March 4, 2009

Mr. Charles G. Pardee  
Senior Vice President, Exelon Generation Company, LLC  
President and Chief Nuclear Officer (CNO), Exelon Nuclear  
4300 Winfield Road  
Warrenville IL  60555

SUBJECT:  ANNUAL ASSESSMENT LETTER – CLINTON POWER STATION  
(05000461/2009001)

Dear Mr. Pardee:

On February 11, 2009, the NRC staff completed its performance review of Clinton Power Station. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2008. 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.

Overall, Clinton Power Station operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the first three quarters of the assessment cycle, 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 June 30, 2010. 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 scheduled include: engineering modifications/50.59, biennial PI&R, and component design basis inspections. The inspections in the last 9 months of the inspection plan are tentative and may be revised at the mid-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 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
Branch 1
Division of Reactor Projects

Docket Nos. 50-461
License Nos. NPF-62

Enclosure: Clinton Inspection/Activity Plan

cc w/encl: Site Vice President - Clinton Power Station
         Plant Manager - Clinton Power Station
         Manager Regulatory Assurance - Clinton Power Station
         Senior Vice President - Midwest Operations
         Senior Vice President - Operations Support
         Vice President - Licensing and Regulatory Affairs
         Director - Licensing and Regulatory Affairs
         Manager Licensing - Clinton, Dresden and Quad Cities
         Associate General Counsel
         Document Control Desk - Licensing
         Assistant Attorney General
         J. Klinger, State Liaison Officer
         Illinois Emergency Management Agency
         Chairman, Illinois Commerce Commission
         Clinton Police Department
         Mayor of Clinton
         Mayor of Weldon
         DeWitt County Board Chairman
         DeWitt County Sheriff
         EMA Coordinator, DeWitt County
         Mayor of Wapella
         McLean County Board Chairman
         McLean County Sheriff
         EMA Coordinator, McLean County
         Piatt County Board Chairman
         Piatt County Sheriff
         EMA Coordinator, Piatt County
         Macon County Board Chairman
         Macon County Sheriff
         EMA Coordinator, Macon County
         G. Mortensen, INPO
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,

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

Docket Nos. 50-461
License Nos. NPF-62

Enclosure: Clinton Inspection/Activity Plan

cc w/encl: Site Vice President - Clinton Power Station
           Plant Manager - Clinton Power Station
           Manager Regulatory Assurance - Clinton Power Station
           Senior Vice President - Midwest Operations
           Senior Vice President - Operations Support
           Vice President - Licensing and Regulatory Affairs
           Director - Licensing and Regulatory Affairs
           Manager Licensing - Clinton, Dresden and Quad Cities
           Associate General Counsel
           Document Control Desk - Licensing
           Assistant Attorney General
           J. Klinger, State Liaison Officer
           Illinois Emergency Management Agency
           Chairman, Illinois Commerce Commission
           Clinton Police Department
           Mayor of Clinton
           Mayor of Weldon
           DeWitt County Board Chairman
           DeWitt County Sheriff
           EMA Coordinator, DeWitt County
           Mayor of Wapella
           McLean County Board Chairman
           McLean County Sheriff
           EMA Coordinator, McLean County
           Piatt County Board Chairman
           Piatt County Sheriff
           EMA Coordinator, Piatt County
           Macon County Board Chairman
           Macon County Sheriff
           EMA Coordinator, Macon County
           G. Mortensen, INPO
<table>
<thead>
<tr>
<th>Unit Number</th>
<th>Planned Dates</th>
<th>Inspection Activity</th>
<th>Title</th>
<th>No. of Staff on Site</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>End</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>03/30/2009</td>
<td>04/17/2009</td>
<td>BI P&amp;I - BIENNIAL PI&amp;R INSPECTION</td>
<td>Identification and Resolution of Problems</td>
</tr>
<tr>
<td>1</td>
<td>05/04/2009</td>
<td>05/08/2009</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>Access Control to Radiologically Significant Areas</td>
</tr>
<tr>
<td>1</td>
<td>05/04/2009</td>
<td>05/08/2009</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>ALARA Planning and Controls</td>
</tr>
<tr>
<td>1</td>
<td>06/22/2009</td>
<td>07/10/2009</td>
<td>HD DROP - SMART SAMPLE OPESS FY-2007-03 REV. 2</td>
<td>Refueling Activities</td>
</tr>
<tr>
<td>1</td>
<td>08/03/2009</td>
<td>08/07/2009</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems</td>
</tr>
<tr>
<td>1</td>
<td>08/03/2009</td>
<td>08/07/2009</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>Reactor Coolant System Activity</td>
</tr>
<tr>
<td>1</td>
<td>08/03/2009</td>
<td>08/07/2009</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>Occupational Exposure Control Effectiveness</td>
</tr>
<tr>
<td>1</td>
<td>08/03/2009</td>
<td>08/07/2009</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>RETS/ODCM Radiological Effluent</td>
</tr>
<tr>
<td>1</td>
<td>08/31/2009</td>
<td>09/04/2009</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program</td>
</tr>
<tr>
<td>1</td>
<td>11/16/2009</td>
<td>11/20/2009</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>Drill/Exercise Performance</td>
</tr>
<tr>
<td>1</td>
<td>11/16/2009</td>
<td>11/20/2009</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>ERO Drill Participation</td>
</tr>
<tr>
<td>1</td>
<td>01/18/2010</td>
<td>01/22/2010</td>
<td>BI ENG - ENGINEERING INSERVICE INSPECTION</td>
<td>Inservice Inspection Activities - BWR</td>
</tr>
<tr>
<td>1</td>
<td>01/25/2010</td>
<td>01/29/2010</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>Access Control to Radiologically Significant Areas</td>
</tr>
<tr>
<td>1</td>
<td>01/25/2010</td>
<td>01/29/2010</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>ALARA Planning and Controls</td>
</tr>
<tr>
<td>1</td>
<td>04/05/2010</td>
<td>04/09/2010</td>
<td>BI RP - RADIATION PROTECTION BASELINE INSPECTION</td>
<td>Access Control to Radiologically Significant Areas</td>
</tr>
</tbody>
</table>

