

August 30, 2004

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

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -  
BRAIDWOOD STATION

Dear Mr. Crane:

On August 11, 2004, the NRC staff completed its mid-cycle plant performance assessment of the Braidwood Station. The mid-cycle review for the Braidwood Station involved the participation of all technical divisions in evaluating performance for the first half of the calendar year 2004 assessment cycle. The process included a review of 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 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.

For the most recent quarter, plant performance for Unit 1 and 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 only reactor oversight process (ROP) baseline inspections at your facility through March 31, 2006.

The enclosed inspection plan details the inspections scheduled through March 31, 2006. The following infrequently performed inspections are planned: Emergency Preparedness Exercise evaluation in November 2004, Modification inspection in March 2005, Safety System Design and Performance inspection in August 2005, Problem Identification and Resolution inspection in October 2005, and Fire Protection Triennial inspection in January 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. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last 12 months of the inspection plan are tentative and may be revised at the end-of-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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at (630) 829-9729 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Ann Marie Stone, Chief  
Branch 3  
Division of Reactor Projects

Docket Nos. 50-456; 50-457  
License Nos. NPF-72; NPF-77

Enclosure: Braidwood Station Inspection/Activity Plan

cc w/encl: Site Vice President - Braidwood Station  
Plant Manager - Braidwood Station  
Regulatory Assurance Manager - Braidwood Station  
Chief Operating Officer  
Senior Vice President - Nuclear Services  
Vice President - Operations Support  
Vice President - Licensing and Regulatory Affairs  
Director Licensing  
Manager Licensing - Braidwood and Byron  
Senior Counsel, Nuclear, Mid-West Regional  
Operating Group  
Document Control Desk - Licensing  
Assistant Attorney General  
Illinois Department of Nuclear Safety  
State Liaison Officer  
Chairman, Illinois Commerce Commission

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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at (630) 829-9729 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Ann Marie Stone, Chief  
Branch 3  
Division of Reactor Projects

Docket Nos. 50-456; 50-457  
License Nos. NPF-72; NPF-77

Enclosure: Braidwood Station Inspection/Activity Plan

cc w/encl: Site Vice President - Braidwood Station  
Plant Manager - Braidwood Station  
Regulatory Assurance Manager - Braidwood Station  
Chief Operating Officer  
Senior Vice President - Nuclear Services  
Vice President - Operations Support  
Vice President - Licensing and Regulatory Affairs  
Director Licensing  
Manager Licensing - Braidwood and Byron  
Senior Counsel, Nuclear, Mid-West Regional  
Operating Group  
Document Control Desk - Licensing  
Assistant Attorney General  
Illinois Department of Nuclear Safety  
State Liaison Officer  
Chairman, Illinois Commerce Commission

DOCUMENT NAME: G:\Branch TSS\midcycle2004\Midcycle Ltrs\Bra.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								
NAME	AMStone:rj								
DATE	08/27/04								

**OFFICIAL RECORD COPY**

ADAMS Distribution:

AJM

DFT

DWW

Project Director, NRR

Project Mgr., NRR

RidsNrrDipmlipb

JLC1

GEG

HBC

RML2

SRI Braidwood

DRPIII

DRSIII

PLB1

JRK1

**Braidwood**  
**Inspection / Activity Plan**  
**09/01/2004 - 03/31/2006**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>ISI 1</b>	<b>- INSERVICE INSP/TI-152 UNIT 1</b>	<b>1</b>			
1	IP 2515/152	Reactor Pressure Vessel Lower Head Penetration Nozzles (NRC Bulletin 2003-02)		10/04/2004	10/22/2004	Safety Issues
1	IP 7111108P	Inservice Inspection Activities - PWR		10/04/2004	10/22/2004	Baseline Inspections
	<b>7112102</b>	<b>- OUTAGE ALARA</b>	<b>3</b>			
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		10/04/2004	10/15/2004	Baseline Inspections
1, 2	IP 7112102	ALARA Planning and Controls		10/04/2004	10/15/2004	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		10/04/2004	10/15/2004	Baseline Inspections
	<b>71114</b>	<b>- BASELINE EP EXERCISE INSP</b>	<b>3</b>			
1, 2	IP 7111401	Exercise Evaluation		11/15/2004	11/19/2004	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		11/15/2004	11/19/2004	Baseline Inspections
	<b>HEATSKB</b>	<b>- BIENNIAL HEAT SINK INSPECTION (DRS)</b>	<b>1</b>			
1, 2	IP 7111107B	Heat Sink Performance		01/31/2005	02/04/2005	Baseline Inspections
	<b>71122.01</b>	<b>- EFFLUENTS AND ACCESS CONTROL</b>	<b>1</b>			
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		01/10/2005	01/14/2005	Baseline Inspections
1, 2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		01/10/2005	01/14/2005	Baseline Inspections
1, 2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		01/10/2005	01/14/2005	Baseline Inspections
1, 2	IP 7112202	Radioactive Material Processing and Transportation		01/10/2005	01/14/2005	Baseline Inspections
	<b>MOD/5059</b>	<b>- MODIFICATIONS/50.59 INSPECTION</b>	<b>3</b>			
1, 2	IP 7111102	Evaluation of Changes, Tests, or Experiments		03/14/2005	03/18/2005	Baseline Inspections
1, 2	IP 7111117B	Permanent Plant Modifications		03/14/2005	03/18/2005	Baseline Inspections
	<b>ISI</b>	<b>- UNIT 2 ISI/TI-150 INSPECTION</b>	<b>2</b>			
2	IP 7111108P	Inservice Inspection Activities - PWR		04/18/2005	05/13/2005	Baseline Inspections
	<b>OUTAGE</b>	<b>- ACCESS CONTROL, ALARA</b>	<b>1</b>			
1, 2	IP 7112101	Access Control to Radiologically Significant Areas		04/18/2005	04/29/2005	Baseline Inspections
1, 2	IP 7112102	ALARA Planning and Controls		04/18/2005	04/29/2005	Baseline Inspections
	<b>MAINT</b>	<b>- BIENNIAL MAINTENANCE RULE INSPECTION</b>	<b>1</b>			
1, 2	IP 7111112B	Maintenance Effectiveness		08/08/2005	08/12/2005	Baseline Inspections
	<b>SSDPC</b>	<b>- SAFETY SYSTEM DESIGN &amp; PERFORMANCE</b>	<b>5</b>			
1, 2	IP 7111121	Safety System Design and Performance Capability		08/15/2005	09/02/2005	Baseline Inspections
	<b>71114</b>	<b>- BASELINE EP INSPECTION</b>	<b>1</b>			
1, 2	IP 7111402	Alert and Notification System Testing		08/08/2005	08/12/2005	Baseline Inspections
1, 2	IP 7111403	Emergency Response Organization Augmentation Testing		08/08/2005	08/12/2005	Baseline Inspections
1, 2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		08/08/2005	08/12/2005	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		08/08/2005	08/12/2005	Baseline Inspections

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

**Braidwood**  
**Inspection / Activity Plan**  
**09/01/2004 - 03/31/2006**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>71122.03</b>	<b>- REMP, PI VERIFICATION</b>	<b>1</b>			
1, 2	IP 7112203	Radiological Environmental Monitoring Program		08/22/2005	08/26/2005	Baseline Inspections
1, 2	IP 71151	Performance Indicator Verification		08/22/2005	08/26/2005	Baseline Inspections
	<b>71111.11</b>	<b>- LIC OPERATOR REQUAL PROGRAM EVALUATION</b>	<b>2</b>			
1, 2	IP 7111111B	Licensed Operator Requalification Program		09/12/2005	09/16/2005	Baseline Inspections
	<b>PI&amp;R</b>	<b>- PROBLEM IDENTIFICATION AND RESOLUTION</b>	<b>3</b>			
1, 2	IP 71152B	Identification and Resolution of Problems		10/16/2005	11/05/2005	Baseline Inspections
	<b>FIREPROT</b>	<b>- FIRE PROTECTION INSPECTION TRIENNIAL</b>	<b>3</b>			
1, 2	IP 7111105T	Fire Protection		01/09/2006	01/27/2006	Baseline Inspections
	<b>71122.02</b>	<b>- RADWASTE AND TRANSPORTATION</b>	<b>1</b>			
1, 2	IP 7112202	Radioactive Material Processing and Transportation		01/09/2006	01/13/2006	Baseline Inspections

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