

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

May 25, 1993

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Serial No. 93-287
SPS/RCB R1
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37


Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION REPORT NOS. 50-280/93-09 AND 50-281/93-09

We have reviewed your Inspection Report Nos. 50-280/93-09 and 50-281/93-09 dated April 29, 1993, and the enclosed Notice of Violation. Our reply to the Notice of Violation is attached. We share your concerns over the control of locked high radiation areas, and we are taking the actions described in the attachment to address these concerns.

Please contact us if you have any questions or require additional information.

Very truly yours,


W. L. Stewart

Attachment

cc: Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

Mr. M. W. Branch
NRC Senior Resident Inspector
Surry Power Station

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PDR ADOCK 05000280
G PDR

Handwritten initials/signature

REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION CONDUCTED MARCH 29 - APRIL 2, 1993
SURRY POWER STATION UNITS 1 AND 2
INSPECTION REPORT NOS. 50-280/93-09 AND 50-281/93-09

NRC COMMENT:

During an NRC inspection conducted on March 29 - April 2, 1993, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violation is listed below:

10 CFR 20.203(c)(2)(iii) requires that each entrance or access point to a high radiation area shall be maintained locked except during periods when access to the area is required, with positive control over each individual entry.

10 CFR 20.203(c)(3) states that the controls required by 10 CFR 20.203(c)(2) of this section shall be established in such a way that no individual will be prevented from leaving a high radiation area.

Technical Specification 6.4.1.B requires that procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained, and adhered to for all operations involving radiation exposure.

Attachment 1, Requirements and Responsibilities to Enter a Locked High Radiation Area, of Health Physics Procedure HP-8.0.61, High Radiation Area Key Control, Revision 1, dated April 16, 1991, requires, in Step 2.3, that when a Locked High Radiation Area entrance is unlocked, the entrance is to be under constant surveillance to prevent unauthorized entries; and, in Step 2.4, that when leaving the area, no one is to be left in the area and the entrance is to be securely locked.

Contrary to the above, on March 30, 1993, the licensee's Locked High Radiation Area control measures failed when two region-based NRC inspectors conducting a tour were inadvertently locked in the Unit 2 "C" Reactor Coolant Loop Room, a locked high radiation area. The licensee failed to maintain constant surveillance over the loop room entrance while it was unlocked and failed to verify that no one was left in the area after relocking the entrance. As a result, the inspectors were temporarily prevented from leaving the high radiation area when the entrance door, unlocked at the time of entry, was chained and padlocked prior to their exit from the loop room. No unnecessary radiation exposures were received.

This is a Severity Level IV violation (Supplement IV).

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(1) Reason for the Violation, or, if Contested, the Basis for Disputing the Violation

On March 30, 1993, at approximately 1100 hours, two visiting NRC Inspectors from Region II were inadvertently locked inside the Unit 2 "C" Loop Room for about one minute. "C" Loop Room is controlled as a locked high radiation area in accordance with station Technical Specifications and procedures because of the presence of ≥ 1 R/hr general area radiation levels in the overhead. Access control was being maintained through the high radiation area key control program. In accordance with this program, keys are issued only to Health Physics (HP) Technicians and Advanced Radiation Workers (ARW) in accordance with station procedures.

At approximately 1030 hours, an ARW properly notified the HP Roving Monitor that he was entering the "C" Loop Room. The ARW entered the locked area using his issued key. During the time the ARW was working in the area, unbeknownst to both the ARW and the HP Roving Monitor, two NRC Inspectors entered the Loop Room. When the ARW finished his tasks in the Loop Room, he exited and locked the door behind him. Shortly thereafter, when the HP Roving Monitor was opening the locked gate for other workers, he discovered that the NRC Inspectors had been inadvertently locked in. It is estimated that the Inspectors were locked inside the Loop Room for about one minute. No abnormal radiation exposures occurred, and the two Inspectors each received about five (5) millirem during their entire tour inside containment.

The reason for this violation was the failure to maintain proper control of a locked high radiation area. Station procedures require that unlocked high radiation area doors be maintained under constant surveillance to prevent unauthorized entries. The procedures also require verification that no one is left in the area upon departure. The ARW who had entered the area did not see anyone else in the room as he exited and closed and locked the door with the inspectors still inside.

(2) Corrective Steps Which Have Been Taken and the Results Achieved

The event was discussed with the ARW involved and with each Health Physics shift, emphasizing the points which allowed the event to happen. A description of the event was published on the Station's closed circuit television system. Applicable procedures have been changed to provide increased control over locked high radiation area doors. Doors which are not equipped with a self-closing and locking mechanism along with a keyless system for egress will require constant Health Physics control. It is considered that these measures will significantly reduce the likelihood of recurrence of an event of this nature.

(3) Corrective Steps That Will be Taken to Avoid Further Violations

Insert signs have been ordered which will add the word "locked" to the posting at the entrance to the locked high radiation areas. Replacement of locked high radiation area doors with doors equipped with self-closing and locking mechanisms as well as a keyless egress system is under evaluation. Radiation worker training will be revised to emphasize the lessons learned from this event.

(4) The Date When Full Compliance Will be Achieved

Full compliance was achieved on May 6, 1993, when the high radiation area key control procedure was changed to require constant HP access control over unlocked doors not equipped with self-closing and locking mechanisms along with a keyless systems for egress.