



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

January 12, 2015

EA-14-179

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

SUBJECT: WATTS BAR NUCLEAR PLANT – INSPECTION REPORT 05000391/2014616;
INVESTIGATION REPORT NO. 2-2013-011; AND APPARENT VIOLATION

Dear Mr. Skaggs:

This refers to an investigation completed on October 30, 2014, by the U.S. Nuclear Regulatory Commission's (NRC) Office of Investigations (OI) at Tennessee Valley Authority's (TVA) Watts Bar Nuclear Plant (Watts Bar), Unit 2. The purpose of the investigation was to determine whether contract employees working at Watts Bar Unit 2 deliberately violated a TVA procedure during anchor bolt installation for overhead base plates on Unit 2 hangers 86-1541 and 86-1545 in December 2011. A Factual Summary, included as an enclosure, provides details of the OI investigation.

Based on the results of the investigation, one apparent violation (AV) was identified and is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>.

The apparent violation involves 10 CFR 50, Appendix B, Criterion V, *Instructions, Procedures, and Drawings*, which requires that activities affecting quality be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances, and be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

In this case, contract employees were using TVA Procedure MAI-5.1B, Wedge Bolt (WB) Anchor Installation, Revision 21, for anchor bolt installation for overhead base plates on Unit 2 hangers 86-1541 and 86-1545. Section 6.2.6 of that procedure states that wedge bolt anchors shall be installed to within 5 degrees of perpendicular. Newly installed wedge bolt anchors exceeding this requirement are removed and replaced per Section 6.4 or approval of the deviation obtained from Site Engineering. Contrary to the requirements of this procedure, on approximately December 19, 2011, a contract foreman assigned to install anchor bolts for overhead base plates on hangers 86-1541 and 86-1545 willfully failed to remove and replace or

obtain site engineering approval for newly installed wedge bolt anchors exceeding the 5 degrees of perpendicular as required by MAI-5.1B. The contract foreman requested one of the contract employees to fabricate a non-approved modified tool. At the direction of the contract foreman, the tool was then used to straighten the wedge bolt anchors to within 5 degrees of perpendicular. The contract foreman was also observed by others to use the modified tool to straighten the wedge bolt anchors. All four overhead base plates of hangers 86-1541 and 86-1545 had at least one bent bolt.

Since you identified the apparent violation, and based on our understanding of your corrective actions, a civil penalty may not be warranted in accordance with Section 2.3.4 of the Enforcement Policy. The final decision will be based on you confirming on the docket that the corrective actions have been or are being taken.

Before the NRC makes its enforcement decision, we are providing you an opportunity to (1) respond in writing to the apparent violation addressed in this inspection report within 30 days of the date of this letter, (2) request a Pre-decisional Enforcement Conference (PEC), or (3) request Alternative Dispute Resolution (ADR). If a PEC is held, the NRC will issue a press release to announce the time and date of the conference; however the PEC will be closed to public observation since information related to an Office of Investigations report will be discussed and the report has not been made public. If you decide to participate in a PEC or pursue ADR, please contact Robert Haag at 404-997-4446 within 10 days of the date of this letter. A PEC should be held within 30 days and an ADR session within 45 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as a "Response to Apparent Violations in NRC Inspection Report 05000391/2014616 and Investigation Report No. 2-2013-011; EA-14-179" and should include for the apparent violation: (1) the reason for the apparent violation or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a PEC.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a predecisional enforcement conference does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the conference may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned.

In lieu of a PEC, you may also request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a third party neutral. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained neutral (the "mediator") works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no

power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues. Additional information concerning the NRC's program can be obtained at <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact ICR at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.

In addition, please be advised that the number and characterization of the apparent violation(s) described in this inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," after completion of enforcement activities, a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

For administrative purposes this letter is issued as Inspection Report 05000391/2014616 and the apparent violation is designated as AV 05000391/2014616-01, Failure to Follow Site Procedure for Installation of Anchor Bolts.

If you have any questions concerning this matter, please contact Robert Haag of my staff at 404-997-4446.

