



Commonwealth Edison
 1400 Opus Place
 Downers Grove, Illinois 60515

March 26, 1993

U.S. Nuclear Regulatory Commission
 Washington, D.C. 20555

Attention: Document Control Desk

Subject: Dresden Nuclear Power Station Units 2 and 3
 Reply to Notice of Violations
 Inspection Report Nos. 50-237/93007;
 50-249/93007

Reference: C. Peterson letter to L. DelGeorge, dated
 February 26, 1993

Enclosed is the Commonwealth Edison Company (CECo) response to the Notice of Violations (NOVs) which were transmitted with the reference letter. The NOV cited one Severity Level IV violation requiring a written response. CECo's response is provided in the attachment.

If your staff has any questions or comments concerning this letter, please refer them to Denise Saccomando, Regulatory Performance Administrator at (708) 663-7285.

Sincerely,

D.L. Farrar
 Regulatory Services Manager

Attachment

cc: A.B. Davis, Regional Administrator - Region III
 J. Stang, Project Manager - NRR
 M. Leach, Senior Resident Inspector

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ATTACHMENT

REPLY TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-237/93007; 50-249/93007

Violation:

Technical Specification 6.11.1 requires that procedures for personnel radiation protection be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

Procedure DRP 1620-02, "Radiologically Controlled Contaminated Areas (Change Areas) and Protective Clothing Instructions," states that radiologically controlled contaminated areas shall be posted with signs bearing "CAUTION - RADIOACTIVE MATERIAL AREA" and "FLOOR AND EQUIPMENT CONTAMINATED" inserts.

Procedure DRP 1480-01, "Contamination Surveys," states that any material exiting the controlled area must be given an unconditional release unless only fixed contamination is present and the material bears a radioactive material label or tag.

Procedure DRP 1520-13, "Loading and Shipping Radioactive Protective Clothing," states that the Station Laborer group will set aside for survey by radiation protection personnel a laundry bag of protective clothing if the contact dose rate exceeds 25 mRem/hour.

Contrary to the above, approved and maintained procedures were not adhered to for all operations involving personnel radiation exposure, as evidenced by the following examples:

- a) As of February 5, 1993, radiologically controlled contaminated areas throughout the plant were not posted with signs bearing "CAUTION - RADIOACTIVE MATERIAL AREA" and "FLOOR AND EQUIPMENT CONTAMINATED" inserts, as required by DRP 1620-02.
- b) Around November 1992 and February 1993, contaminated material exiting the controlled area was not given an unconditional release and did not bear a radioactive material label or tag, as required by DRP 1480-01. Specifically, contaminated scrap metal and gloves were found outside the controlled area.
- c) In January 1993, the Station Laborer group did not set aside for survey by radiation protection personnel two laundry bags of protective clothing with constant dose rates exceeding 25 mRem/hour, as required by DRP 1520-13. Specifically, the dose rate on one bag was 115 mRem/hour and the dose rate on the other bag was 111 mRem/hour.

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Reason for the Violation (Example a):

Upon identification of this discrepancy, Dresden initiated a Problem Identification Form (PIF) to determine why postings were not consistent with Dresden Radiation Protection Procedure DRP 1160-03, "Radiological Signs, Labels, Signals and Controls."

The investigation determined that inconsistent guidance existed within the department for the posting of contaminated areas. Specifically, in October 1988, Radiation Protection Memo 88-007, "Clarification of Posting Criteria," was issued and directed personnel to use the insert "contaminated Area" instead of the inserts "Floor Contaminated" and "Equipment Contaminated ." This was done to facilitate posting consistency. In March 1989, DRP 1160-03, revision 4 (the current procedure) was issued and required the use of the "Floor and Equipment Contaminated" insert. In October 1989, DRP 1160-02, "Routine Radiological Control Surveys" was issued and required that each accessible side of the contaminated area be posted in accordance with DRP 1160-03. Finally, in July 1991, RP Memo 88-007 was deleted.

The precursors leading to this violation were:

The Radiation Protection Technicians were posting in adherence to the RP Memo 88-007 which had been deleted.

More than one procedure which references radiological posting requirements exists within the department. This leads to inconsistency and confused implementation.

There is a lack of sufficient control regarding the use of RP Memos, relative to their implementation, deletion, and their relation to Dresden Radiation Protection Procedures.

Radiation Protection Management has reviewed the use of the "Contaminated Area" insert in lieu of "Floor and Equipment Contaminated" and finds that it is a more appropriate posting.

Corrective Steps Taken and Results Achieved:

The Radiation Protection Department reviewed all procedures involved with radiological posting criteria and consolidated posting requirements into one procedure, DRP 1160-3. DRP 1160-3 has been revised to incorporate the use of the "Contaminated Area" in lieu of the "Floor and Equipment Contaminated" insert. DRP 1620-2, "Radiological Controlled Contaminated Area (Change Area) and Protected Clothing Instructions," has been revised to eliminate the specific posting requirement and references the user to DRP 1160-3.

Training on the revision was conducted before issuance of the procedure.

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Corrective Steps Taken to Avoid Further Violations:

On February 19, 1993, the Radiation Protection Department implemented an improved process for Radiation Protection Policy Memorandums. This mechanism, "Radiation Protection Policy Memo ADM-01," patterned after Braidwood Station's policy control process, states that policies will not contradict or take precedence over procedural requirements. Additionally, ADM-01 memo contains the requirement to address whether the policy changes the intent of any reference material.

