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SOUTHERN COMPANY
Energy to Serve Your World℠

September 8, 2000

Docket No.: 50-364

NEL-00-0224

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

Joseph M. Farley Nuclear Plant - Unit 2
Licensee Event Report 2000-003-00
Pressurizer Pressure Protection Channel
Not In Compliance with Technical Specifications

Ladies and Gentlemen:

Joseph M. Farley Nuclear Plant – Unit 2 Licensee Event Report (LER) No. 2000-003-00 is being submitted in accordance with 50.73(a)(2)(i).

This letter contains no NRC commitments. If there are any questions, please advise.

Respectfully submitted,

DM Morey

Dave Morey

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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 2	0 5 0 0 0 3 6 4	1 OF 4

TITLE (4)

Pressurizer Pressure Protection Channel Not in Compliance with Technical Specifications

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 8	1 3	2 0 0 0	2 0 0 0	0 0 3	0 0	0 9	0 8	2 0 0 0	FACILITY NAME	0 5 0 0 0

OPERATING MODE (9)	1
POWER LEVEL (10)	1 0 0

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

	20.2201(b)		20.2203(a)(2)(v)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)
	20.2203(a)(1)		20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)
	20.2203(a)(2)(i)		20.2033(a)(3)(ii)		50.73(a)(2)(iii)		73.71
	20.2203(a)(2)(ii)		20.2033(a)(4)		50.73(a)(2)(iv)		OTHER
	20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		*Specify in Abstract below*
	20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)		*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 August 13, 2000, at 1000, it was determined that Unit 2 had been operated contrary to Technical Specification (TS) Table 3.3.1-1 item 8.a. The pressurizer low pressure reactor trip setpoint on one channel was found to have been incorrectly set. The surveillance procedure requires one of two calibration thumbwheels on the applicable circuit card to be repositioned for performance of the surveillance. It was concluded that another thumbwheel was inadvertently returned to the normal operating position for the first thumbwheel at the completion of the previous surveillance test on June 24, 2000. This resulted in the low pressurizer reactor trip setpoint being approximately 1757 psig with a 1 second time constant instead of a required 1865 psig with a 10 second time constant. Other functions based on pressurizer pressure from this channel, and the other two pressurizer pressure channels, were unaffected by this condition.

Root cause investigation concluded the cause of this event was personnel error in that the technician, who performed the surveillance on June 24, 2000, repositioned the incorrect thumbwheel. Also, a second technician incorrectly performed verification and therefore failed to identify the error. The affected card was returned to the correct alignment, and the channel tested satisfactorily. Technicians involved have been coached. Maintenance personnel will be retrained and expectations reinforced on self checking and independent verification requirements by October 31, 2000.

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

Description of Event

On August 13, 2000, at 1000, it was determined that Unit 2 had been operated contrary to Technical Specification (TS) 3.3.1, specifically Table 3.3.1-1 item 8.a and action statement M, in that the pressurizer low pressure reactor trip setpoint on one channel [JE] was found to have been incorrectly set. The as found setpoint of this channel was calculated to be approximately 1757 psig, instead of the required nominal setpoint of 1865 psig (1862 allowable value) per TS Table 3.3-1 item 8.a. The channel was not placed in the trip condition, contrary to TS 3.3.1 action statement M. This condition existed from June 24, 2000, to August 13, 2000.

The "Coarse T1" thumbwheel on the applicable circuit card is set at the 3 position for operation, and is placed at 0 for surveillance testing. The "Coarse Gain" thumbwheel on the same card normally remains set at the 1 position except for full calibrations. During setup of initial conditions for routine surveillance testing on August 13, 2000, the "Coarse T1" thumbwheel was found in the 0 position instead of the 3 position, and the "Coarse Gain" thumbwheel was found in the 3 position instead of the 1 position. During the return to service at the end of routine surveillance testing on June 24, 2000, instead of repositioning the "Coarse T1" thumbwheel to the 3 position, the "Coarse Gain" thumbwheel was inadvertently repositioned to 3, thereby placing the low pressure reactor trip setpoint for this channel out of TS limits.

A second technician performing the verification of the thumbwheel position failed to identify the mispositioning.

The affected card was returned to correct alignment and the channel tested satisfactorily.

Alignment of similar circuit cards in adjacent racks in this cabinet, and corresponding cards for other channels of this trip function in all channels on both units was checked satisfactorily.

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

Cause of Event

Root cause investigation concluded that the cause of this event was personnel error in that the technician, who performed the surveillance on June 24, 2000, repositioned the incorrect thumbwheel. Also, a second technician incorrectly performed verification and failed to identify the error.

Safety Assessment

The as found low pressurizer pressure trip setting for the affected channel (PT 455) was calculated to be approximately 1757 psig instead of the required nominal setting of 1865 psig (1862 allowable value). The low pressurizer pressure trip is credited to mitigate the consequences of a small break LOCA to prevent DNBR parameters from being exceeded. Had an actual event resulting in low RCS pressure occurred, PT 455 would have provided a trip signal to the reactor protection system when RCS pressure decreased below 1757 psig. However a reactor trip would have been provided at or above 1865 psig by the remaining two pressurizer pressure channels since the actuation requires 2 out of 3 logic. Also, due to the decrease in time constant from 10 seconds to 1 second, for rapid pressure reduction transients, the anticipatory (rate) function would have generated the trip signal from PT 455 more quickly. Single failure criteria would not have been met for the low pressurizer pressure reactor trip function. However, both of the pressurizer low pressure trip functions from the other channels were available throughout this event. In addition, some degree of diverse protection was available from the low pressurizer pressure safety injection actuation, which also generates a reactor trip. A reactor trip signal would have been generated at 1850 psig due to the full availability of the pressurizer low pressure safety injection actuation circuitry.

The reactor protection system was not challenged during the time the thumbwheels were out of position. In addition, no condition resulted in a low RCS pressure event and had one occurred the other two pressurizer pressure channels would have provided protection. Other functions based on pressurizer pressure from this channel, notably low pressure safety injection actuation, and high pressure reactor trip, were unaffected by this condition and remained operable throughout this event. Therefore the health and safety of the public were unaffected by this event.

This event does not represent a Safety System Functional Failure.

Corrective Action

The affected card was returned to the correct alignment, and the channel tested satisfactorily.

Technicians involved have been coached.

Maintenance personnel will be retrained, and expectations reinforced, on self checking and independent verification requirements, by October 31, 2000.

Additional Information

The following LERs have been submitted in the past 2 years on personnel error involving mispositioned components:

LER 2000-002-00 Unit 1 Unplanned Auxiliary Feedwater Actuation Upon Shutdown of Both Steam Generator Feed Pumps

LER 1999-002-00 Unit 1 Reactor Trip Following Loss of 1A Steam Generator Feedwater Pump

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

LER 1998-008-00 Unit 1, Reactor Vessel Support Concrete Design Basis Temperature exceeded Due to Closed Cooling Damper