December 21, 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 50-237/00-19(DRS); 50-249/00-19(DRS)

Dear Mr. Kingsley:

On December 8, 2000, the NRC completed an inspection at Dresden Units 2 and 3. The enclosed report documents the inspection findings, which were discussed on December 8, 2000, with Mr. Swafford and other members of your staff.

The inspection was an examination of activities conducted under your license as they relate to 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, field observations and interviews with personnel.

No findings of significance were identified.

In accordance with 10 CFR Part 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).

Sincerely,

/RA/

John M. Jacobson, Chief Mechanical Engineering Branch Division of Reactor Safety

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

Enclosure: Inspection Report 50-237/00-19(DRS); 50-249/00-19(DRS)

See Attached Distribution

O. Kingsley

cc w/encl:

R. Krich, Vice President, Regulatory Services

D. Ambler, Regulatory Assurance Manager M. Aguilar, Assistant Attorney General

Chairman, Illinois Commerce Commission

P. Swafford, Site Vice President R. Fisher, Station Manager

DCD - Licensing

State Liaison Officer

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O. Kingsley

 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

AJM DFT LWR (Project Mgr.) J. Caldwell, RIII G. Grant, RIII B. Clayton, RIII C. Ariano (hard copy) DRSIII DRSIII PLB1 JRK1 BAH3

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: License Nos:	50-237; 50-249 DPR-19; DPR-25
Report No:	50-237/00-19(DRS); 50-249/00-19(DRS)
Licensee:	Commonwealth Edison Company
Facility:	Dresden Nuclear Power Station, Units 2 and 3
Location:	6500 North Dresden Road Morris, IL 60450
Dates:	December 4 - 8, 2000
Inspectors:	J. Gavula, Reactor Inspector G. O'Dwyer, Reactor Inspector W. Scott, Reactor Inspector
Approved by:	John M. Jacobson, Chief Mechanical Engineering 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 05000237-00-19(DRS); IR 05000249-00-19(DRS); on 12/4 -12/8, 2000, Commonwealth Edison Company, Dresden Nuclear Power Plant, Units 2 and 3. Evaluations of Changes, Tests, or Experiments, and Permanent Plant Modifications.

The inspection was conducted by reactor engineers from the Division of Reactor Safety. No findings of significance were identified.

Report Details

1. **REACTOR SAFETY**

Cornerstone: Initiating Events, Mitigating Systems and Barrier Integrity

- 1R02 Evaluations of Changes, Tests or Experiments (Attachment 71111.02)
- .1 Review of 10 CFR Part 50 .59 Evaluations and Screenings
- a. Inspection Scope

The inspectors reviewed a sample of nine evaluations performed in accordance with 10 CFR Part 50.59. The evaluations related to permanent plant modifications, setpoint changes, procedure changes, and changes to the Updated Final Safety Analysis Report. The inspectors confirmed that prior NRC approval was not required for the implemented changes. The inspectors also reviewed 14 screenings where the licensee had determined that a full 10 CFR Part 50.59 evaluation was not necessary. The inspectors verified that the licensee's conclusions were correct and consistent with 10 CFR Part 50.59. In addition, the inspectors reviewed a sample of condition reports associated with 10 CFR Part 50.59 evaluation problems. These reviews verified that the licensee's threshold for identifying problems in this area was sufficiently low, and that associated technical concerns and regulatory requirements were appropriately resolved.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (Attachment 71111.17)

.1 Review of Recent Plant Modifications

a. Inspection Scope

The inspectors reviewed a sample of nine design change packages out of approximately 410 that were issued within the last two years. The sample selection incorporated various importance measures for systems based on the licensee's most recent probabilistic risk analysis. The sample of modifications primarily affected mitigating systems, and one of the modifications affected barrier integrity. The inspectors reviewed the modifications to verify that the design was adequate, that the post-modification testing established system or component operability, that design and licensing basis documents were being updated to reflect the modification, and that significant plant procedures were updated to reflect the effects of the modification prior to being used. The appropriateness of the modification design assumptions were validated through the associated calculations, drawings, logic diagrams, and walkdowns. In addition, the inspectors reviewed a sample of condition reports associated with modification problems. These reviews verified that modification issues were identified at a relatively low threshold and that the corrective actions were appropriate.

