



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257**

September 4, 2012

Mr. Michael D. Skaggs  
Senior Vice President  
Nuclear Construction  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

**SUBJECT: MID-CYCLE ASSESSMENT LETTER – WATTS BAR NUCLEAR PLANT  
UNIT 2 (NRC INSPECTION REPORT 05000391/2012606)**

Dear Mr. Skaggs:

On August 9, 2012, the U. S. Nuclear Regulatory Commission (NRC) staff completed its performance review of the Watts Bar Nuclear (WBN) Plant Unit 2 construction project. Our technical staff reviewed inspection results for the period from July 1, 2011, through June 30, 2012. 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.

Overall, WBN Unit 2 construction activities were conducted in a manner that complied with the Commission's rules and regulations, the conditions of your construction permit, and the Unit 2 regulatory framework commitments. Our inspections indicated that your construction program and procedure development, along with project staffing, were sufficiently implemented to support ongoing construction activities. Overall, the corrective action program implementation activities, including initiation, classification, disposition, and trending were deemed satisfactory. However, since our inspections did identify some concerns with the completeness and adequacy in the documentation and implementation of your corrective actions, we plan to continue to inspect this area during focused and team Problem Identification and Resolution (PI&R) inspections. Specifically, for violation (VIO) 05000391/2012612-01, "Failure to Correct a Condition Adverse to Quality Associated with Containment Spray Pump Layup and Preventive Maintenance," the NRC staff identified that two of the four layup and preventive maintenance activities associated with the containment spray pump that were identified in a previous violation were not performed. Also, for non-cited violation (NCV) 05000391/2012612-02, "Failure to Correct Longstanding CAP Deficiencies," the NRC staff identified several examples where extensions of corrective actions were not in accordance with procedures. Because of the importance of your corrective action program in resolving conditions adverse to quality, it is imperative that your corrective action program be able to identify the appropriate corrective actions and implement those corrective actions in a timely manner to resolve conditions adverse to quality.

During the Mid-Cycle Assessment period, the NRC staff reviewed two (2) NCVs involving your commercial grade dedication (CGD) program. These violations identified both CGD implementation errors and problems with your procedural guidance for performing CGD activities. Because of the large number of components already procured under the CGD process, a thorough extent of condition review for these violations is warranted. We plan to review your corrective actions during future NRC inspections.

Based on an NRC Office of Investigations report (EA 2012-21), an apparent violation of NRC requirements was identified for the falsification of micrometer records for safety-related cables inside penetrations. The violation was being considered for escalated enforcement action, and the NRC sent you a Choice Letter (ML 12083A099) where you requested Alternative Dispute Resolution (ADR). The outcome of the ADR was a Confirmatory Order (ML 12202A260). It is important that all of the actions contained in the Confirmatory Order are completed in a timely manner to minimize the possibility of future incidents of falsification. The NRC plans to review your implementation of the corrective actions during future inspections.

The NRC staff has expended a large effort toward the WBN Unit 2 project during the Mid-Cycle Assessment period. Specifically, the Region II office has spent over 15,500 hours performing inspections, assessments, public meetings, allegation follow-up, and inspection program support for WBN Unit 2. The NRC staff anticipates this level of effort will increase in 2013 as WBN Unit 2 construction activities continue and pre-operational testing is performed on additional safety-related systems.

In conclusion, project performance for the most recent quarter, as well as for the previous three quarters of the assessment cycle, was acceptable based on the above inspection conclusions, the fact that all violations were classified as Severity Level IV or below, and that no Substantive Cross-Cutting Issue was identified. Therefore, we do not plan to expand our inspection activities beyond what is specified by Inspection Manual Chapter (IMC) 2517.

The enclosed inspection plan contains those major or infrequent projected inspection activities that we have currently identified, in part, by reviewing your project schedule. It is crucial that you keep us apprised of any project schedule changes as soon as they are identified, in order to maintain our inspection plan current. As additional details of your project schedule become available, we will plan other inspections specified in IMC 2517. Your staff will be informed of changes/additions to our inspection plans. Routine inspections performed by the resident inspectors and regional staff on construction activities, Corrective Action Programs (CAPs), Special Programs (SPs), Generic Communications, Historical Open Items, and Construction Deficiency Reports (CDRs) are not listed on the inspection plan due to their ongoing and continuous nature. We plan to give your staff ample notification of specific upcoming inspection activities as their schedule becomes available in order to allow for the resolution of any scheduling conflicts and personnel availability issues.

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). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

M. Skaggs

3

Please contact me at (404) 997-4506 with any questions you may have regarding this letter or our planned inspections.

Sincerely,

**/RA/**

James B. Baptist, Acting Chief  
Construction Projects Branch 3  
Division of Construction Projects

Docket No. 50-391  
Construction Permit No: CPPR-92

Enclosure:  
Watts Bar Unit 2 Inspection Plan

cc w/encl: (See next page)

M. Skaggs

3

Please contact me at (404) 997-4446 with any questions you may have regarding this letter or our planned inspections.

