown of Both Steam Generator Feed Pumps

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 NAME	DOCKET NUMBER
										0 5 0 0 0
0 3	0 4	2 0 0 0	2 0 0 0	0 0 2	0 0	03	29	2000	FACILITY NAME	0 5 0 0 0

OPERATING MODE (9)	2
POWER LEVEL (10)	0 0 3

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

	20.2201(b)		20.2203(a)(2)(v)		50.73(a)(2)(viii)
	20.2203(a)(1)		20.2203(a)(3)(i)		50.73(a)(2)(x)
	20.2203(a)(2)(i)		20.2033(a)(3)(ii)		73.71
	20.2203(a)(2)(ii)		20.2033(a)(4)	X	50.73(a)(2)(iv)
	20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)
	20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)

OTHER

Specify in Abstract below or in NRC Form 366A

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (include area code)
L. M. Stinson, General Manager Nuclear Plant	3 3 4 - 8 9 9 - 5 1 5 6

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	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-space typewritten lines) (16)

On March 4, 2000 at 0018, during the shutdown of FNP Unit 1 for refueling, an unplanned emergency safeguards actuation of the Auxiliary Feedwater System (AFW) occurred upon the planned shutdown of both Steam Generator Feedwater Pumps (SGFP). This automatic signal caused the 1B Motor Driven Auxiliary Feedwater (MDAFW) pump to start, AFW flow control valves to open fully and Steam Generator Blowdown to isolate. The 1A MDAFW pump was already running.

The cause of this event was personnel error in that a step in the unit operating procedure to block the autostart of the AFW system on trip of both SGFPs was missed. When the turbine was secured, a leaking Main Feed Regulating Valve (MFRV) caused a rapid rise in steam generator (SG) water level. In an effort to stop the rapid rise in SG water level, the crew acted expeditiously to secure the second SGFP. During these efforts, the step to block the AFW autostart was missed. Additionally, the operating crew was aware that the MFRV was suspected of leaking but failed to proactively question and address the problem.

Licensed personnel and Engineering Support personnel have been provided information on the proper use of and the need to adhere to "continuous use" procedures and to question and investigate abnormal indications. Troubleshooting and repair on the 1B MFRV has been completed. The SGFP operating procedure has also been changed to include a "Caution" statement regarding trip of the second SGFP.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Joseph M. Farley Nuclear Plant - Unit 1	0 5 0 0 0 3 4 8	2 0 0 0	– 0 0 2	– 0 0	2 OF 4

TEXT (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 March 4, 2000 at 0018, during the shutdown of FNP Unit 1 for refueling with the unit at approximately 3% reactor power, an unplanned emergency safeguards actuation of the Auxiliary Feedwater System (AFW) [BA] occurred due to the AFW autostart function not being defeated when the second SGFP was secured. The AFW actuation occurs automatically when both Steam Generator Feed Pumps (SGFP) [SJ] are secured and should have been manually blocked prior to the shutdown of both SGFPs. This actuation caused the 1B Motor Driven Auxiliary Feedwater (MDAFW) pump to start, AFW flow control valves to open fully and Steam Generator Blowdown [WI] to isolate. The 1A MDAFW pump was already running.

During the operating cycle the demand position of the 1B Main Feed Regulating Valve (MFRV) had been observed to be less than that of the other MFRVs. This difference was inappropriately considered satisfactory as documented in an engineering test procedure conducted as a part of power uprate testing at the onset of the operating cycle. Consequently, the reason for the difference in MFRV demand was not aggressively pursued. Additionally, during the transfer from MFRVs to the bypass valves, an operator noticed that the 1B bypass valve position demand indication was significantly below the other two bypass valves, for approximately the same flow. This difference in demand of the MFRV and bypass valves and the need for contingent action was recognized by the operator but not communicated to the crew. When the turbine [TA] was tripped the reduction in steam demand caused an unexpected level rise in the 1B Steam Generator (SG) [AB]. In order to control this level rise, the operating SGFP was expeditiously removed from service. The unit operating procedure contains a step for defeat of the MDAFW pump start before securing both SGFP's. During the expeditious shutdown of the 1B SGFP, this procedure step was missed.

Post event investigation found the 1B MFRV ~ 9% open with demanded position full closed. When air was failed to the valve, it fully closed. Since the Feedwater Isolation signal fails the air supply to the valve, overriding the valve controller, the Feedwater Isolation function of this valve was unaffected by this event.

Cause of Event

The cause of this event was personnel error in that a step in the unit operating procedure to block the autostart of the AFW system on trip of both SGFPs was missed. When the main turbine was secured, a leaking MFRV caused a rapid rise in steam generator (SG) water level. In an effort to stop the rapid rise in SG water level, the crew acted expeditiously to secure the second SGFP. During these efforts, the step to block the AFW autostart was missed. Additionally, the operating crew was aware of the suspect MFRV but failed to proactively question and address the problem.

Safety Assessment

All Engineered Safety Feature equipment functioned as designed during this event, therefore no risk to the public was created.

The health and safety of the public were unaffected by this event.

This event does not represent a Safety System Functional Failure.

Corrective Action

Licensed personnel and Engineering Support personnel have been provided information on the proper use of and the need to adhere to "continuous use" procedures and to question and investigate abnormal indications.

Troubleshooting and repair of the 1B MFRV has been completed.

The SGFP operating procedure has been changed to include a "Caution" statement regarding trip of the second SGFP.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Joseph M. Farley Nuclear Plant - Unit 1	0 5 0 0 0 3 4 8	2 0 0 0	– 0 0 2	– 0 0	4 OF 4

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

Additional Information

A four-hour non-emergency notification was made per 10 CFR 50.72 (b) (2) (ii) at 0140 on March 4, 2000.

The following LERs have been submitted in the past 2 years on personnel error for either failure to follow procedure or lack of questioning attitude:

LER 1999-001-00 Unit 1, 4160 Volt Breaker In a Non Seismically Racked-Out Condition

LER 1998-005-00 Unit 2, Technical Specification 3.0.4 Not Met During Mode Change Due to Turbine Driven Auxiliary Feedwater Pump Being Inoperable

LER 1998-004-00 Unit 2, Failure to Perform Penetration Room Filtration system Surveillance Requirements