b. <u>Findings</u>

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA6 Meetings, including Exit

Exit Meeting Summary

The inspectors presented the inspection results to Mr. P. Swafford, and other members of licensee management at the exit meeting held on December 8, 2000. The licensee acknowledged the findings presented and did not identify any materials reviewed by the inspectors as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

<u>Licensee</u>

- P. Swafford, Site Vice President
- R. Fisher, Plant Manager
- P. Chabot, Engineering Manager
- M. Molaei, Rapid Response Team Supervisor
- R. Peak, Design Engineering Manager
- T. Loch, Mechanical Engineering Supervisor
- S. Lawrence, Design Engineer

<u>NRC</u>

B. Dickson, Dresden Resident Inspector

INSPECTION PROCEDURES (IPs) USED

IP 71111.02	Evaluations of Changes, Tests, or Experiments
IP 71111.17	Permanent Plant Modifications
IP 71152	Identification and Resolution of Problems (reference)

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened None

<u>Closed</u> None

Discussed None

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection, including documents prepared by others for the licensee. Inclusion on this list does not imply that NRC inspectors reviewed the documents in their entirety, but, rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort.

Calculations

1591.00694-C-002, DCR 990620, Vacuum Breaker Valve Torque for Valves 2-1601-31A/B 1591.00694-C-004, DCR 990621, Vacuum Breaker Counter Balance Weight Setting for Valves 2-1601-31A/B, 2(3) 1601-32A-F, 2(3)1601-33A-F

29.0202.1033.001, Revision 2, Stress Evaluation/Load Combination for Vacuum Relief Lines, Math Model D3.10

29.0202.1034.01, Revision 1, Stress Report FSAR Evaluation of Model D3.10, Vacuum Relief

29.0202.1032.021, Revision 3, Vacuum Relief Model 3.10 DRE00-0074, Revision 0, Evaluation of the Piping for the Reactor Recirculation Piping Tie-Back Supports on the Venturi Flow Sensing Lines

CWE027.1251, Revision 0, Dresden Units 2 & 3 "B" LP Feedwater Heater Nozzle Repair

Condition Reports Generated as a Result of the Inspection

D2000-06564, Post Modification Test for 9900646 failed to test certain electrical contacts D2000-06566, HPCI Drain Line in close proximity to various conduits D2000-06594, Offsite dose calculation D2000-06598, Corrective Action regarding Unit 2 HPCI turbine stop valve D2000-06600, Replacement of 3-1601-31a/B utilized guidance from NCIG 05 D2000-06601, Seismic Qualification Report Lacks Sufficient Documentation D2000-06602, FCR 990219 for DCP 9900155 was approved without calculation update D2000-06611, Screening was performed as opposed to 10 CFR Part 50.59 Evaluation D2000-06613, Calculation DRE00-0074 Requires Revision D2000-06614, P&ID M-356 Requires Revision

Condition Reports

D1999-05236, Poor Quality 50.59 Screenings Adverse Trend Identified by Engineering D1999-02830, N.O. identified numerical errors in Control Room HVAC calculation D1999-00758, N.O. identifies inadequate 50.59 review for UFSAR change DFL 98-050 D2000-01922, HPCI stop valve repair may not have followed the mod process D2000-02676, Vendor A/E deficiencies and inconsistencies on Calculation DRE00-0014

