August 31, 2006

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: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN - QUAD CITIES NUCLEAR POWER STATION

Dear Mr. Crane:

On August 7, 2006, the NRC staff completed its performance review of the Quad Cities Nuclear Power Station for the first half of the calendar year 2006 assessment cycle. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results over the previous 12 months. 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 physical protection information. A separate letter designated and marked as "Exempt from Public Disclosure in Accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Plant performance for the most recent quarter for Quad Cities Unit 1 was within the Regulatory Response column of the NRC's Action Matrix based on one inspection finding being classified as having low to moderate safety significance (White) in the mitigating systems cornerstone. The White finding and related violation were finalized in a letter dated June 29, 2006, and related to the failure to verify that the electromatic relief valve (ERV) actuator design was suitable for operation at the increased vibration levels experienced at extended power uprate (EPU) power levels. As a result, in addition to conducting the reactor oversight process baseline inspection at Unit 1, a supplemental inspection using Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," is tentatively planned to be conducted in the first quarter of 2007, pending the completion of your planned corrective actions, described in your response letter as scheduled for the end of 2006.

Plant performance for the most recent quarter for Unit 2 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 baseline inspections at Unit 2.

C. Crane

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through March 31, 2008. 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. In addition, the resident inspectors plan to perform Temporary Inspection 2515/169, "Mitigating Systems Performance Index (MSPI) Verification," before the end of calendar year 2006. The inspections in the last nine months of the inspection plan are tentative and may be revised at the end-of-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 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 http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

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

Sincerely,

/**RA**/

Mark A. Satorius, 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

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DATE	08/31/2006	08/31/2006			

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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 Emergency Management Agency State Liaison Officer, State of Illinois State Liaison Officer, State of Iowa Chairman, Illinois Commerce Commission D. Tubbs, Manager of Nuclear MidAmerican Energy Company Chairman, Rock Island County Board Rock Island County Sheriff Coordinator, Rock Island Emergency Services and 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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Quad Cities Inspection / Activity Plan 09/01/2006 - 03/31/2008

Unit		Activity		Planned Dates Start End		Inspection Type
Number	Inspection Activity		on Site	Sidri	Ena	Туре
		ONENT DESIGN BASES INSPECTION	6			
1,2	IP 7111121	Component Design Bases Inspection		08/14/2006	09/15/2006	Baseline Inspections
	7112203 - REMP		1			
1,2	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control P		10/09/2006	10/13/2006	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		10/09/2006	10/13/2006	Baseline Inspections
		LEM IDENTIFICATION AND RESOLUTION	4			
1,2	IP 71152B	Identification and Resolution of Problems		11/27/2006	12/15/2006	Baseline Inspections
		SINK INSPECTION	1			
1,2	IP 7111107B	Heat Sink Performance		12/18/2006	12/22/2006	Baseline Inspections
		UMENTATION & SCBA	1			
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		02/05/2007	02/09/2007	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		02/05/2007	02/09/2007	Baseline Inspections
		LINE EP INSPECTION	1			
1,2	IP 7111402	Alert and Notification System Testing		02/12/2007	02/16/2007	Baseline Inspections
1,2	IP 7111403	Emergency Response Organization Augmentation Testing		02/12/2007	02/16/2007	Baseline Inspections
1,2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		02/12/2007	02/16/2007	Baseline Inspections
1,2	IP 71151-EP01	Drill/Exercise Performance		02/12/2007	02/16/2007	Baseline Inspections
1,2	IP 71151-EP02	ERO Drill Participation		02/12/2007	02/16/2007	Baseline Inspections
1,2	IP 71151-EP03	Alert & Notification System		02/12/2007	02/16/2007	Baseline Inspections
	ISI - ISI BA	SELINE INSPECTION	1			
1	IP 7111108G	Inservice Inspection Activities - BWR		02/12/2007	02/16/2007	Baseline Inspections
	7112102 - OUTA	GE: ACC CNTL & ALARA	1			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		05/07/2007	05/11/2007	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		05/07/2007	05/11/2007	Baseline Inspections
	FY 2007 - QUAD	CITIES INIT PREP 05/2007	3			
1	W90150	OL - INITIAL EXAM - QUAD CITIES - MAY/JUNE 2007		05/14/2007	05/18/2007	Not Applicable
	FY 2007 - QUAD	CITIES INIT EXAM 06/2007	3			
1	W90150	OL - INITIAL EXAM - QUAD CITIES - MAY/JUNE 2007		06/04/2007	06/15/2007	Not Applicable
	MOD5059 - MODIF	FCATION/50.59 INSPECTION	2			
1,2	IP 7111102	Evaluation of Changes, Tests, or Experiments		08/20/2007	09/07/2007	Baseline Inspections
1,2	IP 7111117B	Permanent Plant Modifications		08/20/2007	09/07/2007	Baseline Inspections
	7112202 - RADW	1				
1,2	IP 7112202	Radioactive Material Processing and Transportation		08/27/2007	08/31/2007	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		08/27/2007	08/31/2007	Baseline Inspections

This report does not include INPO and OUTAGE activities. This report shows only on-site and announced inspection procedures. Page 2 of 2

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Quad Cities Inspection / Activity Plan 09/01/2006 - 03/31/2008

Unit			No. of Staff	Planned Dates		Inspection
Number	Inspection Activity	Title	on Site	Start	End	Туре
	ISFSI - ISFSI I	NSPECTION	1			
1,2	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants		09/01/2007	10/30/2007	Other Routine
	MAINRULE - MAINT	ENANCE EFFECTIVENESS INSPECTION	1			
1,2	IP 7111112B	Maintenance Effectiveness		09/24/2007	09/28/2007	Baseline Inspections
	71111.11 - LIC OF	PERATOR REQUAL PROGRAM EVALUATION	2			
1,2	IP 7111111B	Licensed Operator Requalification Program		10/29/2007	11/03/2007	Baseline Inspections
	7112102 - ALARA	A & PI VERIFICATION	1			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		11/26/2007	11/30/2007	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		11/26/2007	11/30/2007	Baseline Inspections
	ISI - ISI INS	PECTION	1			
2	IP 7111108G	Inservice Inspection Activities - BWR		03/03/2008	03/28/2008	Baseline Inspections
	71121.02 - OUTAG	GE ALARA & ACCESS CTRL	1			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		03/10/2008	03/14/2008	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		03/10/2008	03/14/2008	Baseline Inspections