



CHARLES CENTER • P.O. BOX 1475 • BALTIMORE, MARYLAND 21203-1475

GEORGE C. CREEL
VICE PRESIDENT
NUCLEAR ENERGY
(301) 260-4455

January 17, 1991

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
NRC Inspection Report Nos. 50-317/90-32 and 50-318/90-32

Gentlemen:

The subject inspection report contained a Notice of Violation regarding three instances of plant personnel entering High Radiation Areas without dose rate meters. Our response to the Notice of Violation is provided in Attachment (1).

Should you have any further questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,

GCC/JV/bjd

Attachment

cc: D. A. Brune, Esquire
J. E. Silberg, Esquire
R. A. Capra, NRC
D. G. McDonald, Jr., NRC
T. T. Martin, NRC
L. E. Nicholson, NRC
R. I. McLean, DNR

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ATTACHMENT (1)

NRC INSPECTION REPORT NOS. 50-317/90-32 AND 50-318/90-32

DESCRIPTION AND CAUSE OF VIOLATION

On January 17, 1990, during a routine Radiation Safety Technician (RST) inspection, two contractor personnel were found inside a posted High Radiation Area (HRA) without a continuously monitoring survey instrument (dose rate meter). The contractors had observed other contractors routinely going in and out of the posted HRA for several days and did not notice them carrying dose rate meters. The two contractors had not received any dose on previous entries into this particular HRA.

On February 6, 1990, an RST found a plant operator exiting a posted HRA without a dose rate meter. The operator had entered and surveyed the same area 30 minutes earlier and determined it was not an HRA. The operator had his hands full on the second trip. He therefore decided to proceed into the area without the meter based on his survey from the previous entry.

On June 13, 1990, an RST found two contractor personnel in a posted HRA without a dose rate meter. The contractors incorrectly assumed that their RST had logged them into the HRA with the Special Control Point Watch (SCPW) and had gone into the HRA ahead of them. They crossed the radiological HRA boundary assuming the RST had taken care of their radiological requirements before entering the HRA.

The causes of these events were inattention to detail, plus a lack of concern for work controls and radiological hazards associated with HRAs. In the first event, the two contractors believed that dose rate meters were not required in an HRA based on their perceptions that other personnel were entering the area without dose rate meters. The operator in the second event entered an HRA without a dose rate meter even though he had seen and understood the HRA posting requirements. This individual made a conscious decision to enter the HRA based on the results of his radiation survey 30 minutes earlier. The contractors in the third event incorrectly assumed that they had been logged into the HRA and that the RST would ensure appropriate radiological controls were met for entering the HRA.

Two Human Performance Evaluation System investigations were performed at the direction of the Plant Manager. The first was initiated after the second event occurred. The second was initiated after the third event occurred. These evaluations identified the human factor contributors to these violations of HRA controls and provided recommended corrective actions.

CORRECTIVE ACTIONS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

- The personnel involved were immediately removed from the HRA.
- The training qualification records of the personnel involved were evaluated. It was verified that each individual had been previously trained concerning the plant specific requirements for entering HRAs.
- Appropriate disciplinary action was administered in each case.
- Because of the repeat nature of these events and indications of lack of concern and inattention to detail regarding entering HRAs, Plant Management directed that a site-wide safety break be held to discuss the Radiation Control violations. This immediate corrective action was taken to re-emphasize management expectations regarding strictly following

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NRC INSPECTION REPORT
NOS. 50-317/90-32 AND 50-318 90-32

Radiation Control procedures and policies. This issue was also emphasized to all plant personnel via a handout memorandum distributed at the facility exits.

Plant Management has continued to emphasize the importance of attention to detail and maintaining a questioning attitude to all personnel through a variety of mediums, including Quarterly Communications Meetings, the Calvert Cliffs Newsletter "Calvert Clips" and the "Our Mutual Obligations" statement. Strict procedural adherence has been the cornerstone of our Performance Improvement Plan and continues to be emphasized on a site wide basis.

- The placement of HRA boundaries has been evaluated and improved.
- The events have been incorporated into the "Industry Events" section of our General Orientation Training (GOT) Initial and 1991 requalification training program for the next training cycle.
- GOT programs have been changed to include mockup training for all contractor workers.
- Work practices and procedures for RSTs have been standardized to require each worker in an HRA log himself into the access log for that area. RSTs are no longer allowed to log other personnel into HRAs.
- A "Hands Free" portable survey instrument has been placed in service. This instrument will be available for instances where an individual entering an HRA has both hands full or occupied.

CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

A training video tape is currently being created to visually demonstrate the requirements for entering HRAs.

We feel that these actions, combined with the strength of our existing Radiation Safety training program, and continued plant management emphasis on attention to detail, will further reduce the potential for future violations in this area.

DATE WHEN FULL COMPLIANCE WAS ACHIEVED

Full compliance was achieved for each respective event when the personnel involved were immediately removed from the HRAs.