NRC FORM 366 (4-95) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104

EXPIRES 04/30/98

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)
Millstone Nuclear Power Station Unit 2	05000336	1 OF 3

TITLE (4)

Automatic Actuation of an Engineered Safety Feature During Maintenance

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
05	16	95	95	-- 020 --	01	03	03	97	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	6	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)			
		20.2201(b)	20.2203(a)(2)(v)	50.73(a)(2)(i)	50.73(a)(2)(viii)
POWER LEVEL (10)	000	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)
R. G. Joshi, MP2 Nuclear Licensing	(860) 440-2080

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

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 May 16, 1995 at 1330 hours, with the plant in Mode 6, an automatic actuation of an Engineered Safety Feature (ESF) occurred. Engineered Safety Feature Actuation System (ESAS) Cabinet 5 was being powered down for maintenance. When fuses were removed in accordance with the applicable procedure an inadvertent actuation occurred, Facility 1 Enclosure Building Filtration System fan (F25A) and Control Room Air Conditioning fan (F32A) started and Containment Radiation Monitor fan (F39A) shut down. Only the potential for inadvertent actuations during power restoration was anticipated in the procedure.

The causes of the event were a procedure deficiency and the lack of design features for downpowering the actuation cabinets for maintenance purposes. Fuses in the cabinet cannot be removed and reinstalled reliably without the potential for inadvertent actuations.

As a result of this event, operations procedure OP-2384 was revised to add the appropriate caution for de-energization of the cabinets. Additionally, a design change to simplify maintenance activities will be implemented during the next refueling outage, RFO13.

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

I. Description of Event

On May 16, 1995 at 1330 hours, with the plant in Mode 6, operators were preparing to remove Engineered Safety Features Actuation System (ESAS) Facility 1 actuation cabinet 5 from service to implement modifications to the system. Operators were in the process of powering down actuation cabinet 5 per operations procedure OP2384. Upon removal of one of the cabinet's +24 Vdc power supply fuses (Block Relay Power Supply), Facility 1 Enclosure Building Filtration System (EBFS) fan F25A and Control Room Air Conditioning (CRAC) fan F32A started, and Containment Radiation Monitor fan F39A shut down automatically. Fans F25A and F32A were immediately shutdown.

II. Cause of Event

The causes of the event were a procedure deficiency and the lack of design features for downpowering the actuation cabinets for maintenance purposes. It is not always possible to remove the fuses without getting a momentary contact causing an actuation cabinet re-energization sequence.
A caution in the procedure did note the potential for automatic actuation of ESAS equipment, but only during restoration of the power supply fuses, not during their removal. It is believed that as the operator removed the power supply fuse, it momentarily recontacted the fuse holder, generating the component actuation (which is expected when the fuse is reinstalled).

The block logic that would have prevented these actuations is powered from the same source that supplies the actuation modules. Thus, when power is interrupted or restored, a limited number of inadvertent actuations may occur due to the fact that all blocks do not receive power at the same time, which is required to prevent an actuation signal.

III. Analysis of Event

This event is being reported pursuant to requirements of 10 CFR 50.73(a)(2)(iv)(B) as any event or condition that resulted in the manual or automatic actuation of any Engineered Safety Feature (ESF).

An investigation has determined that there were no safety consequences associated with the event. At the time of the event, the ESAS Facility 1 actuation cabinet 5 was being shutdown for modifications and was not being relied on to be operable. The redundant Facility 2 equipment was available and operable to mitigate the consequences of any postulated accident for Mode 6. The cause of the inadvertent actuation was associated with the maintenance activities.

IV. Corrective Action

As a result of this event, Design Engineering performed an investigation. It was concluded that the lack of design features for downpowering the actuation cabinets for maintenance purposes identified by this event only affects the system during maintenance. It does not affect the in-service performance of the system safety function. Operations procedure OP-2384 was revised to add the appropriate caution statement for de-energization of the cabinets.

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

Additionally, a design change to simplify maintenance activities will be implemented during the next refueling outage, RFO13.

V. Additional Information

Similar LER's:

LER 94-010-01, Inadvertent Actuation of ESAS Equipment.
LER 94-017-01, Inadvertent ESAS Actuations.
LER 95-005-01, Inadvertent Actuation of ESF Equipment.

EIIS Codes:

JE; XC; E059 -	Engineered Safety Actuation System
VC; FAN	Enclosure Building Filter Fan
VI; FAN	Control Room Air Conditioning Fan
IL; FAN	Containment Radiation Monitor Fan

ACTION ITEM TRACKING AND TRENDING INFORMATION

A/R Number _____ A/R Owed To: NL MGR MP2 A/R Due Date: ~~MODE 4~~

A/R Description: LER 95-020-01 MODIFY ESAS TO SIMPLIFY MAINTENANCE

Document Cross References: LER 95-020-01, B16113,

Type Code: CATC Responsible Group: 2 MGR DESENG. Due Date: ~~MODE 4~~

Assignment Subject: LER 95-020-01 DESIGN CHANGE TO SIMPLIFY MAINTENANCE ON ESAS

Sch Ref NA Unit MP2. Mode ~~A~~ NA System ESA.

Text: A DESIGN CHANGE TO SIMPLIFY MAINTENANCE ACTIVITIES WILL BE IMPLEMENTED DURING THE NEXT REFUEL OUTAGE, ~~OF~~ RFO 13. ~~SUFFICIENT DURATION~~

Type Code: _____ Responsible Group: _____ Due Date: _____

Assignment Subject: _____

Sch Ref _____ Unit _____ Mode _____ System _____

Text: _____

Type Code: _____ Responsible Group: _____ Due Date: _____

Assignment Subject: _____

Sch Ref _____ Unit _____ Mode _____ System _____

Text _____

Type Code: _____ Responsible Group: _____ Due Date: _____

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