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MAY 2 2 2000

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 50-388/00-002-00
PLA - 5204 FILE R41-2

Docket No. 50-388
License No. NPF-22

Attached is Licensee Event Report 50-388/00-002-00. This report is being made pursuant to 10.CFR50.73(a)(2)(iv) as a result of an unplanned actuation of an Engineered Safety Feature (ESF) in the Unit 2 Containment Radiation Monitor system. The ESF signal was not valid, and there were no plant conditions which required a containment isolation.

Bryce L. Shriver
Vice President – Nuclear Site Operations

Attachment

cc: Mr. H. J. Miller
Regional Administrator
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

cc: Mr. S. L. Hansell
Sr. Resident Inspector
U.S. Nuclear Regulatory Commission
P. O. Box 35
Berwick, PA 18603-0035

IE22

RGN-001

NRC FORM 366 (6-1998) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 06/30/2001
ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Susquehanna Steam Electric Station - Unit 2	05000388	1 OF 3

TITLE (4)
Inadvertent Valve Closure In Containment Radiation Monitor System During Maintenance Activities

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
										05000
04	24	00	00	-- 002 --	00	05	22	00	FACILITY NAME	DOCKET NUMBER 05000

		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)			
OPERATING MODE (9)	1	20.2201(b)	20.2203(a)(2)(v)	50.73(a)(2)(i)	50.73(a)(2)(viii)
POWER LEVEL (10)	100	20.2203(a)(1)	20.2203(a)(3)(i)	50.73(a)(2)(ii)	50.73(a)(2)(x)
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)	50.73(a)(2)(iii)	73.71
		20.2203(a)(2)(ii)	20.2203(a)(4)	X 50.73(a)(2)(iv)	OTHER
		20.2203(a)(2)(iii)	50.36(c)(1)	50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A
		20.2203(a)(2)(iv)	50.36(c)(2)	50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Gerard M. Machalick - Senior Engineer, Licensing	570 / 542-3861

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-spaced typewritten lines) (16)

On April 24, 2000 with Unit 2 in Mode 1 (Power Operation) at 100% power, the 'B' channel Containment Radiation Monitor Inboard Primary Containment Isolation valves inadvertently closed. Maintenance activities were in progress to replace a relay for the 'A' channel Containment Radiation Monitor Inboard Isolation valves. The cause of the event was loose wiring terminations. Corrective actions include tightening of terminations, updating of design documentation to indicate the interrelationship of 'A' and 'B' channel components, and review of this event and corrective actions with maintenance personnel. This event is reportable per 10CFR50.73(a)(2)(iv), as an unplanned actuation of an Engineered Safety Feature. The safety significance of this event is low, and the health and safety of the public was not compromised.

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
	05000	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Susquehanna Steam Electric Station - Unit 2	388	00	-- 002 --	00	2 OF 3

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

EVENT DESCRIPTION

On April 24, 2000 with Unit 2 in Mode 1 (Power Operation) at 100% power, the two inboard Primary Containment Isolation Valves (PCIVs) for the 'B' channel of the Containment Radiation Monitor (CRM; EIIS Code: IK) system were inadvertently closed during maintenance activities. Maintenance personnel (utility; non-licensed) were preparing to replace a relay for the 'A' channel CRM inboard isolation valves, which is located in the same panel as the circuit for the 'B' valves. The 'A' and 'B' channel inboard isolation valves comprise Division I of the Engineered Safety Feature (ESF) automatic isolation of the CRM system for accident conditions. When maintenance workers were cutting wire ties in preparation for the relay replacement, the loose terminations were moved, allowing the valve control circuit to deenergize which closed the valves. The ESF signal was not valid, and there were no plant conditions which required a containment isolation.

CAUSE OF EVENT

The cause of the event was loose wiring terminations in the control circuit for the 'B' channel CRM inboard isolation valves.

REPORTABILITY/ANALYSIS

This event is reportable per 10CFR50.73(a)(2)(iv), Actuation of an Engineered Safety Feature.

The function of the PCIVs is to limit fission product release during and following postulated Design Basis Accidents to within limits. The operability requirements for PCIVs help ensure that an adequate primary containment boundary is maintained during and after an accident by minimizing potential paths to the environment. Operability of the valves has been demonstrated many times since the valves were installed in 1995, in accordance with the requirements of the Leak Rate Testing Program and Inservice Testing Program. The loose terminations did not affect the operability of the valves until the wires were moved during the maintenance activities of this event.

The objective of the containment radiation monitors is to be able to detect unidentified primary coolant pressure boundary leakage. After the isolation of the 'B' channel CRM isolation valves, manual sampling and analysis was available to fulfill this function, in accordance with Technical Specification LCO 3.4.6 actions.

Based on the analysis above, the safety significance of this event is low, and the health and safety of the public was not compromised.

In accordance with the guidelines provided in NUREG-1022, Revision 1, the required submission date for this report is May 24, 2000.

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
	05000	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Susquehanna Steam Electric Station - Unit 2	388	00	-- 002 --	00	3 OF 3

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

CORRECTIVE ACTIONS

Primary containment and CRM operability were reestablished by tightening all loose terminations in the affected panel and opening the affected 'B' channel CRM valves.

Corrective actions to be completed are:

- Strengthen design documentation and plant labeling to increase awareness of interconnections between 'A' and 'B' channel CRM valve circuits for Unit 1 and Unit 2.
- Review plant design to identify other situations of interconnections between PCIV channels.
- Review this event and corrective actions with maintenance personnel to heighten awareness to interconnections between PCIV channels and to emphasize the importance of tight terminations.

ADDITIONAL INFORMATION

Past Similar Events: None

Failed Component: None