Mr. Charles G. Pardee Chief Nuclear Officer and Senior Vice President Exelon Generation Company, LLC 4300 Winfield Road Warrenville, IL 60555

SUBJECT: ANNUAL ASSESSMENT LETTER - QUAD CITIES NUCLEAR POWER

STATION, UNITS 1 AND 2 (05000254/2008001; 05000265/2008001)

Dear Mr. Pardee:

On February 13, 2008, the NRC staff completed its performance review of Quad Cities Nuclear Power Station, Units 1 and 2. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2007. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only - Security Related Information" will include the Security Cornerstone review and resultant inspection plan.

Overall, Quad Cities Nuclear Power Station, Units 1 and 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

While plant performance for Unit 1 for the most recent quarter is within the Licensee Response column of the Action Matrix, there was a safety significant inspection finding affecting the first quarter of the assessment cycle. Specifically, Quad Cities Nuclear Power Station, Unit 1, was in the Regulatory Response Column of the NRC's Action Matrix for the first quarter of CY 2007 based on one White finding in the Mitigating Systems Cornerstone for failure to verify that the electromatic relief valves actuator design was suitable for operation at the increased vibration levels experienced at extended power uprate power levels. On December 31, 2006, we were notified by your staff of your readiness for the NRC to conduct a supplemental inspection to review the actions taken to address the White finding in the Mitigating Systems Cornerstone. We completed supplemental inspection procedure 95001 on February 23, 2007. Based on the results of this inspection, no findings of significance were identified.

C. Pardee -2-

In our mid-cycle letter dated August 31, 2007, we advised you of a substantive cross-cutting issue in the area of Human Performance with a cross-cutting theme in the aspect of documentation (H.2(c)) from Inspection Manual Chapter 0305. We note that the number of cross-cutting issues in the area of Human Performance with an aspect of documentation increased since the mid-cycle letter. We also note that you have conducted a root and common cause analysis and have assembled a comprehensive corrective action plan. However, these corrective actions were not fully implemented as of the end of the period. Accordingly, this substantive cross-cutting issue will remain open until the number of findings with the same cross-cutting aspect is reduced or until the NRC gains confidence in the performance of the corrective action program to evaluate and correct human performance problems. In accordance with Inspection Manual Chapter 0305, we request that you provide a response to this substantive cross-cutting issue, including your plans to resolve the issue, during the annual public meeting.

The enclosed inspection plan details the inspections, including baseline and other infrequently conducted inspections, less those related to security, scheduled through June 30, 2009. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections scheduled include: biennial PI&R inspection and component design bases inspection. The inspections in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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), accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Mark Ring at 630-829-9703 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA by Gary L. Shear, Acting for/

Cynthia D. Pederson, Director Division of Reactor Projects

Docket Nos. 50-254; 50-265; 72-053 License Nos. DPR-29; DPR-30

Enclosure: Quad Cities Inspection/Activity Plan

<u>DISTRIBUTION</u>: See next page Letter to C. Pardee from C. Pederson dated March 3, 2008

SUBJECT: ANNUAL ASSESSMENT LETTER - QUAD CITIES NUCLEAR POWER

STATION, UNITS 1 AND 2 (05000254/2008001; 05000265/2008001)

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 and Senior Vice President

Senior Vice President - Midwest Operations Senior Vice President - Operations Support Vice President - Licensing and Regulatory Affairs Director Licensing - Licensing and Regulatory Affairs Manager Licensing - Clinton, Dresden and Quad Cities

**Associate General Counsel** 

Document Control Desk - Licensing

**Assistant Attorney General** 

J. Klinger, State Liaison Officer, State of Illinois

State Liaison Officer, State of Iowa

Chairman, Illinois Commerce Commission Illinois Emergency Management Agency Vice President - Law and Regulatory Affairs

Chief Radiological Emergency Preparedness Section,

Dept. Of Homeland Security D. Tubbs, Manager of Nuclear

Chairman, Rock Island County Board

Rock Island County Sheriff

Coordinator, Rock Island Emergency Services and Disaster

Chairman, Whiteside County Board

Whiteside County Sheriff

Coordinator, Whiteside County Emergency Services

Chairman, Board of Supervisors

Clinton County Sheriff

Coordinator, Clinton County Emergency Management

Scott County Administrator

Scott County Sheriff

Coordinator, Scott County Emergency Management

Mayor of Albany

Mayor of Rapids City

President, Village of Port Byron President, Village of Cordova

Mayor of Camanche

Mayor of Clinton

Clinton City Administrator

Mayor of Low Moor

Mayor of LeClaire

LeClaire City Administrator

Mayor of Princeton Mayor of McCausland

INPO

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Enclosure: Quad Cities Inspection/Activity Plan

DISTRIBUTION: See next page

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Letter to C. Pardee from C. Pederson dated March 3, 2008

