March 14, 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: QUAD CITIES NUCLEAR POWER STATION - NRC INSPECTION REPORT 50-254/01-04(DRS); 50-265/01-04(DRS)

Dear Mr. Kingsley:

On February 16, 2001, the NRC completed an inspection at your Quad Cities Nuclear Power Station. The enclosed report documents the inspection findings which were discussed on February 16, 2001, with Mr. Tulon and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, this inspection focused on occupational and public radiation safety, and emergency planning.

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).

Sincerely,

/RA/

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

Docket Nos. 50-254; 50-265
License Nos. DPR-29; DPR-30

Enclosure: Inspection Report 50-254/01-04(DRS);
50-265/01-04(DRS)

See Attached Distribution

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
T. J. Tulon, Site Vice President
G. Barnes, Quad Cities Station Manager
W. Beck, Regulatory Affairs Manager
M. Aguilar, Assistant Attorney General
State Liaison Officer, State of Illinois
State Liaison Officer, State of Iowa
Chairman, Illinois Commerce Commission
W. Leech, Manager of Nuclear
MidAmerican Energy Company

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: QUAD CITIES NUCLEAR POWER STATION - NRC INSPECTION REPORT 50-254/01-04(DRS); 50-265/01-04(DRS)

Dear Mr. Kingsley:

On February 16, 2001, the NRC completed an inspection at your Quad Cities Nuclear Power Station. The enclosed report documents the inspection findings which were discussed on February 16, 2001, with Mr. Tulon and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, this inspection focused on occupational and public radiation safety, and emergency planning.

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).

Sincerely,

/RA/

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

Docket Nos. 50-254; 50-265
License Nos. DPR-29; DPR-30

Enclosure: Inspection Report 50-254/01-04(DRS);
50-265/01-04(DRS)

See Attached Distribution

DOCUMENT NAME: G:DRS\QUA01-04DRS.WPD

To receive a copy of this document, indicate in the box: "**C**" = Copy without attachment/enclosure "**E**" = Copy with attachment/enclosure "**N**" = No copy

OFFICE	RIII		RIII		RIII			
NAME	JHouse:sd		MRing		GShear			
DATE	03/14/01		03/14/01		03/14/01			

OFFICIAL RECORD COPY

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
T. J. Tulon, Site Vice President
G. Barnes, Quad Cities Station Manager
W. Beck, Regulatory Affairs Manager
M. Aguilar, Assistant Attorney General
State Liaison Officer, State of Illinois
State Liaison Officer, State of Iowa
Chairman, Illinois Commerce Commission
W. Leech, Manager of Nuclear
MidAmerican Energy Company

ADAMS Distribution:
AJM
DFT
SNB (Project Mgr.)
R. Mathew, NRR
J. Caldwell, RIII
G. Grant, RIII
B. Clayton, RIII
SRI Quad Cities
C. Ariano (hard copy)
DRP
DRSIII
PLB1
JRK1
BAH3

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-254; 50-265
License Nos:	DPR-29; DPR-30
Report No:	50-254/01-04(DRS); 50-265/01-04(DRS)
Licensee:	Commonwealth Edison Company
Facility:	Quad Cities Nuclear Power Station, Units 1 and 2
Location:	22712 206th Avenue North Cordova, IL 61242
Dates:	February 14-16, 2001
Inspectors:	J. E. House Senior Radiation Specialist T. J. Ploski Senior 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
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

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 05000254-01-04(DRS), IR 05000265-01-04(DRS), on 02/14-02/16/2001, Commonwealth Edison Company, Quad Cities Nuclear Power Station, Units 1 and 2. Radiation Safety Specialist Report.

The inspection was conducted by a senior radiation specialist and a senior emergency preparedness analyst.

Cornerstones: Occupational and Public Radiation Safety, and Emergency Planning

A. Inspector Identified Findings

No findings of significance were identified.

B. Licensee Identified Findings

No findings of significance were identified.

Report Details

Summary of Plant Status: Both Units were at 100 percent power throughout the inspection period.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS2 ALARA Planning and Controls

.1 Radiological Work Planning

a. Inspection Scope

The inspectors reviewed five of the highest radiological exposure jobs conducted during refueling outage Q1R16. The methodology and assumptions used for outage exposure estimates and exposure goals, and the comparison of those estimates to the final job exposures were evaluated. The exposure estimates were based on the as found elevated radiological conditions in the dry-well. Those outage jobs that were greater than 5 person-rem did not exceed the revised dose estimates by more than 50 percent. Worker instructions and requirements including protective clothing, engineering controls to minimize contamination, and the use of predetermined low dose waiting areas were reviewed to determine if the licensee had maintained the radiological exposure as low as is reasonably achievable (ALARA) for those jobs.

b. Findings

No findings of significance were identified.

