

Omaha Public Power District  
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402/636-2000

May 18, 1992  
LIC-92-177R

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station P1-137  
Washington, DC 20555

References: 1. Docket No. 50-285  
2. Letter from NRC (A. B. Beach) to OPPD (W. G. Gates) dated April 17, 1992

Gentlemen:

SUBJECT: NRC Inspection Report No. 50-285/92-07 Reply to a Notice of Violation (NOV)

The subject report transmitted a NOV resulting from an NRC inspection conducted March 23-27, 1992 of the Fort Calhoun Station Radiation Protection Program. Attached is the Omaha Public Power District (OPPD) response to this NOV.

Although several procedural non-compliances associated with the personnel contamination event were identified, OPPD has verified through a Root Cause Analysis that the non-compliances were isolated cases of poor performance by the Radiation Protection personnel involved, and were not indicative of programmatic problems.

If you should have any questions, please contact me.

Sincerely

*W. G. Gates*

W. G. Gates  
Division Manager  
Nuclear Operations

WGG/se1

Attachment

c: LeBoeuf, Lamb, Leiby & MacRae  
R. D. Martin, NRC Regional Administrator, Region IV  
R. P. Mullikin, NRC Senior Resident Inspector  
D. L. Wigginton, NRC Senior Project Manager  
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*TEO*

REPLY TO A NOTICE OF VIOLATION

VIOLATION

During an NRC inspection conducted March 23-27, 1992, violations of NRC requirements were identified. The violation involved failure to follow procedures. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violations are listed below:

Technical Specification (TS) 5.8.1 states, in part, that written procedures and administrative policies shall be established, implemented and maintained that meet or exceed the minimum requirements of Regulatory Guide 1.33.

- A. Regulatory Guide 1.33, Appendix A, Section 7.e.(1) states, in part, that access control to radiation areas by a radiation work permit system should be covered by written procedures.

Radiation Protection Administrative Procedure RP-AD-200, Section 4.6, states, in part, that radiation protection technicians are responsible for .... ensuring that RWP requirements are complied with.

Contrary to the above, the licensee identified that on February 28, 1992, a radiation protection technician instructed personnel to work without respiratory protection on Radiation Work Permit (RWP) 92-2538, even though the RWP stated that respiratory protection was required.

This is a Severity Level IV violation (Supplement IV) (285/9207-01).

- B. Regulatory Guide 1.33, Appendix A, Section 7.e.(4) states, in part, that contamination control should be covered by written procedures.

Radiation Protection Procedure RP-207, Section 7.4.B., states, in part, that all personnel skin and/or clothing contamination events not attributed to noble gases and/or naturally occurring radionuclides shall be documented on Form FC-RP-207-1, "Personnel Contamination Report."

Contrary to the above, the licensee identified that on February 28, 1992, three individuals had facial contamination that was not attributed to noble gases and/or naturally occurring radionuclides and the contaminations were not documented on Form FC-RP-207-1.

This is a Severity Level V violation (Supplement IV) (285/9207-02).

- C. Regulatory Guide 1.33, Appendix A, Section 7.e.(5) states, in part, that respiratory protection should be covered by written procedures.

2. Radiation Protection Procedure RP-203, Section 7.1.2.B., states, in part, that job coverage air samples shall be taken as directed by the RWP during work requiring respiratory protection.

Contrary to the above, the licensee identified that on February 28, 1992, that no air sample was taken to support RWP 92-2538 work which required respiratory protection.

This is a Severity Level IV violation (Supplement IV) (285/9207-04).

- D. Regulatory Guide 1.33, Appendix A, Section 7.e.(8) states, in part, that the bioassay program should be covered by written procedures.

Radiation Protection Procedure RP-207, Section 7.4.3.A. states, in part, that whole body counts are required for individuals with skin contamination in the area of the mouth or nose measured prior to decontamination.