This report does not include INPO and OUTAGE activities. This report shows only on-site and announced inspection procedures.
<table>
<thead>
<tr>
<th>Unit Number</th>
<th>Planned Dates</th>
<th>Inspection Activity</th>
<th>Title</th>
<th>No. of Staff on Site</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>End</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI RP</td>
<td>04/05/2010</td>
<td>04/09/2010</td>
<td>IP 7112102</td>
<td>1 ALARA Planning and Controls</td>
</tr>
<tr>
<td></td>
<td>04/12/2010</td>
<td>04/16/2010</td>
<td>IP 7111403</td>
<td>Emergency Response Organization Augmentation Testing</td>
</tr>
<tr>
<td></td>
<td>04/12/2010</td>
<td>04/16/2010</td>
<td>IP 7111405</td>
<td>Correction of Emergency Preparedness Weaknesses and Deficiencies</td>
</tr>
<tr>
<td></td>
<td>04/12/2010</td>
<td>04/16/2010</td>
<td>IP 71151-EP01</td>
<td>Drill/Exercise Performance</td>
</tr>
<tr>
<td></td>
<td>04/12/2010</td>
<td>04/16/2010</td>
<td>IP 71151-EP02</td>
<td>ERO Drill Participation</td>
</tr>
<tr>
<td></td>
<td>04/12/2010</td>
<td>04/16/2010</td>
<td>IP 71151-EP03</td>
<td>Alert &amp; Notification System</td>
</tr>
<tr>
<td>BI ENG</td>
<td>05/24/2010</td>
<td>06/25/2010</td>
<td>IP 7111121</td>
<td>Component Design Bases Inspection</td>
</tr>
<tr>
<td>BI RP</td>
<td>06/21/2010</td>
<td>06/25/2010</td>
<td>IP 7112103</td>
<td>Radiation Monitoring Instrumentation and Protective Equipment</td>
</tr>
<tr>
<td></td>
<td>06/21/2010</td>
<td>06/25/2010</td>
<td>IP 71151-BI01</td>
<td>Reactor Coolant System Activity</td>
</tr>
<tr>
<td></td>
<td>06/21/2010</td>
<td>06/25/2010</td>
<td>IP 71151-OR01</td>
<td>Occupational Exposure Control Effectiveness</td>
</tr>
<tr>
<td></td>
<td>06/21/2010</td>
<td>06/25/2010</td>
<td>IP 71151-PR01</td>
<td>RETS/ODCM Radiological Effluent</td>
</tr>
</tbody>
</table>

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

SUBJECT: ANNUAL ASSESSMENT LETTER - CLINTON POWER STATION
(05000461/2009001)

DISTRIBUTION:
Tamara Bloomer
RidsNrrDorLpl3-2
RidsNrrPMClinton Resource
RidsNrrDirslpab Resource
Mark Satorius
Kenneth Obrien
Jared Heck
Allan Barker
DRSIII
DRPIII
Patricia Buckley
Tammy Tomczak
ROPreports@nrc.gov