July 28, 2000

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 - NRC INSPECTION REPORT 50-237/2000012(DRS); 50-249/2000012(DRS)

Dear Mr. Kingsley:

On July 14, 2000, the NRC completed an inspection at your Dresden Nuclear Generating Station, Units 2 and 3. The results were discussed on July 14, 2000, with Mr. Swafford 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 license as they relate to radiation safety and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities, facility walkdowns, and interviews with personnel. Specifically, the inspection reviewed aspects of both your occupational and public radiation safety programs, and focused on access controls for radiologically significant areas, the radiological environmental monitoring program, and the controls for the unconditional release of radioactive materials. The radiological aspects of a recent incident during work on the traversing incore probe (TIP) drive mechanism were also reviewed. Additionally, your performance indicator process was reviewed for the occupational radiation safety and emergency preparedness cornerstones, and indicator data reporting for occupational radiation safety was verified for accuracy.

Based on the results of this inspection, one issue was identified concerning the failure to adequately assess the work on the TIP drive mechanism, resulting in a violation of NRC requirements. This issue was evaluated under the risk significance determination process and was determined to be of very low safety significance (Green). The violation was not cited due to its very low safety significance and because the problems associated with the work have been entered into your corrective action program. If you contest the non-cited violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Dresden facility.

O. Kingsley

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 <u>or</u> 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).

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

Sincerely,

/RA by James E. Foster Acting For/

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 50-237/2000012(DRS); 50-249/2000012(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 O. Kingsley

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O. Kingsley

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# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION III**

Docket Nos: License Nos:	50-237; 50-249 DPR-19; DPR-25
Report No:	50-237/2000012(DRS); 50-249/2000012(DRS)
Licensee:	Commonwealth Edison Company
Facility:	Dresden Nuclear Generating Station, Units 2 and 3
Location:	6500 N. Dresden Road Morris, IL. 60540
Dates:	July 10 - 14, 2000
Inspectors:	Wayne Slawinski, Senior Radiation Specialist Robert Jickling, Emergency Preparedness Analyst
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

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- Occupational
  Public
- 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 05000237/2000-012(DRS), IR 05000249/2000-012(DRS), on 07/10 - 14/2000; Commonwealth Edison Company; Dresden Generating Station; Units 2 & 3. Radiation Safety, Other Activities.

The inspection was conducted by a regional senior radiation specialist and a regional emergency preparedness analyst. This inspection identified one green issue and one associated violation which was non-cited. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process.

#### **Cornerstone: Occupational Radiation Safety**

 Green. A non-cited violation of the requirements in 10 CFR 20.1501 was identified for failure to evaluate the radiological hazards associated with work on the traversing incore probe (TIP) drive mechanism motor. Although the TIP work was not adequately planned and the radiological hazards were not adequately assessed prior to commencement of work, a substantial potential for an overexposure did not exist and the licensee's ability to assess dose was not compromised. Consequently, this finding was determined to be of very low safety significance (Section 20S1.2).

# Report Details

<u>Summary of Plant Status:</u> Both units were at or near 100 percent power throughout the five day inspection period.

# 2. RADIATION SAFETY

# **Cornerstone: Occupational Radiation Safety**

2OS1 Access Controls for Radiologically Significant Areas

# .1 Plant Walkdowns and Radiological Boundary Verifications

a. Inspection Scope

The inspectors performed walkdowns of the radiologically controlled area (RCA) to verify the adequacy of radiological area boundaries and postings. Specifically, the inspectors walked down numerous radiologically significant work area boundaries (high, locked high, and very high radiation areas) in the Unit 2 and 3 Reactor Buildings and in the Turbine and Radwaste Buildings, and performed confirmatory radiation measurements to verify that access to these areas and to selected radiation areas were properly posted and controlled in accordance with 10 CFR 20, licensee procedures, and Technical Specifications.

b. Findings

There were no findings identified.

# .2 Review of Incident During Work on the Traversing Incore Probe System

a. Inspection Scope

The inspectors reviewed an incident that occurred on May 6, 2000, during attempted replacement of the Unit 3 "D" Traversing Incore Probe (TIP) drive mechanism motor. Specifically, the inspectors walked down the work area and reviewed the licensee's evaluation of the incident as documented in a Root Cause Report. The incident was also discussed with the radiation protection staff and supporting information was independently assessed to determine the adequacy of the licensee's evaluation and corrective actions. The inspectors verified that the licensee's root cause investigation properly characterized the problems associated with the work activity, that root and contributing factors were adequately identified, that the radiological safety significance of the incident was correctly assessed, and that adequate corrective actions were taken or planned.

