

August 2, 2004

Mr. Christopher M. Crane
President and Chief Nuclear Officer
Exelon Nuclear
Exelon Generation Company, LLC
Quad Cities Nuclear Power Station
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2
NRC EMERGENCY PREPAREDNESS INSPECTION
REPORT 05000254/2004008(DRS); 05000265/2004008(DRS)

Dear Mr. Crane:

On July 23, 2004, the NRC completed an inspection at your Quad Cities Nuclear Power Station. The enclosed report documents the inspection findings, which were discussed on July 23, 2004, with Mr. R. Gideon and 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 emergency preparedness, including your staff's determinations of performance indicators for the Emergency Preparedness Cornerstone.

On the basis of the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR Part 2.390 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/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA by Steven Orth Acting for/

Kenneth Riemer, Chief
Plant Support Branch
Division of Reactor Safety

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

Enclosure: Inspection Report 05000254/2004008(DRS);
05000265/2004008(DRS)

See Attached Distribution

cc w/encl: Site Vice President - Quad Cities Nuclear Power Station
Plant Manager - Quad Cities Nuclear Power Station
Regulatory Assurance Manager - Quad Cities Nuclear Power Station
Chief Operating Officer
Senior Vice President - Nuclear Services
Senior Vice President - Mid-West Regional
Operating Group
Vice President - Mid-West Operations Support
Vice President - Licensing and Regulatory Affairs
Director Licensing - Mid-West Regional
Operating Group
Manager Licensing - Dresden and Quad Cities
Senior Counsel, Nuclear, Mid-West Regional
Operating Group
Document Control Desk - Licensing
Vice President - Law and Regulatory Affairs
Mid American Energy Company
Assistant Attorney General
Illinois Department of Nuclear Safety
State Liaison Officer, State of Illinois
State Liaison Officer, State of Iowa
Chairman, Illinois Commerce Commission
D. Tubbs, Manager of Nuclear
MidAmerican Energy Company
W. King, FEMA Region V

August 2, 2004

Mr. Christopher M. Crane
President and Chief Nuclear Officer
Exelon Nuclear
Exelon Generation Company, LLC
Quad Cities Nuclear Power Station
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2
NRC EMERGENCY PREPAREDNESS INSPECTION
REPORT 05000254/2004008(DRS); 05000265/2004008(DRS)

Dear Mr. Crane:

On July 23, 2004, the NRC completed an inspection at your Quad Cities Nuclear Power Station. The enclosed report documents the inspection findings, which were discussed on July 23, 2004, with Mr. R. Gideon and 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 emergency preparedness, including your staff's determinations of performance indicators for the Emergency Preparedness Cornerstone.

On the basis of the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR Part 2.390 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/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA by Steven Orth Acting for/

Kenneth Riemer, Chief
Plant Support Branch
Division of Reactor Safety

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

Enclosure: Inspection Report 05000254/2004008(DRS);
05000265/2004008(DRS)

See Attached Distribution

DOCUMENT NAME: G:DRS\ML042150426.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	E	RIII	N	RIII	N	RIII
NAME	TPloski:tr		TPloski for RJickling		MRing		SOrth for KRiemer
DATE	07/30/04		07/30/04		07/30/04		08/02/04

OFFICIAL RECORD COPY

cc w/encl: Site Vice President - Quad Cities Nuclear Power Station
Plant Manager - Quad Cities Nuclear Power Station
Regulatory Assurance Manager - Quad Cities Nuclear Power Station
Chief Operating Officer
Senior Vice President - Nuclear Services
Senior Vice President - Mid-West Regional
Operating Group
Vice President - Mid-West Operations Support
Vice President - Licensing and Regulatory Affairs
Director Licensing - Mid-West Regional
Operating Group
Manager Licensing - Dresden and Quad Cities
Senior Counsel, Nuclear, Mid-West Regional
Operating Group
Document Control Desk - Licensing
Vice President - Law and Regulatory Affairs
Mid American Energy Company
Assistant Attorney General
Illinois Department of Nuclear Safety
State Liaison Officer, State of Illinois
State Liaison Officer, State of Iowa
Chairman, Illinois Commerce Commission
D. Tubbs, Manager of Nuclear
MidAmerican Energy Company
W. King, FEMA Region V