The Health Physics Supervisor has requested that Site Quality Verification initiate an effectiveness review of radiological postings to ensure procedural compliance. This review will begin by April 12, 1993.

Date When Full Compliance Was Achieved:

Full compliance was achieved with the issuance of DRP 1160-3.

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Reason for the Violation (Example b):

On November 2, 1992, a RPT found a valve and scrap metal located in a container outside of the mechanical maintenance shop area. The material found had direct contamination readings of 100,000 dpm and 500 to 20,000 dpm smearable contamination. The material was not tagged with an unconditional release tag or a radioactive material label.

A PIF was generated and an investigation was conducted. Interviews were held with the mechanic responsible for the material, his supervisor, the Master Mechanic and the RPT who located the material. The investigation could not definitively determine that the material had been surveyed by Rad Protection as stated by the mechanic. This conclusion is based upon the mechanic's reluctance to disclose which RPT performed the survey, and the belief that the metal's contamination levels of 100,000 dpm would have been easily detected in the low background of Unit 2 trackway. It is believed that the material was not surveyed as required by DRP 1480-01.

On February 2, 1993 two contaminated work gloves were found by a Dresden Station employee alongside the road leading to the station. These gloves were not labelled or tagged and had fixed contamination that ranged from 200 to 5000 dpm. Investigation of the contaminated work gloves could not determine a positive mechanism as to how the gloves left the controlled area.

Corrective Steps Taken and Results Achieved:

The material that was found in the scrap metal container was immediately removed, and taken to the radwaste facility.

The contaminated gloves were retrieved by an RPT and properly dispositioned. Additionally, Radiation Protection management conducted a walkdown of the access road to determine that no additional radioactive material had left the controlled area. No additional material was found.

The Master Mechanic conducted a tailgate session with his department to discuss the event and the need to assure potentially contaminated material is surveyed. Additionally, these events were tailgated with the Radiation Protection Department.

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To ensure that personnel were not intentionally exiting the site with radioactive material, Dresden Station immediately instituted a surveillance on personnel exiting the gatehouse as well as vehicles leaving the security area. This was accomplished by:

- an increased frequency of gatehouse egress package searches by Security personnel,
- Radiation Protection management required all vehicles (except those escorted) to have an unconditional release prior to exiting the station, and
- RPTs were stationed in the gatehouse to monitor the gatehouse egress portal monitors during peak periods.

The results of these actions did not indicate any attempt by personnel to exit the station with radioactive material.

Corrective Steps Taken to Avoid Further Violations:

A comprehensive review of Dresden's radioactive material control program was started by the Radiation Protection Improvement Team, to determine weaknesses in the overall program. This review consisted of:

- the movement of radioactive material within the power block,
- the control of radioactive material in out buildings,
- the storage of radioactive material,
- RCA ingress and egress points,
- utilization of the centralized tool storage facility, and
- the movement of material exiting the RCA.

Based upon the Team's review it was determined that the radioactive material control process and program needs to be revised in order to effectively eliminate events such as those identified in this violation. The revision to the station's radioactive material control process, is currently underway and will be implemented by July 31, 1993.

The Health Physics Supervisor has requested that Site Quality Verification initiate an effectiveness review for the implementation for the revised process for the control of radioactive material. This review will begin within 30 days of implementation of the revised process.

Date When Full Compliance Was Achieved:

Full compliance was achieved when the radioactive material was removed from the uncontrolled area and properly dispositioned.

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Reason for the Violation (Example C):

On January 16 and 27, 1993, Radiation Protection Technicians were surveying laundry boxes prior to shipment. Their survey results detected that laundry bags reading 115 mR/hr and 111 mR/hr had been loaded in the boxes for shipment. These bags, should have been set aside by the station laborers and not loaded into the box as specified by DRP 1520-13, "Loading and Shipping Radioactive Protective Clothing."

The root cause for this violation is the failure of station laborer personnel to adhere to the requirements of DRP 1520-13. Station Laborer management was unable to determine which laborer(s) were responsible for loading the bags because DRP 1520-13 does not provide a mechanism for documentation of who performed the initial survey.

Additionally, DRP 1520-13 requires that a station laborer supervisor initials Checklist A, "Laundry Container Departure Checklist," ensuring that all material in the box is less than 25 mR/hr. The supervisor did initial the checklist, but failed to ensure that the bags loaded were less than 25 mR/hr.

Corrective Steps Taken and Results Achieved:

Station Laborer Supervision conducted a tailgate with their personnel on the requirement to follow procedure relative to the loading of laundry for shipment.

Responsible Station Laborer Supervision was counselled by the Station Laborer Coordinator as the need for procedural adherence and attention to detail.

As an interim control, Radiation Protection Technicians are surveying all laundry bags prior to loading in shipping containers.

Corrective Steps Taken to Avoid Further Violations:

DRP 1520-13 will be revised to require the station laborer to initial Checklist A ensuring that all material that they loaded in the box is less than 25 mR/hr. This procedure will be revised by April 30, 1993.

Station Laborers will be retrained on the use of how to use an ionization chamber and how to properly survey laundry bags. This training will be completed by June 15, 1993.

The control and transport of contaminated laundry will be considered during the station's review of the radioactive material control process. This process will be revised and implemented by July 31, 1993.

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Date When Full Compliance Was Achieved:

Full compliance was achieved with the implementation of interim measures which require Radiation Protection Technicians to survey all laundry bags prior to loading.