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Big Rock Point Nuclear Plant, 10269 US-31 North, Charlevoix, MI 49720

Patrick M Donnelly
Plant Manager

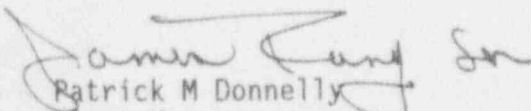
March 14, 1994

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

DOCKET 50-155 - LICENSE DPR-6 - BIG ROCK POINT PLANT - LICENSEE EVENT REPORT
94-002; DISCOVERY OF AN UNSECURED HIGH RADIATION AREA DOOR.

LICENSEE EVENT REPORT 94-002; DISCOVERY OF AN UNSECURED HIGH RADIATION AREA
DOOR, is attached. This event is reportable to the Nuclear Regulatory
Commission pursuant to 10 CFR 50.73(a)(2)(i)(B).

Patrick M Donnelly


Patrick M Donnelly
Plant Manager

CC: Administrator, Region III, USNRC
NRC Resident Inspector - Big Rock Point

ATTACHMENT

9403220133 940314
PDR ADOCK 05000155
S 40000 PDR

A CMS ENERGY COMPANY

IE22
11

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)		DOCKET NUMBER (2)		PAGE (3)	
BIG ROCK POINT PLANT		0 5 0 0 0 1 5 5		1 OF 0 5	

TITLE (4)
DISCOVERY OF AN UNSECURED HIGH RADIATION AREA DOOR

EVENT DATE (6)			LER NUMBER (6)			REPORT DATE (6)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		
0 3	0 5	9 4	9 4	0 0 2	0 0	0 3	1 4	9 4	N/A		
									0 6 0 0 0		
									N/A		
									0 6 0 0 0		

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 81. Check one or more of the following: (11)

OPERATING MODE (9)	<input checked="" type="checkbox"/> N	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.408(c)	<input type="checkbox"/> 60.73(a)(2)(b)	<input type="checkbox"/> 73.71(b)
POWER LEVEL (10)		<input type="checkbox"/> 20.408(a)(1)(b)	<input type="checkbox"/> 60.38(a)(1)	<input type="checkbox"/> 60.73(a)(2)(b)	<input type="checkbox"/> 73.71(c)
		<input type="checkbox"/> 70.408(a)(1)(b)	<input type="checkbox"/> 60.38(a)(2)	<input type="checkbox"/> 60.73(a)(2)(b)(i)	<input type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 388A)
		<input type="checkbox"/> 20.408(a)(1)(b)	<input checked="" type="checkbox"/> 60.73(a)(2)(b)	<input type="checkbox"/> 60.73(a)(2)(b)(ii)	
		<input type="checkbox"/> 20.408(a)(1)(b)	<input type="checkbox"/> 60.73(a)(2)(b)	<input type="checkbox"/> 60.73(a)(2)(b)(iii)	
		<input type="checkbox"/> 20.408(a)(1)(b)	<input type="checkbox"/> 60.73(a)(2)(b)	<input type="checkbox"/> 60.73(a)(2)(b)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Michael D Bourassa, Senior Licensing Engineer	6 1 6 5 4 7 - 6 5 3 7

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES <input type="checkbox"/> (Yes, complete EXPECTED SUBMISSION DATE)	NO <input checked="" type="checkbox"/>	EXPECTED SUBMISSION DATE (16)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (18)

Big Rock Point Technical Specification 6.12.2. requires that high radiation areas greater than 1000 mr/hr accessible to personnel be provided with locked doors to prevent unauthorized entry.

Contrary to the above, on March 5, 1994, at 0930, an auxiliary operator discovered an unlocked high radiation area door. The actions directed by a facility procedure concerning the discovery of high radiation areas found unlocked/unguarded, was recognized and immediately performed. The facility was currently in a scheduled maintenance outage.

The root cause was determined to be human performance, with fatigue and the midnight shift (schedule) as secondary causal factors.

During the time the door was unlocked, no entries were made into the high radiation area. Corrective actions will include "locking or closure device" postings on all high radiation area doors required to be locked.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		9 4	— 0 1 0 2	— 0 1 0	0 2	OF 0 5

TEXT (if more space is required use additional NRC Form 366A's) (12)

IDENTIFICATION OF EVENT

1. Any operation prohibited by the plant's Technical Specifications.

References

a. 10 CFR 50.73(a)(2)(i)(B)

CONDITIONS PRIOR TO THE EVENT

Cold Shutdown. The facility was currently in a scheduled maintenance outage.

