

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Joseph M. Farley - Unit 1										DOCKET NUMBER (2) 0 5 0 0 0 3 4 8				PAGE (3) 1 OF 0 3		
TITLE (4) Failure To Adequately Address Effects Of Fire In An Area																
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 NAMES				DOCKET NUMBER(S)			
0 8	2 6	8 8	8 8	0 1 8	0 0	0 9	2 3	8 8	J. M. Farley - Unit 2				0 5 0 0 0 3 6 4			
OPERATING MODE (9) 1			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)													
POWER LEVEL (10) 1 0 0			20.402(b)				20.405(c)				50.73(a)(2)(iv)				73.71(b)	
			20.405(a)(1)(i)				50.38(a)(1)				50.73(a)(2)(v)				73.71(a)	
			20.405(a)(1)(ii)				50.38(a)(2)				50.73(a)(2)(vi)				☒ OTHER (Specify in Abstract below and in Text, NRC Form 366A)	
			20.405(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(viii)(A)				Voluntary Report	
			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)(ix)					
LICENSEE CONTACT FOR THIS LER (12)																
NAME D. N. Morey, General Manager-Nuclear Plant										TELEPHONE NUMBER AREA CODE 2 0 5 8 9 9 1 5 1 5 6						
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS						
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR		
☐ YES (If yes, complete EXPECTED SUBMISSION DATE)										☒ NO						

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On 8-26-88, it was determined that loss of control of two valves due to a fire in a single fire area and a postulated spurious actuation of a common discharge valve, which is a worst case scenario, could potentially result in the loss of both trains of the service water system until manual operator action could be taken to correct the problem. This condition was identified during the design of plant modifications on portions of the service water system.

To correct the condition, on 8-26-88 the circuit breaker for the motor operated valve in the service water discharge line for each unit was opened to prevent spurious operation of these valves. The position of these breakers is being controlled administratively. Spurious actuation of these valves is not credible after power has been removed. Therefore, there is assurance that one service water discharge flow path for each unit will remain available.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

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Farley Nuclear Plant - Unit 1	0 5 0 0 0 3 4 8	8 8	- 0 1 B	- 0 0	0 2	OF	0 3

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

Plant and System Identification:

Westinghouse-Pressurized Water Reactor

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

Summary of Condition

On 8-26-88, during the review associated with a modification to the electrical design of portions of the service water system [BI], it was determined that loss of control of two valves due to a fire in a single fire area and a postulated spurious actuation of a common discharge valve, which is a worst case scenario, could potentially result in the loss of both trains of the service water system until manual operator action could be taken to correct the problem.

Description of Condition

The FNP service water pumps take suction from the service water pond (five pumps for each unit). Service water is supplied to safety related and non-safety related loads in the Auxiliary, Turbine, and Diesel Buildings. The service water leaving these structures normally discharges to the Chattahoochee River via a common line. This service water discharge flow can also be recirculated to the service water pond. The recirculation flow path is intended for use during off-normal situations.

On Unit 1, a fire in Fire Area 56A could result in damage to the circuitry for valves Q1P16V538 and Q1P16V539, the "B" train and "A" train valves that allow recirculation of service water back to the service water pond. These valves are normally closed and are assumed to remain closed due to loss of power caused by the fire. Therefore, the recirculation flow path back to the service water pond is postulated to be blocked.

A fire in Fire Area 56A was previously analyzed as described in Appendix R Compliance Report A-350971 Section 8. This analysis determined that the "B" train service water flow would be maintained. However, it was determined during the recent review that valve Q1P16V549 also has circuitry in fire area 56A. Valve Q1P16V549 is in the common service water discharge line to the river. If, as a worst case assumption, Q1P16V549 receives a spurious actuation signal due to the fire and closes, the normal service water discharge path would also be isolated. Thus, the discharge flowpath for both trains of service water would be isolated resulting in no service water flow.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/98

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

On Unit 2, a similar scenario is postulated. A fire in Fire Area 4 was previously analyzed as described in Appendix R Compliance Report A-357971 Section 96. This analysis determined that the recirculation service water discharge flowpath would be blocked but "B" train service water flow would be maintained. However, this analysis failed to consider that the electrical circuitry for valve Q2P16V549 could also be damaged by the postulated fire. Similarly to Unit 1, if Q2P16V549 receives a spurious actuation signal due to the fire and closes, both the normal and recirculation service water discharge flowpaths would be isolated resulting in no service water flow.

Cause of Condition

The cause of this condition was the failure of the analysis to adequately address the effects of a fire, which could cause spurious operation of the common service water discharge valve on each unit.

Reportability Analysis and Safety Assessment

This condition is being reported voluntarily to notify the NRC of the discovery of this condition.

This condition had no effect on plant operation; the health and safety of the public was not affected. The postulated loss of both trains of the service water system is highly unlikely. The above analysis scenario is based upon worst case assumptions and does not take credit for operator action to mitigate the postulated event.

Corrective Action

The motor operated valves in the service water discharge line for each unit (Q1P16V549 and Q2P16V549) had their breakers opened on 8-26-88 to prevent spurious operation of these valves. The position of these breakers is being controlled administratively. Spurious actuation of these valves is not credible after power has been removed. Therefore, there is assurance that one service water discharge flow path for each unit will remain available.

Additional review of safe shutdown systems with common train components is being conducted.

Additional Information

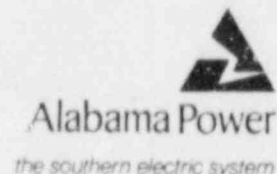
No components failed during this event.

No similar LERs have been submitted by Farley Nuclear Plant.

The NRC Resident Inspector was notified of this condition and the actions to be taken to correct the problem on 8-26-88.

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Telephone 205 250-1837

W. G. Hairston, III
Senior Vice President
Nuclear Operations



September 23, 1988

Docket No. 50-348

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

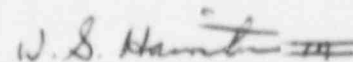
Dear Sir:

Joseph M. Farley Nuclear Plant - Unit 1
Licensee Event Report No. LER 88-018-00

Joseph M. Farley Nuclear Plant, Unit 1, Licensee Event Report No. LER 88-018-00 is being submitted in accordance with 10CFR50.73.

If you have any questions, please advise.

Respectfully submitted,


W. G. Hairston, III

WGH,III/JAR:dst-V8.67

Enclosure

cc: IE, Region II

IE22
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