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: ANNUAL ASSESSMENT LETTER - QUAD CITIES NUCLEAR POWER

STATION (REPORT 50-254/05-01; 50-265/05-01)

Dear Mr. Crane:

On February 9, 2005, the NRC staff completed its end-of-cycle plant performance assessment of the Quad Cities Nuclear Power Station. The end-of-cycle review involved the participation of all reactor technical divisions in evaluating performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2004. 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 so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections that may conflict with your plant activities.

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.

Overall, Quad Cities 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 only reactor oversight process (ROP) baseline inspections at your facility through September 30, 2006. In addition, we are in the process of performing inspection procedure 71004, "Extended Power Uprate," to inspect activities related to the steam dryer replacement on Unit 1 and plan to perform the same inspection during the proposed Unit 2 mid-cycle outage to replace the steam dryer.

As discussed in our Annual Assessment Letter, dated March 4, 2004, and in our Mid-Cycle Performance Review Letter, dated August 30, 2004, both the extended power uprates (EPU) and the high radiological source term in both units continued to be major issues at Quad Cities. In response to several steam dryer failures, two on Unit 2 in mid-2002 and 2003 and one on Unit 1 in late 2003, both units have operated at pre-EPU levels for the majority of the

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assessment period as specified by your commitments to us in letters dated April 2, 2004, and May 12, 2004. In addition, you informed the NRC of your plans to replace the steam dryers on both units. Several meetings were held between representatives from Exelon and the NRC in late 2004 to discuss various EPU-related aspects including flow-induced vibration, loads and stresses, activities for replacing the steam dryers, other equipment vulnerabilities and monitoring plans for potentially affected equipment. We plan to continue those discussions in 2005. With respect to the station's radiological source term, we acknowledge the efforts and progress you have made in addressing this issue through the implementation of your source term reduction program and modifications to Unit 2. We will continue to follow your progress in source term reduction at the site, including your planned modifications to Unit 1.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through September 30, 2006. The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. The plan also contains inspections using Independent Spent Fuel Storage Installation procedures. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review meeting.

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). ADAMS is 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 this inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at (630) 829-9703 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Mark A. Ring, Chief Reactor Projects Branch 1 Division of Reactor Projects

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

Enclosure: Quad Cities Inspection/Activity Plan

See Attached Distribution

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Mark A. Ring, Chief Reactor Projects Branch 1 Division of Reactor Projects

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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

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Operating Group

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ROPreports@nrc.gov (inspection reports, final SDP letters, any letter with an IR number) Institute of Nuclear Power Operations (INPO)

