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Southern Nuclear Operating Company
the southern electric system

J. D. Woodard
Vice President
Farley Project

October 28, 1992

10 CFR 50.73

Docket No. 50-364

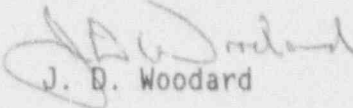
U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Joseph M. Farley Nuclear Plant - Unit 2
Licensee Event Report No. LER 92-012-00

Gentlemen:

Joseph M. Farley Nuclear Plant, Unit 2, Licensee Event Report No. LER 92-012-00 is being submitted in accordance with 10 CFR 50.73. If you have any questions, please advise.

Respectfully submitted.


J. D. Woodard

EFB:map 2660

Enclosure

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

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Joseph M. Farley Nuclear Plant - Unit 2										DOCKET NUMBER (2) 05000364		PAGE (3) 1 OF 3				
TITLE (4) Power Range Nuclear Instrument (NI) 41 OTDT Setpoint Nonconservative																
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)					
09	28	92	92	012	00	10	28	92			05000					
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (11)														
1		20.402(b)			20.405(c)			50.73(a)(2)(iv)			73.71(b)					
POWER LEVEL		99%			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					
		20.405(a)(1)(iii)			X 50.73(a)(2)(i)			50.73(a)(2)(viii)(A)			Abstract below)					
		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						
R. D. Hill, General Manager - Nuclear Plant										AREA CODE		205 899-5156				
COMPLETE ONE LINE FOR EACH FAILURE DESCRIBED IN THIS REPORT (13)																
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORT TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORT TO NPRDS							
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR		
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO						
ABSTRACT (16)																

On 9-28-92, during the performance of a surveillance test procedure (STP) on power range nuclear instrument 41 (NI 1), it was discovered that the as-found values for the gain potentiometer (pot) settings for NI-41 axial flux difference were different from the required values as shown in the plant curve book. Power range NI-41 was declared inoperable at 1200 and the appropriate Technical Specification actions were taken. The gain pot settings were corrected and the surveillance was completed satisfactorily. NI-41 was declared operable at 1547 on 9-28-92.

Investigation revealed that the incorrect gain pot settings had been input on 6-26-92 during performance of the same STP, FNP-2-STP-228.5A, "Nuclear Instrumentation System Power Range Channel N-41 Calibration and Functional Test." The incorrect gain pot settings affected the 7300 protection system calculations of the percent of axial flux difference (AFD) and the overtemperature delta temperature (OTDT) setpoint. The effects of the incorrect gain pot settings were analyzed and determined to cause a nonconservative OTDT setpoint as compared to Technical Specifications.

This event was caused by cognitive personnel error. During performance of STP-228.5A on 6-26-92, the gain pot settings for NI-42 were obtained from the plant curve book and mistakenly input into NI-41. Appropriate procedure changes will be made to provide guidance to ensure that numerical values, obtained from other source documents, are correctly recorded in procedures. Where necessary, verification requirements will be specified.

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TEXT

Plant and System Identification

Westinghouse - Pressurized Water Reactor

Energy Industry Identification System codes are identified in the text as [XX].

Summary of Event

On 9-28-92, it was discovered, during the performance of an STP on power range NI-41, that the incorrect gain pot settings had been input into NI-41 [1G] during the last quarterly surveillance. The incorrect gain pot settings affected the 7300 protection system calculations of the percent of AFD and the OTDT setpoint. The incorrect settings created a nonconservative OTDT setpoint calculation as compared to Technical Specifications.

Description of Event

On 9-28-92 the I & C group was performing quarterly surveillance FNP-2-STP-228.5A on power range nuclear instrument NI-41. During this STP, the as-found values for the gain pot settings for NI-41 were found to be different from the required values as shown in the plant curve book. An investigation revealed that the incorrect gain pot settings had been input on 6-26-92 during the previous quarterly performance of this STP. The gain pot settings for power range instrument NI-42 had been used instead of the settings specified for NI-41.

Power range NI-41 was declared inoperable at 1200 on 9-28-92. The appropriate bistables were placed in the tripped condition as required by Technical Specifications. The correct settings were input and NI-41 was returned to operable status at 1547 on 9-28-92.

The Technical group performed evaluations to determine the effect of the incorrect gain pot settings on NI-41. Calculations revealed that the improper settings caused nonconservative AFD values which resulted in a nonconservative OTDT setpoint calculation with respect to Technical Specifications for conditions when AFD values were large.

Cause of Event

This event was caused by cognitive personnel error. During the performance of STP-228.5A on 6-26-92, gain pot settings for NI-42 were obtained from the plant curve book and mistakenly input into NI-41.

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TEXT

Reportability Analysis and Safety Assessment

This event is reportable because the plant was operating in a condition prohibited by Technical Specifications, in that the gain pot settings for percent of AFD and the OTDT setpoint for NI-41 were nonconservative.

An evaluation of this condition was performed. The calculation results demonstrated that the channel OTDT reactor trip was functional within the safety analysis limit for the expected range of Cycle 9 core AFD. The channel maintained the ability to generate a trip within the limits required in the safety analysis for the entire time period that was evaluated, 6-26-92 to 9-28-92.

The other two channels (NI-42 and NI-43) feeding the OTDT protective circuitry remained operable during this time. Also, during this time the AFD did not reach a value high enough to cause the OTDT setpoint calculation to exceed the Technical Specification tolerance.

Corrective Action

The correct gain pot settings were input for NI-41 and the channel was declared operable at 1547 on 9-28-92.

The calibration and functional test STPs for all four power range nuclear instruments on both units will be revised to require data, obtained from another source document and recorded in the procedure, to be verified correct. This corrective action will be performed prior to the due date for the next quarterly STP.

An evaluation of plant procedures will be performed to identify cases where the correct recording of numerical data obtained from another source document may need to be verified. In such cases, the appropriate procedure changes will be made. Appropriate procedures, that give guidance on the writing of other procedures, will be revised to give instructions for procedure writers to consider the need for a verification when data obtained from another source document is used in a procedure. These corrective actions will be completed by March 31, 1993.

The individual responsible for recording the incorrect gain settings has been coached on the importance of self-verification.

Additional Information

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

No similar events have been reported by FNP.