#### b. Findings

The licensee failed to generate a job specific radiation work permit (RWP) and failed to evaluate the potential radiological hazards associated with replacement of a Unit 3 TIP drive mechanism motor.

The TIP drive mechanism was designed so that the motor drive overrides the torsion spring tension of the cable reel when a TIP detector is being driven into the core, and is equipped with a fail-safe brake that is applied when electrical power is removed from the motor. However, when the motor drive chain is removed, the spring loaded take-up reel is designed to automatically retract the drive cable, unless the reel is pinned or clipped to prevent its recoil.

On May 6, 2000, two electrical maintenance technicians working under a general RWP disconnected the chain drive from the motor so it could be replaced. Unbeknownst to the work crew, this caused the spring loaded take-up reel to rapidly retract the TIP drive cable and detector probe assembly into the drive mechanism housing near the workers position. Fortuitously, the detector had been withdrawn from the reactor core and had decayed to radiation levels of approximately 100 millirem (mrem)/hour on contact. The maintenance technicians did not recognize the potential radiological hazards associated with TIP detectors and were also not familiar with the operation of the drive mechanism and the take-up reel design features. The technicians were equipped with electronic dosimetry (ED), which alarmed when preset dose rates (set at 10 mrem/hour) were exceeded as the workers reached into the drive mechanism housing to continue the motor replacement work. Due to the detector's radiological decay, only about 5 mrem unintended or unplanned dose was received by the workers.

The licensee's root cause evaluation and a concurrent self-assessment of the as-lowas-is-reasonably-achievable (ALARA) program identified several problems associated with the TIP work activity that involved procedures, training and work planning. The licensee also identified a generic problem with the electronic work control system that allowed work to commence without the assignment of a proper RWP. In this instance, the generic problem was compounded by poor communications between the work group and the radiation protection (RP) staff. As a result, the RP department was not aware of the full scope of the TIP system work and therefore missed the opportunity to evaluate its radiological hazards. Corrective actions were documented in the root cause report and the ALARA self-assessment report.

The failure to evaluate the potential radiological hazards associated with replacement of the motor for the TIP drive mechanism, to demonstrate compliance with the occupational dose limits in 10 CFR 20.1201, is a violation of 10 CFR 20.1501(a). This violation is considered a non-cited violation (50-237/2000012-01; 50-249/2000012-01), consistent with Section VI.A of the NRC Enforcement Policy. This violation was entered in the licensee's corrective action program as Condition Report # D2000-02668.

The inspectors evaluated the risk significance of this issue using the Occupational Radiation Safety Significance Determination Process (Appendix C to NRC Manual Chapter 0609, "Significance Determination Process"). The failure to evaluate the radiological hazards associated with the work activity and instruct workers on the

necessary controls to prevent the recoil of the take-up reel reduced the barriers to prevent an unintended exposure. However, the TIP detector had been out of the core and had decayed considerably. Consequently, the detector was not highly activated and its radioactive source strength was not sufficient to produce a significant unintended dose. In addition, the workers were equipped with functioning EDs which alarmed, and an area radiation monitor mounted above the TIP drive mechanisms was operable with its local alarm set sufficiently low to alert workers to elevated radiation levels. Based on these factors, the inspectors concluded that there was not a substantial potential for an overexposure, nor was the licensee's ability to assess worker dose compromised. Therefore, the issue was determined to be of very low safety significance (Green).

# .3 <u>Review of Radiation Work Permits and ALARA Plans</u>

# a. Inspection Scope

The inspectors reviewed several RWPs, associated ALARA plans, and electronic dosimetry alarm setpoints for both dose rate and integrated dose, to ensure conformity with work area radiological conditions given the work activity. The inspectors also verified that adequate work instructions were specified in the RWPs consistent with licensee procedures, in order to maintain worker exposures ALARA.

b. Findings

There were no findings identified.

# .4 <u>Reviews of Radiologically Significant Work</u>

a. <u>Inspection Scope</u>

The inspectors reviewed ALARA plans relative to work in radiologically significant work environments, and attended a pre-job briefing and observed a work activity in a high radiation area. The review was performed to verify the adequacy of surveys, radiological controls, exchange of work area radiological information, and worker performance for compliance with the licensee's procedures. The following work activities were selectively reviewed:

- RWP # 003022, Revision 0, "Unit 3 RWCU Demolition and Noble Metals Pre-Outage Installation," and
- RWP # 004004, Revision 0, "Unit 2/3 Radwaste System Component Maintenance."