Sincerely,

**/RA/**

James B. Baptist, Acting Chief  
Construction Projects Branch 3  
Division of Construction Projects

Docket No. 50-391  
Construction Permit No: CPPR-92

Enclosure:  
Watts Bar Unit 2 Inspection Plan

cc w/encl: (See next page)

☒ PUBLICLY AVAILABLE      ☐ NON-PUBLICLY AVAILABLE      ☐ SENSITIVE      ☒ NON-SENSITIVE

ADAMS: ☒ Yes      ACCESSION NUMBER: ML12244A265      ☒ SUNSI REVIEW COMPLETE

OFFICE	RII:DCP	RII:DCP					
SIGNATURE	CE	Via e-mail					
NAME	C Even	T Nazario					
DATE	8/ /28/12	8/29/12					
E-MAIL COPY?	YES      NO	YES      NO					

OFFICIAL RECORD COPY      DOCUMENT NAME: G:\CC\IDCP\CPB3\WATTS BAR 2\ASSESSMENT\2012 MID-CYCLE\WB2-MID\_CYCLE LETTER 2012 REV3.DOCX

cc w/encl:

Mr. G. P. Arent, Manager,  
WBN Unit 2 Licensing  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, Tennessee 37381

Mr. O. J. Zeringue  
General Manager  
Engineering and Construction  
WBN Unit 2  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, Tennessee 37381

Mr. R. A. Hruby  
General Manager  
Technical Services  
WBN Unit 2  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, Tennessee 37381

Ms. D. K. Guinn, Manager,  
Licensing and Industry Affairs  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, Tennessee 37381

Mr. P. D. Swafford  
Chief Nuclear Officer and Executive Vice  
President  
Tennessee Valley Authority  
1101 Market Place  
3R Lookout Place  
Chattanooga, Tennessee 37402-2801

County Executive  
375 Church Street  
Suite 215  
Dayton, Tennessee 37321

Mr. D. H. Gronek  
Plant Manager, WBN Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, Tennessee 37381

Mr. R. R. Baron  
General Manager, Nuclear Construction  
Quality Assurance  
Tennessee Valley Authority  
1101 Market Street  
Blue Ridge 3A  
Chattanooga, Tennessee 37402-2801

Mr. J. W. Shea  
Corporate Nuclear Licensing  
Tennessee Valley Authority  
1101 Market Street  
Lookout Place 3R  
Chattanooga, Tennessee 37402-2801

Mr. E.J. Viglucci  
Assistant General Counsel  
Tennessee Valley Authority  
400 West Summit Hill Drive  
West Tower 6A  
Knoxville, Tennessee 37902

Mr. Lawrence E. Nanney, Director  
Tennessee Department of Environmental  
Health and Conservation  
Division of Radiological Health  
3<sup>rd</sup> Floor, L&C Annex  
401 Church Street  
Nashville, TN 37243-1532

Mr. D. E. Grissette  
Site Vice President  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Spring City, Tennessee 37381

County Mayor  
P.O. Box 156  
Decatur, Tennessee 37322

Ms. Ann P. Harris  
Public  
341 Swing Loop  
Rockwood, TN 37854

M. Skaggs

5

cc email distribution w/encl:

Greg Scott

Tennessee Valley Authority

Electronic Mail Distribution

Watts Bar Unit 2 Licensing

Tennessee Valley Authority

Electronic Mail Distribution

Letter to Michael D. Skaggs from James B. Baptist dated September 4, 2012.

SUBJECT: MID-CYCLE ASSESSMENT LETTER – WATTS BAR NUCLEAR PLANT  
UNIT 2 (NRC INSPECTION REPORT 05000391/2012606)

Distribution w/encl:

G. Wilson, NRR

J. Poole, NRR

J. Munday, RII

R. Haag, RII

S. Shaeffer, RII DRP

T. Nazario, RII Watts Bar Unit 2 SRI

R. Lewis, RUU Watts Bar Unit 2 RI

R. Monk, RII Watts Bar Unit 1 SRI

C. Evans, RII

[ConE\\_Resource@nrc.gov](mailto:ConE_Resource@nrc.gov)

PUBLIC

## ***Inspection Plan***

### ***Watts Bar Unit 2\****

<b>Inspection Activity</b>	<b>Calendar Quarter for Inspection</b>
HAAUP CAP Inspection	Third Quarter 2012 Team Inspection
Problem Identification & Resolution (PI&R) Inspection	Fourth Quarter 2012 Team Inspection
Containment Sump Inspection	Fourth Quarter 2012 Team Inspection
Containment Coatings Inspection	Fourth Quarter 2012
Engineering Field Change Control Inspection	Fourth Quarter 2012 Team Inspection
Focused PI&R Inspection - Commercial Grade Dedication	Fourth Quarter 2012 Team Inspection
Focused PI&R Inspection - NCV 05000391/2011608-01, Failure to Provide Documentary Evidence that Purchased Material Conformed to Procurement Documents	Fourth Quarter 2012 Team Inspection
IP&S Validation Inspection	First Quarter 2013 Team Inspection
Construction Refurbishment Process (IP 37002)	Ongoing

\* The inspections listed above are limited to major or infrequently performed inspections. They are in addition to routine inspections performed by the resident inspectors and regional staff such as inspections of routine construction activities, CAPs, SPs, Generic Communications and historical open items.