UPDATE REPORT 82-001 DATED 3/17/82

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

Line	Field	Value
01	Licensee Code (2)	P A T M I 1
01	License Number (3)	0 0 - 0 0 0 0 0 - 0 0
01	License Type (4)	4 1 1 1 1
01	CAT (5)	
01	Report Source (6)	L
01	Docket Number (7)	0 5 0 0 0 2 8 9
01	Event Date (8)	0 2 2 5 8 2
01	Report Date (9)	0 8 _ _ 8 2

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During ordered shutdown and while evaluating control room habitability review per

03 NUREG 0737 Item III D.3.4 an item reportable per T.S. 6.9.2.A(9) was identified.

04 Computer room air conditioning unit duct work penetrates the wall to the fuel handling

05 building. There is no radiation signal interlock to shutdown the unit. There appears

06 to be a potential for this to allow contaminated air to enter area served by the

07 control building ventilation system.

08

Line	Field	Value
09	System Code (11)	S G
09	Cause Code (12)	B
09	Cause Subcode (13)	A
09	Component Code (14)	Z Z Z Z Z Z
09	Comp. Subcode (15)	Z
09	Valve Subcode (16)	Z

LER/RO Report Number (17)	Event Year		Sequential Report No.		Occurrence Code	Report Type		Revision No.
	8 2	—	0 0 1	/	0 1	T	—	1

Action Taken (18)	Future Action (19)	Effect on Plant (20)	Shutdown Method (21)	Hours (22)	Attachment Submitted (23)	NPRD-4 Form Sub. (24)	Prime Comp. Supplier (25)	Component Manufacturer (26)
F	F	Z	Z	0 0 0 0	Y	N	Z	Z 9 9 9

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Blind flange is installed on make-up duct to minimize the effect of an airborne

11 contamination problem in the fuel handling or auxiliary buildings. Long term

12 corrective action will be to implement administrative controls to close fire dampers

13 EF-48, 49 & 57 on seismic event alarm in the control room.

14

Line	Facility Status (28)	% Power (29)	Other Status (30)	Method of Discovery (31)	Discovery Description (32)
15	X	0 0 0	NRC Order	C	Design Review

Line	Activity Released (33)	Content of Release (34)	Amount of Activity (35)	Location of Release (36)
16	Z	Z	N/A	N/A

PERSONNEL EXPOSURES

Line	Number (37)	Type (38)	Description (39)
17	0 0 0	Z	N/A

PERSONNEL INJURIES

Line	Number (40)	Description (41)
18	0 0 0	N/A

LOSS OF OR DAMAGE TO FACILITY (43)

Line	Type (42)	Description
19	Z	N/A

8209300297 820917
PDR ADOCK 05000289
S PDR

PUBLICITY

Line	Issued (44)	Description (45)	NRC Use Only
20	N	N/A	

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ATTACHMENT I

LICENSEE EVENT REPORT
NARRATIVE REPORT

TMI-1
LER 82-001

I. CURRENT ACTIVITIES AT THE TIME OF THE OCCURRENCE

TMI Unit 1 was in a long term cold shutdown. Engineering was performing a design review on the Control Building Ventilation System.

II. LEADING CIRCUMSTANCES

A preliminary safety concern which dealt with the potential of breaching an environmental barrier at the time of installation of an air conditioning unit to service the Control Building computer room has been evaluated. The concern identified the possibility of introducing make-up air from the Auxiliary and Fuel Handling buildings, a potentially contaminated area (post accident), into the Control Building Ventilation System which serves the Control Room. The concern further identified the installation as having been made with no provision for automatic isolation on high airborne radioactivity to exclude the potential contaminants from the Control Building Ventilation System.

III. DESCRIPTION

In November 1975, criteria was developed for the installation of a "closed-loop" air conditioning unit to support the Modular Computer System in the Control Building. In early 1976, the installation was completed. During the 1979 Refueling Outage the ductwork for this air conditioning system was modified with the installation of seismically qualified UL listed 3-hour rated fire dampers (FD-48 and FD-49) to isolate the Control Building side (computer room) from the Fuel Handling side where the air conditioner (AH-E-108) is mounted. The fire dampers trip closed and the air conditioner shuts down when a fire detection system actuated and not on high airborne radioactivity in the area. The fire detection system was installed in conjunction with a Halon 1301 fire suppression system for the computer room sub-floor area.

Although the fire dampers and control building wall penetrations are seismically designed, the adjacent suction and discharge duct work are not. The concern is that if a seismic event were to sufficiently damage this ductwork, in conjunction with a high airborne radioactivity condition in the fuel and auxiliary building ventilation system; the control room ventilation system could potentially become contaminated. Also, should the air conditioning system make-up line let contaminated air into the mod comp room, it could potentially contaminate the control building ventilation system.

IV. RESULTANT EVENTS

None

V. PREVIOUS EVENTS OF A SIMILAR NATURE

None

VI. ROOT CAUSE

Recent design reviews have determined that the "closed-loop" air conditioning system was not built or designed in accordance with the standard review plan (SRP) and, therefore, the system does not meet the requirements of NUREG 0737 Section III.D.3.4. The application of the criteria contained in the SRP has resulted in a "new look" at the purpose of the control room ventilation envelope and has resulted in a reconsideration of the air conditioning system.

VII. IMMEDIATE CORRECTIVE ACTION

The installation of a block off plate on the make-up air duct work has minimized the possibility of the introduction of contaminated make-up air into the Control Building Envelope in the event of a radiation accident.

VIII. LONG TERM CORRECTIVE ACTION

The procedure for responding to a seismic event will be modified to require that the Control Building computer room air conditioner be turned off and the seismic fire dampers ED-48 and ED-49 be manually closed. This procedure is initiated based on seismic event alarms in the Control Room.

The closed fire dampers would preclude significant migration of contamination from the hallway area in the event of contaminated air being present in the Fuel Handling Building.

IX. COMPONENT FAILURE DATA

Since no components failed, no data is included.