# b. Findings

There were no findings identified.

# .5 Control of Non-Fuel Materials Stored in the Spent Fuel Pools

# a. Inspection Scope

The inspectors reviewed the licensee's programmatic controls and current practices for the control of highly activated or contaminated materials (non-fuel) stored within the spent fuel or other storage pools. Procedures were reviewed, radiation protection and reactor services staff were interviewed, and a walkdown of the refuel floor was conducted. The inspectors verified that controls for underwater storage of non-fuel materials was adequate, and that the controls were consistent with the licensee's procedures and with Regulatory Guide 8.38, Information Notice 90-33, and applicable Health Physics Positions in Nuclear Regulatory Guide (NUREG)/CR-5569.

# b. Findings

There were no findings identified.

- .6 Identification and Resolution of Problems
- a. Inspection Scope

The inspectors reviewed the RP Department's self-assessment program, the Nuclear Oversight Department's field observation reports and assessments, the licensee's problem identification form (PIF) database, and a variety of individual PIFs related to radiation worker performance, work practices and high radiation area access controls generated since the fourth quarter of 1999. The inspectors evaluated the effectiveness of the self-assessment process to identify, characterize and prioritize individual problems and repetitive issues and trends, and to implement corrective actions to achieve lasting results.

b. Findings

There were no findings identified.

# **Cornerstone: Public Radiation Safety**

- 2PS3 Radiological Environmental Monitoring and Radioactive Material Control Programs
- .1 Review Of Environmental Monitoring Reports and Data
- a. Inspection Scope

The inspectors reviewed the most current Annual Environmental Monitoring Report, the monthly progress reports for the first quarter of 2000, and assessment reports for changes to the offsite dose calculation manual (ODCM) related to environmental monitoring, sampling location commitments, monitoring and measurement frequencies, land use census, interlaboratory comparison program, and data analysis. These reviews were conducted to verify that the radiological environmental monitoring program

(REMP) was implemented as required by Technical Specifications and the ODCM, and that the licensee's assessments ensured that the changes did not affect its ability to monitor the impacts of radioactive effluent releases on the environment. The inspectors also reviewed the ODCM to verify that environmental monitoring stations were located consistent with the updated final safety analysis report and NRC guidance.

b. Findings

There were no findings identified.

# .2 Walkdowns Of Radiological Environmental Monitoring Stations and Meteorological Tower

a. Inspection Scope

The inspectors conducted a walkdown of six of the eight air sampling stations and twelve of the 64 thermoluminescence dosimeter (TLD) monitoring stations to determine whether they were located as described in the ODCM and to determine the equipment material condition. Records were reviewed and instrument readouts were observed to verify that the meteorological instruments were operable, calibrated, and maintained in accordance with regulatory guidance and the licensee's procedures. Meteorological data readouts and recording instruments in the control room and at the tower were verified operable and compared to determine if there were any line loss differences.

b. Findings

There were no findings identified.

- .3 <u>Review Of REMP Sample Collection and Analysis</u>
- a. Inspection Scope

The inspectors accompanied a REMP technician to observe the collection and preparation of a variety of environmental samples, including surface water, particulate air samples, and well water to verify the sampling was representative and that the sampling techniques were in accordance with procedures. The inspectors observed a technician perform air sampler maintenance field checks, and calibrate an air sample pump to verify they were completed in accordance with procedures. Air sampler calibration and maintenance records for September 1999 through June 2000 were also reviewed to verify the equipment was being maintained in accordance with procedures. Additionally, the inspectors reviewed the most recent results of the licensee's interlaboratory comparison program and the vendor's quality control program to verify the adequacy of the vendor's analytical program.

b. Findings

There were no findings identified.

# .4 Unrestricted Release of Material From the Radiologically Controlled Area

#### a. Inspection Scope

The inspectors evaluated the licensee's controls, procedures and practices for the unrestricted release of material from radiologically controlled areas. Specifically, the inspectors verified that: (1) radiation monitoring instrumentation used to perform surveys for unrestricted release of materials was appropriate; (2) instrument sensitivities were consistent with NRC guidance contained in Inspection and Enforcement (IE) Circular 81-07 and Health Physics Positions in NUREG/CR-5569 for both surface contaminated and volumetrically contaminated materials; (3) criteria for survey and release conformed to NRC requirements; (4) licensee procedures were technically sound and provided clear guidance for survey methodologies; and (5) radiation protection staff adequately implemented station procedures. In addition, the inspectors verified that the licensee identified its plant radionuclide mix and adequately assessed the impact of difficult to detect contaminants (such as those that decay by electron capture) on its unrestricted release program.

b. <u>Findings</u>

There were no findings identified.