ADAMS Distribution:

AJM
DFT
LWR
RidsNrrDipmlipb
GEG
HBC
KKB
CAA1
C. Pederson, DRS (hard copy - IR's only)
DRPIII
DRSIII
PLB1
JRK1
ROPreports@nrc.gov

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000254/2004008(DRS); 05000265/2004008(DRS)

Licensee: Exelon Generation Company, LLC

Facility: Quad Cities Nuclear Power Station, Units 1 and 2

Location: 22710 206th Avenue North
Cordova, IL 61242

Dates: July 19 through July 23, 2004

Inspectors: T. Ploski, Senior Emergency Preparedness Inspector
R. Jickling, Emergency Preparedness Inspector
K. Stoedter, Senior Resident Inspector

Observers: A. Garmoe, Reactor Engineer
G. Roach, Reactor Engineer

Approved by: K. Riemer, Chief
Plant Support Branch
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000254/2004008(DRS), 05000265/2004008(DRS); 07/19/2004 - 07/23/2004; Quad Cities Nuclear Power Station, Units 1 and 2; Emergency Preparedness Specialist Report.

The report covers a one-week baseline inspection by two regional emergency preparedness inspectors and a resident inspector. The inspection focused on the Emergency Preparedness Cornerstone in the Reactor Safety strategic performance area during the biennial emergency preparedness exercise. This inspection also included a review of records related to the three emergency preparedness performance indicators for the period January 1, 2004 through June 30, 2004. No findings of significance were identified.

The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector-Identified and Self-Revealed Findings

None.

B. Licensee-Identified Violations

None.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation (71114.01)

a. Inspection Scope

The inspectors reviewed the July 2004 biennial emergency preparedness exercise's objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's radiological emergency plan and to verify that the exercise's simulated problems provided an acceptable framework to support demonstration of the licensee's capability to implement its plan. The inspectors also reviewed records of emergency preparedness drills, which were conducted between January 2004 and June 2004 to determine whether those drills' scenarios were sufficiently different from the scenario used in the July 2004 exercise.

The inspectors evaluated the licensee's exercise performance, focusing on the risk-significant activities of emergency classification, notification, and protective action decision making, as well as implementation of accident mitigation strategies in the following emergency response facilities:

- Control Room Simulator;
- Technical Support Center (TSC);
- Operations Support Center (OSC); and
- Emergency Operations Facility (EOF).

The inspectors also assessed the licensee's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interfaces with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the licensee's emergency plan.

The inspectors attended post-exercise critiques in the TSC, OSC, and EOF to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators to obtain the licensee's refined assessments of its exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and assessments to determine the licensee's ability to adequately critique its exercise performance.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification (71151)

a. Inspection Scope

The inspectors reviewed the licensee's records associated with each of the three emergency preparedness PIs to verify that the licensee's program was implemented consistent with the industry guidelines in Nuclear Energy Institute publication No. 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 2, and related licensee procedures. Specifically, licensee records related to the performance of the Alert and Notification System (ANS), key Emergency Response Organization (ERO) members' drill participation, and Drill and Exercise Performance (DEP) were reviewed to verify the accuracy and completeness of the PI data submitted to NRC for the period from January 2004 through June 2004. The following PIs were reviewed:

Common

- ANS;
- ERO Drill Participation; and
- DEP.

b. Findings

No findings of significance were identified.

4OA6 Meetings

.1 Exit Meeting

An exit meeting was conducted for Emergency Preparedness with Mr. R. Gideon and other members of licensee management and staff at the conclusion of the inspection on July 23, 2004. The licensee acknowledged the information presented. No proprietary information was identified.