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Quad Cities

Inspection / Activity Plan 03/01/2005 - 09/30/2006

Number		Title	on Site	Start	l Dates End	Inspection			
	Inspection Activ			Start	Ellu	Туре			
		OWER UPRATE	1						
1, 2	IP 71004	Power Uprate		01/01/2005	03/31/2005	Other Routine			
		EVIEW EMERGENCY PLAN CHANGES	1						
1, 2	IP 7111404	Emergency Action Level and Emergency Plan Changes	_	01/19/2005	03/25/2005	Baseline Inspections			
		NIT 1 ISI INSPECTION	1						
1	IP 7111108G	Inservice Inspection Activities - BWR	_	03/28/2005	04/01/2005	Baseline Inspections			
		OWER UPRATE	1						
1, 2	IP 71004	Power Uprate	_	03/21/2005	04/30/2005	Other Routine			
		CCESS CONTROL AND ALARA	1						
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		03/28/2005	04/08/2005	Baseline Inspections			
1, 2	IP 7112102	ALARA Planning and Controls		03/28/2005	04/08/2005	Baseline Inspections			
		UAD CITIES INIT PREP 04/2005	3						
1	W90129	OL - INITIAL EXAM - QUAD CITIES - APR/MAY 2005		04/11/2005	04/15/2005	Not Applicable			
		UAD CITIES INIT EXAM 05/2005	3						
1	W90129	OL - INITIAL EXAM - QUAD CITIES - APR/MAY 2005		05/02/2005	05/06/2005	Not Applicable			
		CCESS CONTROL, ALARA	1						
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		05/09/2005	05/20/2005	Baseline Inspections			
1, 2	IP 7112102	ALARA Planning and Controls		05/09/2005	05/20/2005	Baseline Inspections			
		EMP, ACCESS CONTROL	1						
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		06/27/2005	07/01/2005	Baseline Inspections			
1, 2	IP 7112203	Radiological Environmental Monitoring Program		06/27/2005	07/01/2005	Baseline Inspections			
	MAINT - B	ENNIAL MAINTENANCE RULE INSPECTION	1						
1, 2	IP 7111112B	Maintenance Effectiveness		09/19/2005	09/23/2005	Baseline Inspections			
		FSI INSPECTION ACTIVITIES	1						
1, 2	IP 60854	Preoperational Testing Of An ISFSI		08/01/2005	09/30/2005	Other Routine			
1, 2	IP 60856	Review of 10 CFR 72.212(b) Evaluations		08/01/2005	09/30/2005	Other Routine			
1, 2	IP 60857	Review of 10 CFR 72.48 Evaluations		08/01/2005	12/31/2005	Other Routine			
1, 2	IP 60855	Operation Of An ISFSI		10/01/2005	12/31/2005	Other Routine			
	MOD/5059 - M	ODIFICATIONS/50.59 INSPECTION	3						
1, 2	IP 7111102	Evaluation of Changes, Tests, or Experiments		10/03/2005	10/07/2005	Baseline Inspections			
1, 2	IP 7111117B	Permanent Plant Modifications		10/03/2005	10/07/2005	Baseline Inspections			
	71111.11 - L	C OPERATOR REQUAL PROGRAM EVALUATION	2						
1, 2	IP 7111111B	Licensed Operator Requalification Program		10/31/2005	11/04/2005	Baseline Inspections			
	71121.03 - INSTRUMENTATION 1								
1, 2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		11/28/2005	12/02/2005	Baseline Inspections			

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

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IP 7111107B

Quad Cities

Inspection / Activity Plan 03/01/2005 - 09/30/2006

Unit No. of Staff **Planned Dates** Inspection Number on Site Start End Type Inspection Activity Title 71121.03 - INSTRUMENTATION 1 1,2 IP 71151 Performance Indicator Verification 12/02/2005 Baseline Inspections 11/28/2005 71121.02 - ALARA, ACCESS CONTROL IP 7112101 1, 2 Access Control to Radiologically Significant Areas 03/13/2006 03/27/2006 Baseline Inspections 1, 2 IP 7112102 **ALARA Planning and Controls** 03/13/2006 03/27/2006 Baseline Inspections ISI - QUAD CITIES UNIT 2 ISI INSPECTION 1 IP 7111108G 2 Inservice Inspection Activities - BWR 03/20/2006 03/24/2006 Baseline Inspections 71114 - BIENNIAL EP EXERCISE 1 IP 7111401 05/15/2006 **Exercise Evaluation** 05/19/2006 Baseline Inspections 1, 2 IP 71151 1, 2 Performance Indicator Verification 05/15/2006 05/19/2006 Baseline Inspections ВΙ - TRIENNIAL FIRE PROTECTION INSPECTION 6 IP 7111105T Fire Protection 06/30/2006 Baseline Inspections 1,2 06/12/2006 **REVIEW** - ACCESS CONTROL, ALARA 1 1, 2 IP 7112101 Access Control to Radiologically Significant Areas 07/10/2006 07/14/2006 Baseline Inspections IP 7112102 **ALARA Planning and Controls** 1, 2 07/10/2006 07/14/2006 Baseline Inspections 1,2 IP 71151 Performance Indicator Verification 07/10/2006 07/14/2006 Baseline Inspections - HEAT SINK INSPECTION ы 2

08/28/2006 09/01/2006 Baseline Inspections

Heat Sink Performance