- .5 Identification and Resolution of Problems
- a. Inspection Scope

The inspectors reviewed the results of the licensee's REMP self-assessment performed during the first quarter of 2000, to determine whether identified problems were entered into the corrective action program and timely resolved. The inspectors also reviewed the licensee's pre-inspection readiness evaluation of the REMP, which identified the current state of the program and the completion status of the previous self-assessment items.

b. <u>Findings</u>

There were no findings identified.

# 4. OTHER ACTIVITIES

- 4OA1 Performance Indicator (PI) Verification
- a. Inspection Scope

The inspectors reviewed the licensee's PI related data for the occupational radiation safety cornerstone generated during the four quarters preceding the inspection, and assessed its accuracy and completeness against the criteria specified in Nuclear Energy Institute (NEI) 99-02, Revision 0, "Regulatory Assessment Performance Indicator Guideline." Specifically, the inspectors reviewed radiation protection program related

PIFs that potentially dealt with work activities in radiologically significant areas or involved unplanned exposures. The inspectors also independently accessed radiological area access controls and postings during plant walkdowns. In addition, the inspectors reviewed the licensee's assessments and corrective action program to determine if problems with the collection or review of performance indicator data occurred, and interviewed members of the licensee's staff responsible for data acquisition and PI verification and reporting.

b. Findings

There were no findings identified.

#### 4OA5 Temporary Instruction 2515/144 - PI Data Collecting and Reporting Process Review

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's PI data collecting, data analysis and reporting process for the occupational radiation safety cornerstone and the emergency response organization drill participation component of the emergency preparedness cornerstone, to determine whether the licensee was appropriately implementing NRC and industry guidance contained in NEI 99-02, Revision 0. The inspectors verified that procedures for the licensee's performance indicator program were adequately developed and implemented, that data collection and analysis methods were sound, that indicator definitions and reporting elements were consistent with industry guidance, and that licensee staff responsible for data acquisition and analysis understood industry guidance.

b. Findings

There were no findings identified.

#### 4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. Swafford and other members of licensee management and staff at the conclusion of the inspection on July 14, 2000. Additional telephone discussions were held with Mr. Oshier on July 21, 2000. The licensee acknowledged the findings presented. No proprietary information was identified.

# PARTIAL LIST OF PERSONS CONTACTED

# <u>Licensee</u>

P. Boyle, Chemistry Manager S. Butterfield, Regulatory Assurance M. Friedmann, Emergency Planning Coordinator B. Hanson, Operations Manager (Acting) R. Kelly, Regulatory Assurance W. Lipscomb, Training Manager J. Moser, Radiation Protection Manager D. Nestle, REMP/ODCM Health Physicist B. Norris, Radiation Protection Operations Supervisor L. Oshier, Radiation Protection Technical Support Supervisor M. Pavey, Nuclear Oversight B. Rybak, Regulatory Assurance Manager (Acting) B. Rysner, Nuclear Oversight B. Stoffels, Maintenance Manager P. Swafford, Site Vice President D. Villicana. Source Term Reduction Coordinator

# Contractor

A. Lewis, REMP Contractor Technician

NRC

B. Dickson, Resident Inspector

# ITEMS OPENED, CLOSED, AND DISCUSSED

# Opened and Closed

50-237/2000012-01	NCV	Failure to evaluate the radiological hazards
50-249/2000012-01		associated with work on the TIP drive mechanism.

Discussed

None

# LIST OF BASELINE INSPECTION PROCEDURES PERFORMED

The following inspectable-area procedures were used to perform this inspection. Documented findings are contained in the body of the report.

	Inspection Procedure	Report Section
No. 71121.01	Access Control to Radiologically Significant Areas	20S1
No. 71122.03	Radiological Environmental Monitoring Program and Radioactive Material Control Program	2PS3
No. 71151	Performance Indicator Verification	40A1
No. 2515/144	Performance Indicator Data Collecting and	40A5
	Reporting Process	

# PARTIAL LIST OF DOCUMENTS REVIEWED

The following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings.