Contrary to the above, the licensee identified that on February 28, 1992, three individuals alarmed the personnel contamination monitor and exhibited contamination in the area of the mouth or nose, but a whole body count was not performed.

This is a Severity Level IV violation (Supplement IV) (285/9207-05).

#### OPPD Response

##### Reason for Violations (285/9207-01, 9207-02, 9207-04, 9207-05)

These four violations were identified by OPPD as a result of completing the Root Cause Analysis (RCA) discussed below. The RCA was initiated in response to Radiological Occurrence Report (ROR) 92-09.

On March 13, 1992, during a routine random whole body count, it was determined that an OPPD I&C technician received an intake of radioactive material greater than the lower limit of detection for Cs-137. During the investigation to determine the cause of the internal contamination, it was discovered that the individual had been contaminated on February 28, 1992 while working inside the reactor vessel seismic skirt area. A RCA was immediately initiated. The RCA identified that four procedural non-compliances associated with a single event had occurred.

The specific procedural violations identified during the RCA consisted of the following:

- Work inside the vessel skirt had been conducted without respiratory protection equipment as required by the RWP (Violation No. 9207-01).
- No air sample had been taken during the performance of the job (Violation No. 9207-04).
- Failure to document the intake on the personnel contamination report form had occurred and an investigational whole body count had not been performed (Violation Nos. 9207-02 and 9207-05).

It was further determined, by the RCA, that an OPPD shift Radiation Protection (RP) technician and a contractor RP technician had been the only two individuals directly involved in the procedural non-compliances.

The reason for each of the four OPPD self-identified violations is discussed below.

Violation 285/9207-01

This violation was the result of the OPPD shift RP technician instructing the workers to work inside the reactor vessel seismic skirt area without using respiratory protection equipment required by the Radiation Work Permit (RWP No. 92-2538). Investigation revealed that although the shift RP technician was aware of the requirement to read the RWP, he failed to do so and was thus unaware of the RWP requirement for respiratory protection equipment. Failure to read the RWP was attributed to inattention to detail. Typically, RWPs give the shift RP technician the latitude to determine the need for respiratory protection equipment on a case by case basis. Although the workers involved questioned the decision not to wear respirators, they deferred to the authority of the shift RP technician, which is the preferred practice.

Violation 285/9207-02

This violation has been attributed to inattention to detail. The individuals involved in the work inside the vessel skirt alarmed the personnel contamination monitors (PCMs) at the Radiologically Controlled Area exit. The contractor RP technician directed the contaminated individuals to self-decontaminate. After decontamination, the individuals cleared the PCMs. The contractor technician failed to document the contamination in accordance with procedure RP-207, "Personnel Monitoring and Decontamination".

The contractor RP technician contacted the OPPD shift RP technician and informed him that, under his supervision, the contaminations had been handled successfully. The contractor technician did not inform the shift RP technician that there had been detectable facial contamination. The contractor RP technician did not believe that a Personnel Contamination Report (PCR) was required because the contamination was less than 100 CPM (counts per minute) above background. As a result, there was a violation of the procedural requirement to document all facial contaminations. The 100 CPM limit applies to all contaminations except facial contaminations. Additionally, the shift RP technician failed to ensure that the PCR form FC-RP-207-1 had been completed.

Violation 285/9207-04

This violation resulted from poor judgement and a failure to implement good work practices.

The contractor RP technician failed to perform the required air sample because he judged that it wasn't needed due to the expected short duration of the work inside the vessel skirt area (approximately 15 minutes). The contractor RP technician also did not anticipate any airborne radioactive contamination as a result of the scope of work to be performed in the area.

Violation 285/9207-05

This violation is directly connected with the failure to document the personnel contamination referenced in Violation 9207-02. Form FC-RP-207-1 (Personnel Contamination Report) specifically requires a whole body count if contamination is detected in the area of the nose or mouth area. The failure to document the facial contaminations resulted in the failure to perform a whole body count.

As with Violation 9207-02, this violation has been attributed to inattention to detail by the contractor RP technician and inadequate followup by the shift RP technician involved.