Sincerely,

/RA/

William B. Jones, Director
Division of Construction Projects

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

Enclosure: Factual Summary

cc: See next page

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/RA/

William B. Jones, Director
Division of Construction Projects

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

Enclosure: Factual Summary

cc: See next page

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: ML15012A409 SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DCP	RII:EICS	RII:ORA	HQ:OGC	RII: DCP			
SIGNATURE	RCH	DLG2	SAP1	KXH7 via e-mail	WBJ			
NAME	RHAAG	DGAMBERONI	SPRICE	KHanely	W. Jones			
DATE	12/18/2014	12/18/2014	12/18/2014	01/06/2015	01/12/2015			
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO				

cc w/encl:

Mr. Gordon P. Arent
Director, 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 Two
Watts Bar Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Spring City, Tennessee 37381

Paul Simmons, Vice President
WBN Unit Two Project
WBN Unit Two
Watts Bar Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Spring City Tennessee 37381

Mr. James O'Dell, Manager
Licensing and Industry Affairs
WBN Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Spring City, Tennessee 37381

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

Mr. Sean Connors
Plant Manager, WBN Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Spring City, Tennessee 37381

Mr. R. R. Baron, Senior Manager
Nuclear Construction Quality Assurance
WBN Unit Two
Watts Bar Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Spring City, Tennessee 37381

Mr. Joseph Shea, Vice President
Nuclear Licensing
Tennessee Valley Authority
1101 Market Street
3R Lookout Place
Chattanooga, TN 37402-2801

Mr. E. J. Vigluicci
Assistant General Counsel
Tennessee Valley Authority
400 West Summit Hill Drive
6A West Tower
Knoxville, Tennessee 37402

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

cc email distribution w/encl:

Michael Skaggs
Tennessee Valley Authority
Electronic Mail Distribution

Joseph Shea
Tennessee Valley Authority
Electronic Mail Distribution

Letter to Michael D. Skaggs from William B. Jones dated January 12, 2015.

SUBJECT: WATTS BAR NUCLEAR PLANT – INSPECTION REPORT 05000391/2014616;
INVESTIGATION REPORT NO. 2-2013-011; AND APPARENT VIOLATION

DISTRIBUTION:

L. Douglas, RII EICS

R. Haag, DCP

K. Hanley, OE

L. Casey, NRR

D. Cylkowski, OGC

RIDSNNRRDIRS

PUBLIC (after completion of enforcement activities – see EICS)

FACTUAL SUMMARY

Office of Investigations Report No. 2-2013-011

On October 30, 2014, the U.S. Nuclear Regulatory Commission's (NRC) Office of Investigations (OI), Region II, completed an investigation at the Tennessee Valley Authority's (TVA) Watts Bar Nuclear Plant (Watts Bar), Unit 2. The purpose of the investigation was to determine whether contract employees working at Watts Bar Unit 2 deliberately violated a TVA procedure during installation of wedge bolt anchors for overhead base plates on Unit 2 hangers 86-1541 and 86-1545.

Based on the investigation, the pertinent facts are as follows:

On approximately December 19, 2011, a team of contract employees, led by a contract foreman, were assigned to install wedge bolt anchors in overhead base plates on Unit 2 hangers 86-1541 and 86-1545, using TVA Procedure MAI-5.1B, Wedge Bolt (WB) Anchor Installation, Revision 21. Section 6.2.6 of that procedure states that wedge bolt anchors shall be installed to within 5 degrees of perpendicular. Newly installed wedge bolt anchors exceeding this requirement are removed and replaced per Section 6.4 or approval of the deviation is obtained from Site Engineering.

After installation of the wedge bolt anchors, contract employees determined that the anchors had not been installed within 5 degrees of perpendicular. However, in lieu of removal and replacement, or obtaining approval of a deviation from Site Engineering, the contract foreman requested one of the contract employees to fabricate a modified tool. At the direction of the contract foreman, the tool was then used to straighten the wedge bolt anchors to within 5 degrees of perpendicular. The contract foreman was also observed by others to use the modified tool to straighten the wedge bolt anchors.

A preponderance of the evidence obtained demonstrates that the contract foreman understood the Watts Bar procedural requirements, as well as the importance of procedural adherence. The evidence further demonstrates that the contract foreman deliberately used or caused others to use a modified tool to straighten wedge bolt anchors instead of removing the anchors per procedure (or obtaining Site Engineering approval), and that he was aware that his actions were in violation of procedural requirements.