Drawings

M356, Revision BW, Diagram of Pressure Suppression Piping

M-3821, Revision 2, Loop A Venturi Instrument Lines Low Pressure Taps

M-3822, Revision 2, Loop A Venturi Instrument Lines High Pressure Taps

M-3823, Revision 2, Loop B Venturi Instrument Lines Low Pressure Taps

M-3824, Revision 2, Loop B Venturi Instrument Lines High Pressure Taps

M-4300, Revision A "B" LP Feedwater Heater Shell Repairs

M-4214, Revision A, "C" LP Feedwater Heater Shell Repairs

M-4331, Revision B, Low Pressure Feedwater Heater Extraction Steam Inlet Nozzle Repair "C' Htr

Modifications

9800303, Revision 1, Modify Unit-3 HPCI Aux Oil Pump to Allow Manual Start
9800329, Revision 0, Modify Existing Supports & Add New Support to HPCI Drain Line
9900081, Revision 2, Install four (4) Additional Cells to U2 125 VDC Battery
9900155, Revision 0, Install Recirc Piping Tie-Back Supports
9900158, Revision 2, Replace 3-1601-31A, 3-1601-31B Valves
9900442, Revision 0, Modify 3-0220-58A Internals to O-Ring Style Assembly
9900471, Revision 0, Install U3 Turb Stop VIv Retaining Plate on HPCI 3-2303-STPV
9900560, Revision 2, Repair U3 Feedwater Heater Shell, Extraction Steam Inlet Nozzles C1/2/3
9900646, Revision 0, Reactor Recirc. MG Set Lube Oil Pump Auto Start Circuit Change

10 CFR Part 50.59 Evaluations

1998-03-224H, Revision 0, MSIV 3-0203-1B Liner Upgrade

1998-04-283, Revision 0, Revise the Control Circuit for HPCI AOP "3-2303-AOP"

1999-02-067, Revision 0, Scram Discharge Volume Level Transmitter Replacement

1999-03-100, Revision 0, Install Three Additional Battery Cells to the Unit-2 125 VDC Alternate Batterv

1999-04-163, Revision 0, Changes to UFSAR Chapter 8.3 to Resolve DBI Items 1208, 1962, & 1980

2000-01-034, Revision 1, Input Parameter & Results Changes to Post-LOCA Control Rm Dose 2000-02-048H, Revision 0, Unit-2 Feedwater Control System Tuning Test

2000-02-065, Revision 0, UFSAR Change Package 00-033

2000-03-83, Revision 0, Modify the Reactor Recirc. Motor Generator Controls & Instrumentation.

10 CFR Part 50.59 Screenings

1999-0225, Revision 0, Maintenance and Surveillance of EQ and Safety Related 480 Volt MCC

1999-0304, Revision 0, MSIV Limit Switch Adjustment and Scram Setpoint Check

1999-0669, Revision 0, Unit 2,3, 2/3 DC Battery Charger Capacity Test Procedures

1999-0717, Revision 0, Develop Procedure DOP 4400-11 for Isolation, Draining, and Returning to Service Half the Condenser to Allow On-line Maintenance

1999-0825, Revision 0, Revise the Monthly Station Battery Inspection Procedure to be More Consistent with Tech. Spec. Values

1999-1372, Revision 0, Revise Procedure NSP-AP-4004, Revision-4

2000-0135, Revision 0, U2 Turb Stop VIv Retaining Plate on Hpci 3-2303-Stpv

2000-0754, Revision 0, U3 Turb Stop VIv Retaining Plate on Hpci 3-2303-Stpv Validation

2000-0878, Revision 0, Modify 3-0220-58a Internals to O-ring Style Assembly

2000-2092H, Revision 0, Modify 3-0220-58b Internals to O-ring Style Assembly Validation

2000-2157, Revision 0, Standby Liquid Control Injection Test

2000-2164, Revision 0, Source Range Monitor Operation

2000-2190, Revision 0, Limitorgue Valve Operator Maintenance

2000-2149, Revision 0, FW and MG Set Breaker Time Delay

Miscellaneous

Procedure DOS 1600-13, Revision 19, Suppression Chamber to Reactor Building Vacuum Bkr Full Stroke Exercise Test for 2 (3)-1601-31A and B

FCR 990219, Provide Updated U-Bolt Installation Instructions