Corrective Actions That Have Been Taken (Violations 9207-01, 9207-02, 9207-04, 9207-05)

1. A RCA was performed as discussed above. The RCA (ROR 92-09) determined that this was an isolated event that resulted in several procedural non-compliances.
2. A review was conducted of random whole body counts performed from January 1991 through April 1992. A review of exit whole body counts performed from January 1992 through April 1992 was also conducted. Of the 177 random whole body counts reviewed, the appropriate documentation was completed in all cases. Of the exit whole body counts reviewed, there were no cases where an intake of radioactive material was received by an individual without proper documentation in accordance with station procedures.
3. Interviews were conducted with several contractor RP technicians and the entire day shift crew of OPPD RP technicians. It was concluded that there was no knowledge of any similar events where documentation had not been prepared. Additionally, individuals interviewed were fully knowledgeable of the requirements for documentation of PCRs and investigative whole body counts.
4. A review of the 14 Radiological Occurrence Reports generated in 1992 was conducted to determine if there were any other generic implications. Two of the RORs reviewed, 92-02 and 92-08, involved small intakes of radioactive material. It was determined that in both cases, complete documentation of the events was properly performed.
5. A Radiation Protection departmental meeting was conducted to discuss the procedural violations associated with this event and to emphasize the necessity of verbatim procedural compliance and self-checking.

6. Appropriate disciplinary action was taken with the OPPD shift Radiation Protection technician. The contractor Radiation Protection technician involved had already resigned as of the date of discovery of the uptake. However, the contractor site representative was notified about these violations.
7. The Training department distributed required reading "Hot Lines" to Radiation Protection personnel on the procedures that were violated. Personnel were required to review and certify their understanding of the procedural requirements of RP-201, RP-207 and RP-650.

Corrective Actions That Will Be Taken: (Violations 9207-01, 9207-02, 9207-04 and 9207-05)

1. During the next scheduled RP training cycle, these procedural violations and the associated event will be discussed and reviewed. This will be completed by August 31, 1992.
2. During the next scheduled RP training cycle, self-checking training will be instructed to the RP technicians. The self-checking training will also be incorporated into the initial training for RP technicians. This will be completed by August 31, 1992.
3. The requirements of procedure RP-203, "Air Sampling", and RP-AD-200, "Radiation Protection Administrative Procedure", will be reinforced during the next scheduled training cycle. This will be completed by August 31, 1992.
4. These procedural violations and the associated event will be included in the Significant/Industry Events training program for RP contractors. This will be completed by December 31, 1992.

Date of Full Compliance

OPPD is presently in full compliance.

VIOLATION

- C. Regulatory Guide 1.33, Appendix A, Section 7.e.(5) states, in part, that respiratory protection should be covered by written procedures.

1. Radiation Protection Procedure, RP-201, Section 7.4.1.A., states, in part, that respiratory protection equipment selection is to be documented on Form FC-RP-201-6 and attached to the RWP when respiratory protection equipment is specified on a RWP.

Contrary to the above, on March 27, 1992, the inspectors determined that Form FC-RP-201-6 was not attached to RWP 92-2538 which required respiratory protection equipment.

This is a Severity Level V violation (Supplement IV) (285/9207-03).

OPPD RESPONSE

Reason For Violation

The "Respirator Selection" form FC-RP-201-6 is prepared as a supplement to the RWP. This form provides documentation on the reasons why respiratory protection equipment is required. Completion of this form is the responsibility of the ALARA technicians.

The ALARA technician who prepared RWP 92-2538 failed to comply with the Radiation Protection Procedure RP-201 by not attaching form FC-RP-201-6 to the RWP.

The ALARA technician who prepared RWP 92-2538 was interviewed and remembered that a FC-RP-201-6 form was prepared for the RWP at the time and that it must have been misplaced if it was missing. The inattention to detail by the ALARA technician resulted in the procedural non-compliance.

