August 31, 2007

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 14, 2007, the NRC staff completed its performance review of the Braidwood Station for the first half of the calendar year (CY) 2007 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 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.

Plant performance for the most recent quarter at the Braidwood Nuclear Generating Plant 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 reactor oversight process (ROP) baseline inspections at your facility.

The enclosed inspection plan details the inspections, less those related to security, scheduled through December 31, 2008. Significant inspections planned include a Biennial Problem Identification and Resolution inspection in October 2008, and an Evaluation of Changes, Tests, or Experiments and Permanent Plant Modifications inspection in November 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. 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).

The NRC is currently evaluating the scope and frequency of all the baseline inspection procedures. If the results of the evaluation, or any other circumstances, cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Richard A. Skokowski at (630) 829-9620 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA by A. H. Hsia for/

Cynthia D. Pederson, Director
Division of Reactor Projects

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

Enclosure: Braidwood Station Inspection/Activity Plan

DISTRIBUTION:
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Letter to C. Crane from C. Pederson dated August 31, 2007

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN - Braidwood Station

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 Emergency Management Agency  
State Liaison Officer  
Chairman, Illinois Commerce Commission  
Will County Executive  
Will County Sheriff  
Director, Will County Emergency Management Agency  
Mayor of Joliet  
City Manager of Joliet  
Kendall County Board Chairman  
Kendall County Sheriff  
Grundy County Board Chairman  
Grundy County Sheriff  
Grundy County Emergency Management Agency  
Mayor of Morris  
Minooka Village President  
Mayor of Coal City  
Mayor of Carbon Hill  
Mayor of Diamond  
Mayor of Braidwood  
Mayor of Wilmington  
Channahon Village President  
Channahon Village Administrator  
Mayor of Shorewood  
Shorewood Village Administrator  
Mayor of Elwood  
Mayor of Braceville  
Mayor of Kankakee  
INPO
Letter to C. Crane from C. Pederson dated August 31, 2007

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

DISTRIBUTION:
RAG1
TEB
RFK
RidsNrrDirslpab
JLC1
MAS
KGO
JKH3
RML2
SAM9
SRI Braidwood
DRPIII
DRSIII
PLB1
TXN
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This report does not include INPO and OUTAGE activities. This report shows only on-site and announced inspection procedures.