.2 Source-Term Reduction and Control

a. Inspection Scope

The inspectors evaluated the licensee's source term reduction program in order to verify that the licensee had an effective program in place, and was knowledgeable of plant source term and techniques for its reduction. Areas reviewed included:

Cobalt-60 trending in reactor coolant
Hydrogen water chemistry cycling control to reduce crud bursts
Zinc injection into reactor coolant
Hot spot reduction program
Hydrolasing for dose reduction in lines
Floor drain cleaning-installation of strainer socks
Condensate demineralizer element design
Stellite reduction
Vessel nozzle flushing
System flushing
Shutdown cooling loop management
Noble metal chemical addition

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

.1 Emergency Planning

a. Inspection Scope

The inspectors reviewed and discussed the licensee's methods and procedures for assessing information used to determine the values of the following emergency preparedness performance indicators for the time period ending December 31, 2000: Alert and Notification System (ANS); Emergency Response Organization (ERO) Drill Participation; and Drill and Exercise Performance (DEP). Records of Control Room Simulator examination sessions, periodic ANS tests, and excerpts of drill and exercise evaluations were also reviewed.

b. Findings

No findings of significance were identified.

.2 Radiological Effluents

a. Inspection Scope

The inspectors reviewed licensee effluent release data for calendar year 2000. The accuracy and completeness of the data was assessed against the criteria specified in Nuclear Energy Institute 99-02, Revision 0, "Regulatory Assessment Performance Indicator Guideline." In addition, the inspectors interviewed members of the licensee's staff who were responsible for performance indicator data acquisition, verification and reporting, and verified that their review and assessment of the data was adequate.

b. Findings

No findings of significance were identified.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. Tulon, and other members of licensee management and staff at the conclusion of the inspection on February 16, 2001. The licensee acknowledged the information presented. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

E. Anderson, Radiation Protection Manager
D. Barker, Radiation Protection Supervisor
G. Barnes, Station Manager
W. Beck, Manager, Regulatory Assurance
P. Behrens, Chemistry Manager
S. Darin, Engineering
T. Fuhs, Regulatory Assurance
D. Kallenbach, Radiation Protection
J. McMillan, Radiation Protection
K. Ohr, Radiation Protection Supervisor
J. Sirovy, Nuclear Oversight Assessor
T. Tulon, Site Vice-President

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

ALARA	As-Low-As-Is-Reasonably Achievable
ANS	Alert and Notification System
CFR	Code of Federal Regulations
DEP	Drill and Exercise Performance
DRS	Division of Reactor Safety
ERO	Emergency Response Organization
NRC	Nuclear Regulatory Commission
OA	Other Activities
OS	Occupational Radiation Safety
Q1R16	Unit 1 Refueling Outage 16
RWP	Radiation Work Permit

PARTIAL LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection. 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.

Condition Reports

Q2000-01078; Q2000-01082; Q2000-01730; Q2000-01731; Q2000-02548; Q2000-02605; Q2000-02940; Q2000-04030

Assessments and Audits

Focus Area Assessment (AR-2949) "Evaluation of DEP Under PI-08 (S.18) During Licensed Operator Requalification Training Simulator Exams"

Procedures

RS-AA-122-108, "PI - ERO Drill/Exercise Performance," Revisions d, 0, and 1
RS-AA-122-109, "PI - ERO Drill Participation," Revisions 0 and 1
RS-AA-122-110, "PI - ANS Reliability," Revisions 0 and 1

Radiation Work Permits

001035 1-D Inboard MSIV: Overhaul/Repair
001046 U1 MSIP Weld Treatment
001007 U1 Dry-well Shielding Activities
001043 ISI Dry-well Insulation Support
001044 ISI Dry-well Scaffold Support
001045 ISI Dry-well Preparation Inspection Welds
003600 ISI Inspections and Support

Miscellaneous

"2000 Source Term Reduction Plan," Quad Cities Station
"Use of Cobalt Free Alloys in Valves," Revision 0, July 7, 2000
List of Completed/Planned Hydrolase Jobs
List of Hot Spots: Relative Dose Effect
Training and Reference Material Guidance - "DEP NRC PI-08 (S.18)," Revision 7
"Exelon Semi-Annual Siren Report, July - December 2000 - with Annual Summary for 2000"
"Quad Cities Off-Site Siren Test Plan," Revision 2
"Siren Daily Operability Data Sheets - 2000"
"Siren Monthly Operability Reports - 2000"
"Site (monthly) PI Validation Sheets" for Period Ending December 31, 2000
Records associated with licensed operator requalification exams
Records associated with drills and the biennial exercise conducted during 2000