Corrective Actions That Have Been Taken

1. The ALARA Group conducted an audit of the RWPs generated during 1992. This audit of over 600 RWPs determined that there were five RWPs requiring respiratory protection without the associated Respirator Selection form FC-RP-201-6. For those RWPs that were still active, the forms were completed and attached to the RWPs. For those RWPs that were terminated, a list was generated showing which RWPs were improperly completed, and documentation was provided in each terminated RWP file. In each of the five cases where the form was missing, the proper respiratory protection was actually used.
2. Station "Hot Lines" were issued to the RP technicians regarding the requirements of Radiation Protection procedure RP-201 "Radiation Work Permits".

Corrective Actions That Will Be Taken

1. The Radiation Protection Department will evaluate possible procedural/process enhancements to ensure that the Respirator Selection form is prepared. This will be completed by July 31, 1992.
2. During the next scheduled RP training cycle, these procedural violations and the associated event will be discussed and reviewed. This will be completed by August 31, 1992.
3. During the next scheduled RP training cycle, self-checking training will be instructed to the RP technicians. The self-checking training will also be incorporated into the initial training for RP technicians. This will be completed by August 31, 1992.

Date of Full Compliance

OPPD is presently in full compliance.

### VIOLATION

- E. Regulatory Guide 1.33, Appendix A, Section 8.b.(1)(aa) states, in part, that specific procedures for surveillance tests, inspections, and calibrations should be written for area, portable, and airborne radiation monitors.

Radiation Protection Procedure RP-402, Section 7.2.3.A. states, in part, that when in service, instruments shall be calibrated at least semiannually. Section 7.2.4 B. states, in part, that schedules may be adjusted + or - 25 percent . . . . To extend a calibration due date attach a second calibration label to the instrument which reflects the new due date.

Contrary to the above, on March 24, 1992, the inspectors noted that the calibration sticker on PING-1A, S/N 212, stated that the calibration was performed on September 12, 1991, and was due on March 12, 1992.

This is a Severity Level IV violation (Supplement IV) (285/9207-06).

### OPPD RESPONSE

#### Reason for Violation

This violation resulted from inattention to detail by the contractor RP technician involved.

The calibration due dates for non-portable instrumentation are tracked by the Instrument & Control (I&C) Department's computer system. Preventive Maintenance Work Orders (PMO) are issued prior to the calibration due date for instrumentation under I&C control. Due to I&C's outage work load the calibration was not performed as scheduled, and was rescheduled. The calibration due date was then automatically extended by 25% of the due date as allowed by procedure. I&C did not notify RP that the calibration due date had been extended. The contractor RP technician who response-tested the instrument overlooked the calibration due date label and as a result failed to affix a new label or tag the instrument out of service. Even though a new label had not been attached, the PING-1A was still considered calibrated since it was within the allowed +25% extension period.

#### Corrective Actions That Have Been Taken

1. The PING was tagged out-of-service immediately after notification of the problem.
2. I&C immediately scheduled the PING for calibration, which was completed on March 27, 1992.
3. The RP Instrument group audited the 726 in-place and portable instruments. They found three portal monitors at the north access point that were within the +25% window but did not have revised calibration labels attached. These three portal monitors were tagged out of service, calibrated, and current calibration labels attached.



4. Memo FC-RP-159-92 was sent to the RP Instrument technicians for their review and signatures. It stressed that calibration due dates are to be verified prior to response testing.
5. The Radiation Protection Instrument group has updated their instrument tracking system to include the calibration due dates of non-portable instrumentation. This will serve as an alternate means of tracking to ensure that any instruments due for calibration will be tagged out of service on or prior to the calibration due dates.

Corrective Actions That Will Be Taken

During the next scheduled RP training cycle, self-checking will be instructed to the RP technicians. The self-checking training will also be incorporated into the initial training for RP technicians. This will be completed by August 31, 1992.

Date of Full Compliance

OPPD is presently in compliance.