

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



Southern Nuclear Operating Company
the southern electric system

J. Woodard
President
by Project

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10 CFR 50.73

Packet No. 50-348

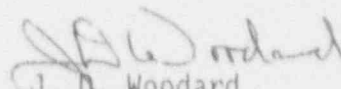
U. S. Nuclear Regulatory Commission
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Joseph M. Farley Nuclear Plant - Unit 1
Licensee Event Report No. LER 91-012-00

Gentlemen:

Joseph M. Farley Nuclear Plant, Unit 1, Licensee Event Report No. LER 91-012-00 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. Ebner
Mr. G. F. Maxwell

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Joseph M. Farley Plant - Unit 1										DOCKET NUMBER (2) 05000348				PAGE (3) 1 OF 3			
TITLE (4) Procedural Inadequacies for Verifying the Interlock Action of the RHR System From the RCS																	
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)				
12	29	91	91	012	00	01	27	92	J. M. Farley-Unit 2				05000364				
									05000								
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (11)															
9		20.402(a)				20.405(c)				50.73(a)(2)(iv)				73.71(b)			
POWER LEVEL		100				20.405(a)(1)(i)				50.36(c)(1)				50.73(a)(2)(v)		73.71(c)	
		20.405(a)(1)(ii)				X 50.36(c)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below)			
		20.405(a)(1)(iii)				X 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							
D. N. Morey, 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 NRC		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORT TO NRC							
SUPPLEMENTAL REPORT EXPECTED (14)												EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR	
YES (/ yes, complete EXPECTED SUBMISSION DATE)												X NO					

ABSTRACT (16)

On 12-29-91, during a procedure review, it was discovered that FNP-2-STP-11.5, "RHR Suction Valve Automatic Isolation", did not include a verification that the Reactor Coolant System (RCS) loop to Residual Heat Removal (RHR) pump suction valves Q2E11MOV8701A, Q2E11MOV8701B, Q2E11MOV8702A and Q2E11MOV8702B could not be opened from the main control board (MCB) when RCS pressure is above the automatic closure setpoint (700 psig). The verification of this interlock is part of the required surveillance testing associated with Technical Specification 4.5.2. In addition, prior to 3-1-88 this requirement had not been incorporated into FNP-1-STP-11.5 for the corresponding system in Unit 1 and therefore the surveillance had not been performed.

This event was caused by procedural inadequacy.

FNP-2-STP-11.5 has been revised to provide verification of the interlock and to include this as an acceptance criterion. Unit 1 procedure FNP-1-STP-11.5 previously contained a step to verify the interlock but not as part of the acceptance criteria. The Unit 1 procedure has also been revised to include verification of the interlock as an acceptance criterion.

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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 12-29-91, during a procedure review, it was discovered that FNP-2-STP-11.5, "RHR Suction Valve Automatic Isolation Test", did not include a verification that the RCS loop to RHR pump suction valves Q2E11MOV8701A, Q2E11MOV8701B, Q2E11MOV8702A and Q2E11MOV8702B [BP] could not be opened from the MCB when RCS pressure is above the automatic closure setpoint (700 psig). The verification of this interlock is part of the required surveillance testing associated with Technical Specification 4.5.2. In addition, prior to 3-1-88 this requirement had not been incorporated into FNP-1-STP-11.5 for the corresponding system in Unit 1 and therefore the surveillance had not been performed.

Description of Event

On 12-29-91, a senior reactor operator was performing procedure reviews of FNP-1-STP-11.5 and FNP-2-STP-11.5. During the reviews it was noted that the Unit 1 procedure verified that the RCS loop to RHR pump suction valves were interlocked closed following automatic closure at a pressure between 700 and 750 psig. The Unit 2 procedure did not verify this interlock function for valves Q2E11MOV8701A, Q2E11MOV8701B, Q2E11MOV8702A and Q2E11MOV8702B as required per Technical Specification 4.5.2.

Bistables connected to the RCS pressure transmitters isolate the RHR system from the RCS by operating relay contacts which close the isolation valves at 700 psig and prevent them from opening at pressures above 402.5 psig. Upon discovery of the potential procedure inadequacy, maintenance work requests (MWRs) were generated and the interlock contacts for the bistables set at 402.5 psig were verified open for all four Unit 2 isolation valves. With the contacts open, the valves cannot be opened with the MCB handswitch.

Additional investigation on 12-29-91 revealed that Instrumentation and Control (I&C) surveillance procedures FNP-2-STP-201.16 and FNP-2-STP-201.17 performed on the RCS wide range pressure transmitters Q2E11PT402 and Q2E11PT403 verify that the required bistables actuate at the correct pressures. Verification that the interlock relay contacts are open and that the bistables actuate properly ensures the RHR pump suction valves cannot be opened with the MCB handswitch when system pressure is above 402.5 psig.

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TEXT

Further review also found that prior to 3-1-88 the Unit 1 procedure FNP-1-STP-11.5 did not test the interlock function.

Cause of Event

This event was caused by procedural inadequacy.

Reportability Analysis and Safety Assessment

This event is reportable because surveillance required by Technical Specification 4.5.2 was not performed adequately.

Upon discovery of the potential procedural inadequacy, MWRs were generated and the 402.5 psig interlock relay contacts were verified open for all four Unit 2 isolation valves. Therefore, any inadvertent manipulation of the MCB handswitches for the valves would not have opened the valves.

The required bistables were previously demonstrated to actuate at the correct pressures. Verification that the interlock contacts are open and that the bistables actuate properly ensures the interlock will function properly thus satisfying the surveillance requirement.

Surveillance on Unit 1 was verified current and adequate.

The appropriate procedures have been revised to provide verification of the RHR interlock action.

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

Corrective Action

FNP-2-STP-11.5 has been revised to provide verification of the required interlock and to include this as an acceptance criterion. Unit 1 procedure FNP-1-STP-11.5 previously contained a step to verify the interlock but not as part of the acceptance criteria. The Unit 1 procedure has also been revised to include verification of the interlock as an acceptance criterion.

Additional Information

Both units were operating at approximately 100% power on 12-29-91.

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