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## **DISTRIBUTION**:

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## **Quad Cities**

## Inspection / Activity Plan

03/01/2008 - 06/30/2009

No. of Staff

**Planned Dates** 

Inspection

Inspection Activity	Title	on Site	Start	End	Туре
BI ENG - ENGIN	EERING INSERVICE INSPECTION	1			
IP 7111108G	Inservice Inspection Activities - BWR		03/03/2008	03/28/2008	Baseline Inspections
BI RP - RADIA	TION PROTECTION BASELINE INSPECTION	1			
IP 7112101	Access Control to Radiologically Significant Areas		03/10/2008	03/14/2008	Baseline Inspections
IP 7112102	ALARA Planning and Controls		03/10/2008	03/14/2008	Baseline Inspections
IP 71151-OR01	Occupational Exposure Control Effectiveness		03/10/2008	03/14/2008	Baseline Inspections
BI RP - RADIA	TION PROTECTION BASELINE INSPECTION	1			
IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program (REMP)	ogram	06/02/2008	06/06/2008	Baseline Inspections
IP 71151-PR01	RETS/ODCM Radiological Effluent		06/02/2008	06/06/2008	Baseline Inspections
BI PI&R - BIENN	IAL PI&R INSPECTION	4			
IP 71152B	Identification and Resolution of Problems		07/21/2008	08/08/2008	Baseline Inspections
BI EP - EP EXI	ERCISE INSPECTION / PI VERIFICATION	3			
IP 7111401	Exercise Evaluation		08/25/2008	08/29/2008	EP Baseline Inspection
IP 71151-EP01	Drill/Exercise Performance		08/25/2008	08/29/2008	Baseline Inspections
IP 71151-EP02	ERO Drill Participation		08/25/2008	08/29/2008	Baseline Inspections
IP 71151-EP03	Alert & Notification System		08/25/2008	08/29/2008	Baseline Inspections
BI RP - RADIA	TION PROTECTION BASELINE INSPECTION	1			
IP 7112101	Access Control to Radiologically Significant Areas		08/25/2008	08/29/2008	Baseline Inspections
IP 7112102	ALARA Planning and Controls		08/25/2008	08/29/2008	Baseline Inspections
IP 71151-BI01	Reactor Coolant System Activity		08/25/2008	08/29/2008	Baseline Inspections
BI ENG - COMP	ONENT DESIGN BASES INSPECTION	5			
IP 7111121	Component Design Bases Inspection		09/22/2008	10/24/2008	Baseline Inspections
2515/171 - TI 2515	5/171 B5B PHASE 2 AND 3	2			
IP 2515/171	VERIFICATION OF SITE SPECIFIC IMPLEMENTATION OF B.5.B PHASE 2 & 3 MITIGATING	3	11/17/2008	11/21/2008	Generic Safety Inspection
BI RP - RADIA	TION PROTECTION BASELINE INSPECTION	1			
IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		12/08/2008	12/12/2008	Baseline Inspections
BI ENG - TRIENI	NIAL HEAT SINK INSPECTION	1			
IP 7111107B	Heat Sink Performance		02/02/2009	02/06/2009	Baseline Inspections
BI EP - EP RO	UTINE INSPECTION / PI VERIFICATION	1			
IP 7111402	Alert and Notification System Testing		03/02/2009	03/06/2009	EP Baseline Inspection
IP 7111403	Emergency Response Organization Augmentation Testing		03/02/2009	03/06/2009	EP Baseline Inspection
IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		03/02/2009	03/06/2009	EP Baseline Inspection
IP 71151-EP01	Drill/Exercise Performance		03/02/2009	03/06/2009	Baseline Inspections
IP 71151-EP02	ERO Drill Participation		03/02/2009	03/06/2009	Baseline Inspections
IP 71151-EP03	Alert & Notification System		03/02/2009	03/06/2009	Baseline Inspections

## Quad Cities Inspection / Activity Plan 03/01/2008 - 06/30/2009

Inspection Activity	Title	No. of Staff on Site	Planned Start	d Dates End	Inspection Type
	TION PROTECTION BASELINE INSPECTION	1			
IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		03/09/2009	03/13/2009	Baseline Inspections
IP 71151-OR01	Occupational Exposure Control Effectiveness		03/09/2009	03/13/2009	Baseline Inspections
BI ENG - ENGIN	EERING INSERVICE INSPECTION	1			
IP 7111108G	Inservice Inspection Activities - BWR		05/04/2009	05/29/2009	Baseline Inspections
BI RP - RADIA	TION PROTECTION BASELINE INSPECTION	1			
IP 7112101	Access Control to Radiologically Significant Areas		05/18/2009	05/26/2009	Baseline Inspections
IP 7112202	Radioactive Material Processing and Transportation		05/18/2009	05/26/2009	Baseline Inspections