.2 Public and Media Briefing

On July 23, 2004, an inspector summarized the NRC's preliminary conclusions on the licensee's exercise and critique performances at public and media briefings hosted by Federal Emergency Management Agency Regions V and VII staffs in Cordova, Illinois.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

J. Bartlett, Operations Training Manager
W. Beck, Regulatory Assurance Manager
G. Boerschig, Work Control Manager
J. Burkhead, Nuclear Oversight Lead Assessor
R. Gideon, Station Manager
W. Harris, Emergency Preparedness Coordinator
R. Mika, Corporate Emergency Preparedness Exercise Coordinator
T. Wojcik, Engineer

Illinois Emergency Management Agency

R. Ganser, Resident Inspector

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened and Closed

None.

Discussed

None.

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1EP1 Exercise Evaluation

Quad Cities Station Exercise Scenario Manual; dated July 21, 2004

Pre-Exercise Drill Scenario Manual; dated June 16, 2004

Quad Cities Station 2004 Pre-Exercise Findings and Observations Report; dated July 19, 2004

Draft Quad Cities Station 2004 Exercise Findings and Observations Report; undated

Drill Manual; Quad Cities Station Quarterly PI Drill on April 23, 2004

Drill Manual; Quad Cities Station Quarterly PI Drill on April 30, 2004

Drill Manual; Quad Cities Station Quarterly PI Drill on May 7, 2004

Drill Manual; Quad Cities Station Quarterly PI Drill on May 14, 2004

Quad Cities Station Annex to the Exelon Standardized Emergency Plan; Revision 18

EP-AA-110; Assessment of Emergencies; Revision 4

EP-AA-110-301; Core Damage Assessment - Boiling Water Reactors; Revision 2

EP-AA-111; Emergency Classification and Protective Action Recommendations; Revision 7

EP-AA-112; Emergency Response Organization and Emergency Response Facility Activation and Operation; Revision 8

EP-AA-112-100; Control Room Operation; Revision 5

EP-AA-112-200; TSC Activation and Operation; Revision 4

EP-AA-112-201; TSC Command and Control; Revision 1

EP-AA-112-202; TSC Facility Support Group; Revision 1

EP-AA-112-203; TSC Operations Group; Revision 1

EP-AA-112-204; TSC Technical Support Group; Revision 1

EP-AA-112-205; TSC Maintenance Group; Revision 1

EP-AA-112-206; TSC Radiation Protection/Chemistry Group; Revision 1

EP-AA-112-300; OSC Activation and Operation; Revision 4

EP-AA-112-400; EOF Activation and Operation; Revision 4

EP-AA-112-402; EOF Command and Control; Revision 1

EP-AA-112-403; EOF Logistics Support Group; Revision 2

EP-AA-112-404; EOF Technical Support Group; Revision 1

EP-AA-112-405; EOF Protective Measures Group; Revision 1

EP-AA-113; Personnel Protective Actions; Revision 4

EP-AA-114; Notifications; Revision 4

EP-MW-110-200; Dose Assessment; Revision 2

EP-MW-114-100; Midwest Region Offsite Notifications; Revision 3

4OA1 Performance Indicator Verification

Quad Cities Station's Emergency Planning Zone Sirens' Monthly Operability Reports - January 2004 Through June 2004

LS-AA-2110; Monthly PI Data Elements for ERO Drill Participation - January 2004 Through June 2004; Revision 6

LS-AA-2120; Monthly PI Data Elements for Drill/Exercise Performance - January 2004 Through June 2004; Revision 4

LS-AA-2130; Monthly PI Data Elements for ANS Reliability - January 2004 Through June 2004; Revision 4

Quad Cities Station June 28, 2004 Unusual Event Critique Report; dated July 9, 2004

NRC Event Report 40846; Unusual Event at Quad Cities Station Due to Earthquake

Condition Report 226627; Potential Inadvertent Compromise of April 2004 Drill Scenario PI Opportunity

LIST OF ACRONYMS USED

ANS	Alert and Notification System
CRS	Control Room Simulator
DEP	Drill and Exercise Performance
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
NRC	Nuclear Regulatory Commission
NUREG	Nuclear Regulatory Guide
OSC	Operations Support Center
PI	Performance Indicator
TSC	Technical Support Center