August 30, 2005

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 9, 2005, the NRC staff completed its mid-cycle plant performance review of Braidwood Station, Units 1 and 2 for the first half of the calendar year 2005 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 at Braidwood Station Units 1 and 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, 2007.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through March 31, 2007. Significant inspections planned for this year include a Problem Identification and Resolution Inspection on October 2005, Temporary Instruction (TI) 2515/150, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles" (Unit 1), in April 2006, and a Triennial Fire Protection Inspection in July 2006. The inspection plan is provided to minimize the resource impact on your staff and 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 in the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle review meeting.

C. Crane -2-

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) 829-9620 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Richard A. Skokowski, Chief Reactor Projects Branch 3 Division of Reactor Projects

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

Enclosure: Braidwood Station Inspection/ Activity Plan

See Attached Distribution

| DOCUMENT NAME:G:\Branch TSS\ALL MOC\midcycle 2004 to 2005\MOC letters\Brai.wpd | | | | | | | | | | | | |
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C. Crane -3-

cc w/encl: Site Vice President - Braidwood Station

Plant Manager - Braidwood Station

Regulatory Assurance Manager - Braidwood Station

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C. Crane -4-

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Braidwood

Inspection / Activity Plan

09/01/2005 - 03/31/2007 Unit No. of Staff **Planned Dates** Inspection on Site Start End Number Inspection Activity Title **Type** SSDPC - SAFETY SYSTEM DESIGN & PERFORMANCE 5 1,2 IP 7111121 Safety System Design and Performance Capability 08/15/2005 09/02/2005 Baseline Inspections 71111.11 - LIC OPERATOR REQUAL PROGRAM EVALUATION 2 09/16/2005 Baseline Inspections 1,2 IP 7111111B Licensed Operator Requalification Program 09/12/2005 PI&R - PROBLEM IDENTIFICATION AND RESOLUTION 3 IP 71152B 1,2 Identification and Resolution of Problems 10/10/2005 10/28/2005 Baseline Inspections - BRAIDWOOD INIT PREP 03/2006 FY 2006 3 03/31/2006 Not Applicable W90143 BRAIDWOOD - APR/MAY 2006 03/27/2006 1 ISI - BRAIDWOOD UNIT 1 ISI & TI-150 INSPECTION 2 IP 2515/150 Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC ORDER EA-03-04/10/2006 04/27/2006 Safety Issues 1 IP 7111108P Inservice Inspection Activities - PWR 04/10/2006 04/27/2006 **Baseline Inspections** IP 71121 - ALARA, ACCESS CONTROL 1 IP 7112101 1,2 Access Control to Radiologically Significant Areas 04/17/2006 04/28/2006 **Baseline Inspections** 1.2 IP 7112102 **ALARA Planning and Controls** 04/17/2006 04/28/2006 **Baseline Inspections** FY 2006 - BRAIDWOOD INIT EXAM 05/2006 3 W90143 BRAIDWOOD - APR/MAY 2006 05/15/2006 05/19/2006 Not Applicable FPI - FIRE PROTECTION INSPECTION 3 1,2 IP 7111105T Fire Protection [Triennial] 06/12/2006 06/30/2006 Baseline Inspections ROUTINE - INSTRUMENTATION, ACCESS CONTROL 1 1.2 IP 7112101 Access Control to Radiologically Significant Areas 07/31/2006 08/04/2006 **Baseline Inspections** 1.2 IP 7112103 Radiation Monitoring Instrumentation and Protective Equipment 07/31/2006 08/04/2006 **Baseline Inspections** - EP EXERCISE BASELINE IP 71114 2 1.2 IP 7111401 **Exercise Evaluation** 08/07/2006 08/11/2006 **Baseline Inspections** 1.2 IP 71151 Performance Indicator Verification 08/07/2006 08/11/2006 **Baseline Inspections** H/S - HEAT SINK INSPECTION 1 IP 7111107B 1.2 Heat Sink Performance 09/25/2006 09/29/2006 Baseline Inspections ISI - BRAIDWOOD UNIT 2 ISI & TI-150 INSPECTION 2 IP 2515/150 Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC ORDER EA-03-2 10/16/2006 11/03/2006 Safety Issues 2 IP 7111108P Inservice Inspection Activities - PWR 10/16/2006 11/03/2006 **Baseline Inspections** OUTAGE - ACCESS CONTROL, ALARA 1 1.2 IP 7112101 Access Control to Radiologically Significant Areas 10/16/2006 10/20/2006 **Baseline Inspections** 1.2 IP 7112102 ALARA Planning and Controls 10/16/2006 10/20/2006 **Baseline Inspections** 1.2 IP 71151 Performance Indicator Verification 10/16/2006 10/20/2006 **Baseline Inspections** PI&R - PROBLEM IDENTIFICATION AND RESOLUTION 1

12/15/2006 Baseline Inspections

11/27/2006

This report does not include INPO and OUTAGE activities.

IP 71152B

1.2

This report shows only on-site and announced inspection procedures.

Identification and Resolution of Problems

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Report 22

Braidwood

Inspection / Activity Plan 09/01/2005 - 03/31/2007

| Unit Number | Inspection Activity | Title | No. of Staff on Site | Planned Start | d Dates End | Inspection Type |
|----------------|---------------------|--|-------------------------|------------------|----------------|----------------------|
| | 71122.01 - RAD | EFFLUENTS | 1 | | | |
| 1,2 | IP 7112201 | Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems | | 02/12/2007 | 02/16/2007 | Baseline Inspections |
| 1, 2 | IP 71151 | Performance Indicator Verification | | 02/12/2007 | 02/16/2007 | Baseline Inspections |