

February 6, 2001

Mr. Oliver D. Kingsley
President, Nuclear Generation Group
Commonwealth Edison Company
ATTN: Regulatory Services
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

SUBJECT: DRESDEN NUCLEAR GENERATING STATION - NRC INSPECTION REPORT
50-237/01-07(DRS); 50-249/01-07(DRS)

Dear Mr. Kingsley:

On January 26, 2001, the NRC completed a routine inspection at your Dresden Nuclear Generating Station, Units 2 and 3. The results were discussed on January 26, 2001, with Messrs. Swafford and Fisher and other members of your staff. The enclosed report presents the results of that inspection.

The inspection was an examination of activities conducted under your licenses as they relate to radiation safety and to compliance with the Commission's rules and regulations and with the conditions of your licenses. Within these areas, the inspection consisted of a selective examination of procedures and representative records, facility walkdowns, and interviews with personnel. Specifically, the inspection reviewed aspects of your occupational radiation safety program and focused on radiation monitoring instrumentation.

No findings of significance were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

O. Kingsley

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We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/RA/

Gary L. Shear, Chief
Plant Support Branch
Division of Reactor Safety

Docket Nos. 50-237; 50-249
License Nos. DPR-19; DPR-25

Enclosure: Inspection Report 50-237/01-07(DRS);
50-249/01-07(DRS)

cc w/encl: D. Helwig, Senior Vice President, Nuclear Services
C. Crane, Senior Vice President, Nuclear Operations
H. Stanley, Vice President, Nuclear Operations
R. Krich, Vice President, Regulatory Services
DCD - Licensing
P. Swafford, Site Vice President
R. Fisher, Station Manager
D. Ambler, Regulatory Assurance Manager
M. Aguilar, Assistant Attorney General
State Liaison Officer
Chairman, Illinois Commerce Commission

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-237; 50-249
License Nos: DPR-19; DPR-25

Report No: 50-237/01-07(DRS); 50-249/01-07(DRS)

Licensee: Commonwealth Edison Company

Facility: Dresden Nuclear Generating Station, Units 2 and 3

Location: 6500 N. Dresden Road
Morris, IL 60450

Dates: January 22 - 26, 2001

Inspector: Wayne J. Slawinski, Senior Radiation Specialist

Observer: Ryan D. Alexander, Radiation Specialist

Approved by: Gary L. Shear, Chief
Plant Support Branch
Division of Reactor Safety

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
<ul style="list-style-type: none">● Initiating Events● Mitigating Systems● Barrier Integrity● Emergency Preparedness	<ul style="list-style-type: none">● Occupational● Public	<ul style="list-style-type: none">● Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.

SUMMARY OF FINDINGS

IR 05000237-01-07(DRS), 05000249-01-07(DRS), on 01/22-26/2001, Commonwealth Edison Company, Dresden Nuclear Generating Station, Units 2 and 3. Radiation Safety Specialist Report.

The inspection was conducted by a regional senior radiation specialist.

Cornerstone: Occupational Radiation Safety

No findings of significance were identified.

Report Details

Summary of Plant Status: During this inspection, Units 2 and 3 operated at or near 100% power.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS3 Radiation Monitoring Instrumentation

.1 Tests and Calibrations of Radiation Monitoring Instrumentation

a. Inspection Scope

The inspector verified that radiological instrumentation associated with monitoring transient high and/or very high radiation areas, and instruments used for remote emergency assessment had been calibrated consistent with industry standards and in accordance with station procedures. The inspector confirmed that selected area radiation monitors (ARMs) were located as described in the Updated Final Safety Analysis Report (UFSAR). The inspector verified that discrepancies with some ARM designations listed in the current revision of the UFSAR would not impact operator alarm recognition and response, and were attributed to documentation problems which the licensee planned to resolve. The inspector reviewed the licensee's alarm setpoints for selected ARMs and verified that the setpoints were established consistent with the UFSAR and Technical Specifications. Specifically, the inspector selectively reviewed calibration procedures and calendar years 1999-2000 calibration records for the following radiation monitoring instrumentation:

- Unit 3 Drywell Radiation Monitor
- Unit 2 Traversing In-Core Probes (TIP) Drive Area ARM
- Unit 2 Filter Building Charcoal Adsorber Vault ARM
- Unit 3 High Pressure Coolant Injection (HPCI) Cubicle ARM
- Unit 3 Maximum Recycle Chemical Addition Room ARM

In addition, the inspector verified that deficiencies in the oversight of the ARM calibration and test program did not impact safety, were acknowledged by the licensee, and that plans to address this problem were being considered.