#### Procedures and Job Standards

RP-AA-304, Revision 3, Unconditional Release Surveys DAP 12-25, Revision 6, Radiation Work Permit Program RP-DR-460, Revision 0, TIP Area Access Controls RP-AA-460, Revision 1, Controls for High and Very High Radiation Areas DRP 5010-01, Revision 9, Radiological Posting and Labeling Requirements RP-DR-TEC-005, Revision 0, NRC/NEI Performance Indicator S.27 Data Collection RS-AA-122-115, Revision 2, PI - Occupational Exposure Control Effectiveness Dresden Policy Statement # 86, Revision 0, NRC/NEI PI Data Collection Forms Offsite Dose Calculation Manual, Chapter 11, Revision 1.5, Radiological Environmental Monitoring Program DFP 0800-39, Revision 10, Control Of Material/Equipment Hanging In Units 2 and 3 Spent Fuel Pools DRP 6100-02, Revision 1, Review Of Environmental And Meteorological Monitoring Reports RP-AA-304, Revision 3, Unconditional Release Surveys TML-SPM-1, Revision 4, Sampling Procedures Manual. RS-AA-122-109, Revision 1, Performance Indicator - Emergency Response Organization Drill Participation Emergency Preparedness Department Training and Reference Material, NRC Performance Indicator 09 (S.19) Guidance, Revision 5, Emergency Response Organization Drill Participation

Dresden Policy Statement # 86, Revision 00, NRC/NEI Performance Indicator Data Collection Forms

# Radiation Work Permits and ALARA Plans

RWP # 003005, Revision 0, Unit 3 Reactor Core Detector System Maintenance RWP # 003022, Revision 0, Unit 3 RWCU Demolition and Noble Metals Pre-Outage Installation RWP # 004004, Revision 0, Unit 2/3 Radwaste System Component Maintenance

#### Audits, Assessments and Related

Self-Assessment Report, January 4, 2000, Program Monitoring and Controls for Iron-55 and Other Difficult to Measure Radionuclides

Self-Assessment Report, May 22-31, 2000, Cross Functional ALARA Program Monthly Self-Assessment Reports for Radiation Protection Department for April and May 2000, and Quarterly Report for the 1<sup>st</sup> Quarter 2000

Self-Assessment Report, June 12-15, 2000, Radiological Posting and Labelin Nuclear Oversight Field Observations, ATI #s 20888-61, 21135-10, and 16896-02, 03, 11, 14, 16, 18, 22, 31, 47, 48, and ATI #s 20888-23, 20888-67, 20888-68, 21135-09, 21135-12, 21135-14, and 25772-56

Radiation Protection Department Pre-Inspection Readiness Evaluation, June 28-30, 2000 Nuclear Oversight Assessment, NOA-12-00-PS02, March 29, 2000, Radwaste Processing, Shipping, and Effluent Monitoring

#### Investigation Reports, Problem Identification Forms and Related

Root Cause Report #28586, 3D Traversing Incore Probe Retracts into Drive Mechanism Housing Due to Inadequate Worker Knowledge

- PIF # D2000-03186, Work Control Process Has Two Different Routing Lists, Can Lead to No RWP
- PIF # D2000-03828, Poor Radworker Practice by IMD During D3 HPCI Drain Pot PM
- PIF # D2000-02018, Inadequate Planning of Shipment Preparation for DAW Barrels
- PIF # D1999-02191 and Apparent Cause Evaluation, Unposted High Radiation Area in Unit 1 Radwaste Yard
- PIF # D2000-02263, Dose Rate Exceeded Without Audible Alarm Noted
- PIF database search results for January 1, 2000 July 11, 2000, Generating Approximately 200 PIFs Which Were Selectively Reviewed During the Inspection
- PIF # D2000-00393, Radioactive Material Found in the Mechanical Maintenance Department Shop
- PIF # D2000-01281, Adverse Trend In ERO Drill Participation Performance Indicator
- PIF # D2000-02077, Contaminated Tool On Dresden Unit 1 MTF

# Other Documents

- Position Paper, Guidance for Applying Iron-55 Scaling Factors for Assessment of DACs and Internal Dose
- High, Locked High and Very High Radiation Area Boundary and Posting Checklist
- Dresden's Drill and Exercise Performance Data Collection Schedule Memorandums, June 2, 2000, July 5, 2000, and July 10, 2000
- Dresden Station Annual Radiological Environmental Operating Report 1999, April 28, 2000

Monthly Progress Reports to ComEd REMP for Dresden Station, January - March, 2000 and January - April, 2000

Murray & Trettle Meteorological Monitoring Program Monthly Report, April 2000

Teledyne Brown Engineering Land Use Census, August 31, 1999

Teledyne Brown Engineering Pump Maintenance, Pump Status, Pump Field Check, and Field Rotameter Calibration Records from September 14, 1998 Through June 16, 2000