DESCRIPTION OF THE EVENT

Big Rock Point Technical Specification 6.12.2. requires that high radiation areas greater than 1000 mr/hr accessible to personnel be provided with locked doors to prevent unauthorized entry.

Contrary to the above, on March 5, 1994, at 0930, an auxiliary operator on routine rounds discovered that the steam drum door (a high radiation area door) was unlocked. The last known entry/exit into that area occurred at 0213 that same day. The facility was currently in a scheduled maintenance outage.

ROOT CAUSE ANALYSIS OF THE EVENT

Interviews were held with the following individuals that were known to have exited the high radiation area at 0213; Lead Repairman, Contract Repairman, and the Radiation Protection Technician. The Auxiliary Operator that discovered the unlocked door at 0930 was also interviewed.

A barrier analysis was performed to evaluate this event after completing interviews with the individuals identified above.

Barrier #1

Technical Specification 6.12 - Requirements for control of high radiation area doors established. All individuals aware of requirements. Barrier adequate.

Barrier #2

Administrative Procedure 5.8, High Radiation Area Key and Access Control - Requirements of this procedure mirror the Technical Specifications. All individuals were aware of requirement to lock door.

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TEXT (if more space is required, use additional NRC Form 3054 (1-77))

Repairman unaware of section 5.5 which states "it is the responsibility of the lead individual or radiation protection technician to assure all personnel are accounted for and are clear of the area prior to locking". Barrier adequate.

Barrier #3

Radiation Work Permit - Requires high radiation door watch for this task. Encompasses controls for a high radiation area door. A door watch was established. Barrier adequate.

Barrier #4

Status Sheet - Requires notifying the control room upon entering and exiting. All individuals aware of this requirement. Barrier adequate.

Barrier #5

High Radiation Area Key Log - Issuance of key encompasses controls for a high radiation area door. Barrier adequate.

Barrier #6

Steam Drum Door Alarm - All individuals aware that the steam drum door is an alarming door. Appropriate notification made to control room. Barrier adequate.

Barrier #7

Past Plant and Industrial Experience - There has been significant training and establishment of expectations by Chemistry and Health Physics Management in recent departmental meetings to establish performance expectations of technicians relating to high radiation areas. Self checking at completion of task promoted by management. This included communication to technicians that formal training on a self checking system and implementation would occur in the short term. Barrier Adequate.

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0 4 OF 0 5						

TEXT (if more space is required, use additional NRC Form 306A g) (17)

Barrier #8

Radiation Protection Technician - Aware of requirements for high radiation area locked doors. Radiation protection technician failed to lock door prior to exiting area. Barrier less than adequate.

Summary

The programmatic barriers are adequate. The root cause is human performance, with fatigue and the midnight shift (schedule) considered as secondary causal factors.

CORRECTIVE ACTION TO PREVENT RECURRENCEImmediate Corrective Action

The auxiliary operator established control to prevent unauthorized entry by ensuring the door was locked. The control room and radiation protection were notified of the unsecured door.

Corrective action

In light of the heightened exposure and awareness placed on the proper administration of high radiation areas because of previous less than adequate performance; and the adequacy of the programmatic aspects for the control of high radiation areas; appropriate disciplinary action will be taken with regards to the radiation protection technician's performance.

The facilities bulletin board will be utilized to communicate that locking the high radiation area door for areas greater than 1000 mr/hr is the responsibility of the lead worker and radiation protection technician.

To aid station and contract personnel, high radiation area postings will also indicate if the specified door or closure device is required to be secured.

SAFETY SIGNIFICANCE

As noted in the barrier evaluation employed to determine the root cause, the steam drum door is an alarmed door. The door alarms in the control room and is represented by both audio (buzzer) and visual (flag) annunciators. The alarm will not reset unless the door is closed or the alarm actuating device is placed in the "door closed" position. The control room also has in operation a pan-and-tilt camera which can be used to monitor the steam drum door. The door

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TEXT: If more space is required, use additional NRC Form 305A (1-77)

is of a large enough construction that it typically requires two individuals to open the door (the door also functions as a radiation shield).

During the period of time that the door was unsecured, the alarm system was verified to be operational, and the control room logbook confirms an exit made on March 5, 1994, at 0213; and an entry that same day at 0927, coinciding with the time of the discovery that the door was unsecured. The low probability of a single individual being capable of opening the door, and not being detected by the alarms in the control room, ensures that an inadvertent or unauthorized entry into the area was not experienced. In addition, this door is in a vital area of the plant, which results in restricted access to the general plant population.

ADDITIONAL REFERENCES

- LER 93-006 dated 8/9/93
- LER 93-001 dated 2/4/93