The inspector discussed surveillance practices and reviewed calendar years 1999-2000 calibration records and procedures for selected radiation monitors used for assessment of internal exposure, and those instruments utilized for surveys of personnel and equipment prior to egress from the radiologically protected area (RPA). The inspector observed radiation protection (RP) staff complete functional tests of selected personnel contamination monitors, portal monitors, and a small article monitor, and verified that these instruments were source tested and calibrated adequately, consistent with station procedures and industry standards. These instruments included:

- Canberra Fastscan Whole Body Counting System
- Eberline PM-7 Portal Monitor
- Eberline Personnel Contamination Monitor (PCM)
- Eberline PCM-2 Whole Body Personnel Contamination Monitor
- NE Technology IPM-9D Whole Body Frisking Monitor
- NE Technology Small Articles Monitor (SAM 9)

The inspector observed portable survey instruments maintained in the licensee's instrument calibration facilities and instrument issue area, and verified that those instruments designated "ready for use" had current calibrations, were operable, and in good physical condition. The inspector observed radiation protection staff source check portable radiation survey instruments and conduct a six month calibration of a portable ion chamber survey instrument, and verified that those tests were completed adequately using appropriate radiation sources and station procedures.

b. Findings

No findings of significance were identified.

.2 Respiratory Protection Program

a. Inspection Scope

The inspector reviewed aspects of the licensee's respiratory protection program for compliance with the requirements of Subpart H of 10 CFR Part 20, and to ensure that self-contained breathing apparatus (SCBA) were properly maintained and stored. The inspector also verified that selected emergency response personnel required to use SCBAs were trained and qualified. Specifically, the inspector reviewed SCBA inspection records for calendar year 2000, for those units maintained for emergency use in various areas of the plant, and reviewed respiratory protection equipment use and maintenance procedures to verify consistency with industry standards. The inspector walked-down the SCBA air bottle filling station and SCBA storage locations in the control room, the operations support center, and safe shutdown cart. The inspector examined several SCBA units in these areas to assess material condition and to verify that air bottle hydrostatic tests were current. The inspector also verified the licensee's capability for refilling and transporting SCBA bottles to the control room and support locations in the plant. Additionally, the inspector reviewed respiratory protection training lesson plans and worker qualification records, and confirmed that control room operators and other selected emergency response personnel were trained and qualified for SCBA use.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed: (1) the results of a focus area self-assessment of radiation protection instrumentation and SCBAs completed by the RP staff in January 2001; (2) Nuclear Oversight assessments of the RP program completed in calendar years 1999-2000 as they relate to the radiation instrumentation program; and (3) the licensee's condition report (CR) database and numerous individual CRs related to radiation monitoring instrumentation and the SCBA program generated in calendar years 2000-2001. The inspector evaluated the effectiveness of these processes to identify, characterize and prioritize problems, and to develop corrective actions.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA6 Management Meetings

Exit Meeting Summary

The inspector presented the preliminary inspection results to Messrs. Swafford and Fisher and other members of licensee management and staff at the conclusion of the site inspection on January 26, 2001. The licensee acknowledged the information presented. No proprietary information was identified by the licensee.

PARTIAL LIST OF PERSONS CONTACTED

H. Bush, Radiation Protection Supervisor
R. Fisher, Station Manager
R. Kelly, Regulatory Assurance
J. Moser, Radiation Protection Manager
J. Nalewajka, Nuclear Oversight Lead Assessor
D. Nestle, REMP/ODCM Health Physicist
B. Norris, Radiation Protection Engineering Supervisor
H. Oclon, Nuclear Oversight Assessor
C. Oshier, Radiation Protection Technical Support Supervisor
K. Robbins, System Engineer, Electrical Group Lead
P. Swafford, Site Vice President
J. Zelinko, Instrument Maintenance

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

ARM	Area Radiation Monitor
CR	Condition Report
HPCI	High Pressure Coolant Injection
PCM	Personnel Contamination Monitor
RP	Radiation Protection
RPA	Radiologically Protected Area
SAM	Small Articles Monitor
SCBA	Self-Contained Breathing Apparatus
TIP	Traversing In-Core Probes
UFSAR	Updated Final Safety Analysis Report

PARTIAL LIST OF DOCUMENTS REVIEWED

The following is a partial list of licensee documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector reviewed the documents in their entirety, but rather that selected portions of the documents were evaluated as part of the overall inspection effort.

