March 3, 2008

Mr. William R. Campbell, Jr.
Chief Nuclear Officer and Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: ANNUAL ASSESSMENT LETTER – WATTS BAR NUCLEAR PLANT
(NRC INSPECTION REPORT 05000390/2008001 AND 05000391/2008001)

Dear Mr. Campbell:

On February 7, 2008, the NRC staff completed its performance review of the Watts Bar Nuclear Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2007. 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, Watts Bar 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. We also plan on conducting several non-ROP inspections which include TI 2515/171, Verification of Site Specific (B.5.b) Phase 2 and 3 Mitigation Strategies; TI 2515/172, Reactor Coolant System Dissimilar Metal; and TI 2515/174, Hydrogen Igniter Backup Power Verification.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through June 30, 2009. 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 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 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 (404) 562-4530 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Rebecca L. Nease, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket Nos.:  50-390, 50-391
License Nos.: NPF-90, CPPR-92

Enclosure: Watts Bar Inspection/Activity Plan (03/01/08 – 06/30/09)

cc w/encl:  (See next page)
cc w/encl:
Masoud Bajestani
Vice President
Watts Bar Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

Gordon P. Arent
New Generation Licensing Manager
Tennessee Valley Authority
Electronic Mail Distribution

Senior Resident Inspector
Watts Bar Nuclear Plant
U.S. NRC
1260 Nuclear Plant Road
Spring City, TN  37381-2000

Michael K. Brandon
Manager
Licensing and Industry Affairs
Tennessee Valley Authority
Electronic Mail Distribution

William R. Campbell, Jr.
Chief Nuclear Officer and Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN  37402-2801

Michael J. Lorek
Plant Manager
Watts Bar Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

Lawrence E. Nanney
Director
TN Dept. of Environment & Conservation
Electronic Mail Distribution

Larry E. Nicholson
General Manager
Performance Improvement
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN  37402-2801

Michael D. Skaggs (WB2)
Site Vice President
Browns Ferry Nuclear Plant
Tennessee Valley Authority
Electronic Mail Distribution

Ashok S. Bhatnagar
Senior Vice President
Nuclear Generation Development and Construction
Tennessee Valley Authority
Electronic Mail Distribution

Michael A. Purcell
Senior Technical Advisor
Nuclear Power Group
Tennessee Valley Authority
4X Blue Ridge
1101 Market Street
Chattanooga, TN  37402-2801

H. Rick Rogers
Vice President
Nuclear Engineering and Technical Services
Tennessee Valley Authority
Electronic Mail Distribution

(cc w/encl cont’d – See next page)
cc w/encl cont’d:
Beth A. Wetzel
Manager
Corporate Nuclear Licensing and Industry Affairs
Tennessee Valley Authority
Electronic Mail Distribution

James H. Bassham
Director
Tennessee Emergency Management Agency
Electronic Mail Distribution
**Watts Bar**

**Inspection / Activity Plan**

*03/01/2008 - 06/30/2009*

<table>
<thead>
<tr>
<th>Unit Number</th>
<th>Inspection Activity</th>
<th>Title</th>
<th>No. of Staff on Site</th>
<th>Planned Dates</th>
<th>Inspection Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>EB3TI172</td>
<td>- TI-172</td>
<td>Reactor Coolant System Dissimilar Metal Butt Welds</td>
<td>1</td>
<td>03/31/2008 - 04/04/2008</td>
<td>Generic Safety Inspection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PLANNED EXAM</td>
<td>1</td>
<td>04/21/2008 - 04/25/2008</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>OL EXAM</td>
<td>- INITIAL EXAM PREP</td>
<td>WATTS BAR/DECEMBER 2008 EXAM AT POWER FACILITIES</td>
<td>3</td>
<td>05/12/2008 - 05/18/2008</td>
<td>Not Applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluation of Changes, Tests, or Experiments</td>
<td>1</td>
<td>01/19/2009 - 01/30/2009</td>
<td>Baseline Inspections</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification and Resolution of Problems</td>
<td>3</td>
<td>06/08/2009 - 06/12/2009</td>
<td>Baseline Inspections</td>
</tr>
<tr>
<td>OL EXAM</td>
<td>- INITIAL EXAM - WEEK 1</td>
<td>WATTS BAR/DECEMBER 2009 EXAM AT POWER FACILITIES</td>
<td>3</td>
<td>03/09/2009 - 03/13/2009</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>PI&amp;R</td>
<td>- PROBLEM IDENTIFICATION AND RESOLUTION</td>
<td>Identification and Resolution of Problems</td>
<td>5</td>
<td>06/08/2009 - 06/12/2009</td>
<td>Baseline Inspections</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification and Resolution of Problems</td>
<td>1</td>
<td>06/22/2009 - 06/26/2009</td>
<td>Baseline Inspections</td>
</tr>
</tbody>
</table>

This report does not include INPO and OUTAGE activities.

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