Corporate and Station Procedures

WC-AA-111, Revision 0, "Predefine Process"
RP-RD-826, Revision 0, "MSA Self-Contained Breathing Apparatus Inspection"
RP-DR-827, Revision 0, "Use of the Eagle Breathing Air Compressor System"

Radiation Protection Self-Assessments

Dresden Radiation Protection Department Focus-Area Self-Assessment Final Report
No. 26726, "Radiological Instrumentation and SCBA Controls" (½-12/2001)

Nuclear Oversight Documents

Nuclear Oversight Assessment NOA-12-99-PS02, "Radiation Protection Assessment"
(3/26/1999)
Nuclear Oversight Assessment NOA-12-00-OP02, "Document, Drawing, and Procedure
Control/Qualifications" (3/22/2000)
Nuclear Oversight Assessment NOA-DR-01-1Q, "Dresden Plant Support Functional Area
Assessment Agenda Plan" (12/20/2000)

Calibration Procedures and Records

DRP 5800-09, Revision 3, "Calibration Frequencies for Radiation Protection Survey
Instruments"
DRP 5822-08, Revision 1, "Sensitivity Checks of Personnel Contamination Monitors"
DRP 5823-16, Revision 1, "Bicron RSO and Eberline RO-2/2A/20 Series Ion Chamber
Calibration and Operation," including calibration records for Bicron RSO-50E, Serial
No. B284Y (2/11/2000 and 8/1/2000)
DRP 5800-04, Revision 0, "Verification of Counting Efficiencies for Geiger Mueller (GM) - Type
Contamination Survey Instruments," including calibration records for Eberline E520 with
HP210 Probe, Serial Nos. 2749 (4/19/1999 and 12/4/2000), 3750 (4/3/2000), and 3777
(4/3/2000)
DRP 5823-41, Revision 2, "Operation and Calibration of the Wide Range MGP Telepole,"
including calibration records for MGP Telepole, Serial No. 8898-015 (9/27/1999 and
9/7/2000)
DRP 5822-10, Revision 0, "Operation and Calibration of the Eberline PM-7 Portal Monitors,"
including calibration records for PM-7 Nos. 1 and 2 (12/08/1999 and 6/8/2000)
DIS 1800-04, Revision 9, "Personnel Contamination Monitor (PCM) Calibration," including
calibration records for PCM Serial No. 117 (8/18/1999 and 8/8/2000)

DRP 5822-41, Revision 3, "Calibration and Operational Checks of the Eberline PCM-2 Whole

Body Contamination Monitor," including calibration records for PCM-2 Serial No. 149 (11/24/1999 and 11/9/2000)
DRP 5822-07, Revision 2, "Calibration, Maintenance, and Operation of the IPM-9D(8M) Whole Body Frisking Monitor," including calibration records for IPM-9D Serial No. 144 (12/9/1999 and 12/7/2000)
DRP 5822-11, Revision 3, "Operation and Calibration of the Small Articles Monitor (SAM)," including calibration records for SAM Serial No. 236 (12/13/1999 and 12/10/2000)
DIS 1600-16, Revision 11, "Drywell High Radiation Monitor Group 2 Isolation Functional and Calibration Tests," including calibration records for Unit 3 Channel Nos. 2419A and 2419B (9/23/2000)
DIS 1800-05, Revision 10, "Unit 2 GEMAC Area Radiation Monitor Calibration," including calibration records for Unit 2 Filter Building Charcoal Adsorber Vault ARM (4/30/1999) and Unit 2 TIP Drive Area ARM (4/26/1999 and 3/20/2000)
DIS 1800-06, Revision 11, "Unit 3 GEMAC Area Radiation Monitor Calibration," including calibration records for Unit 3 HPCI Room Cubicle ARM (11/23/1999 and 11/29/2000)
DIS 1800-07, Revision 9, "Unit 3 NUMAC Area Radiation Monitor Calibration," including calibration records for Unit 3 Maximum Recycle Chemical Addition Room ARM (12/14/1998 and 2/21/2000)
"Calibration of the Canberra Fastscan Whole Body Counting System - Dresden Nuclear Station," (9/7-8/2000)

Condition Reports and Related

CR database for calendar years 2000-2001 related to radiation monitoring instrumentation and SCBAs
Individual CRs reviewed included No. D2000-02674, D2000-06495, D2000-06543, D2001-00375, D2001-00463, and D2001-00423.

Other Documents

Updated Final Safety Analysis Report, Revision 2, Chapters 12.3.4 and 12.5
Dresden Area Radiation Monitoring System Monitoring Plan
SCBA Qualification Data Base
"Level 1 Respiratory Training" and "S.C.B.A." Lesson Plans