



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

November 5, 2010

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-0001

Watts Bar Nuclear Plant, Unit 2  
NRC Docket No. 50-391

10 CFR 50.4

**Subject: WATTS BAR NUCLEAR PLANT (WBN) UNIT 2 – INSTRUMENTATION AND  
CONTROLS STAFF INFORMATION REQUESTS**

- References:
1. Licensee Open Items to be Resolved for SER Approval List
  2. TVA Letter dated October 5, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Instrumentation and Control Staff Information Request"
  3. TVA Letter dated April 30, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Westinghouse Information Request for Withholding"
  4. TVA Letter dated October 29, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Instrumentation and Control Staff Information Request"

The purpose of this letter is to provide documents in response to NRC's information request contained in the "Licensee Open Items to be Resolved for SER Approval List," (Reference 1) and that TVA committed to submit in support of the responses provided to NRC in TVA letters dated October 5, 2010 (Reference 2) and April 30, 2010 (Reference 3). Enclosure 1 provides the description of the commitments and the documents attached to this letter. In some cases, the attached documents may not be issued/finalized due to ongoing comment resolution. However, due to the insignificance of the comments that were received during the internal review, the conclusions reached in the affected vendor documents will not be invalidated. Enclosure 1 also contains TVA's revised response to Letter Item 30 (Matrix Item 310) contained in Reference 4.

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Attachments 1, 4 and 7 contain information proprietary to Westinghouse Electric Company (WEC). TVA requests that the WEC proprietary demarcated information be withheld from public disclosure in accordance with 10 CFR § 2.390. Attachments 3, 6 and 9 contain the Application for Withholding Proprietary Information from Public Disclosure Affidavits for the WEC documents in Attachments 1, 4 and 7, respectively. Attachments 2, 5 and 8 contain the nonproprietary demarcated versions of the WEC proprietary documents in Attachments 1, 4 and 7, respectively.

Enclosure 2 contains the new regulatory commitments contained in this letter. If you have any questions, please contact William Crouch at (423) 365-2004.

I declare under the penalty of perjury that the foregoing is true and correct. Executed on the 5<sup>th</sup> day of November, 2010.

Sincerely,

  
Masoud Bajestani  
Watts Bar Unit 2 Vice President

Enclosures:

1. Description of Commitments and Attached Vendor Proprietary Documents
2. Regulatory Commitments

cc (Enclosures):

U. S. Nuclear Regulatory Commission  
Region II  
Marquis One Tower  
245 Peachtree Center Ave., NE Suite 1200  
Atlanta, Georgia 30303-1257

NRC Resident Inspector Unit 2  
Watts Bar Nuclear Plant  
1260 Nuclear Plant Road  
Spring City, Tennessee 37381

**Enclosure 1**

**TVA Letter Dated November 5, 2010**

**Description of Commitments and Requested Vendor Documents**

**I. The following provides the description of the commitments and the documents attached to this letter:**

**1. NRC Request (Item Number 65)**

*By letter dated March 12, 2010 TVA stated that the target submittal date for the FMEA was August 31, 2010.*

**TVA Commitment Provided In Reference 2:**

“Attachment 37 (Contained in TVA letter dated October 5, 2010) contains the proprietary versions of the “Common Q PAMS Failure Modes and Effects Analysis (FMEA), the Post Accident Monitoring System Reliability Analysis,” and the affidavits for withholding. The nonproprietary versions will be submitted by November 5, 2010.”

**Actions Taken to Address Commitment:**

To address the submittal of the nonproprietary version, the following is a listing of the documents that are attached to this letter:

Attachment No.	Document Title	Document No.	Revision
1	Nuclear Automation Watts Bar 2 NSSS Completion Program I&C Projects, “Failure Modes and Effects Analysis (FMEA) for the Post Accident Monitoring System” (Proprietary),*dated October 2010	WNA-AR-00180-WBT-P	0
2	Nuclear Automation Watts Bar 2 NSSS Completion Program I&C Projects, “Failure Modes and Effects Analysis (FMEA) for the Post Accident Monitoring System” (Nonproprietary),* dated October 2010	WNA-AR-00180-WBT-NP	0
3	Application For Withholding Proprietary Information From Public Disclosure WNA-AR-00-80-WBT-P Rev. 0, “Nuclear Automation Watts Bar 2 NSSS Completion Program I&C Projects, Failure Modes and Effects Analysis (FMEA) for the Post Accident Monitoring System,” (Proprietary), dated October 29, 2010	CAW-10-2999	N/A

\*Note: This is a demarcated version of the vendor document.

**Enclosure 1**

**TVA Letter Dated November 5, 2010**

**Description of Commitments and Requested Vendor Documents**

**2. NRC Request (Item Number 241)**

*Review CERPI WCAPs for system description information to be submitted to the NRC.*

**TVA Commitment Provided in Reference 2:**

"The document that provides the most detailed information is the "CERPI System Requirements Specification WNS-DS-00001-WBT," Rev. 2. The proprietary version of this document and the affidavit for withholding are contained in Attachment 29 (Contained in TVA letter dated October 5, 2010). The demarcated proprietary and nonproprietary documents will be submitted to NRC by November 12, 2010."

**Actions Taken to Address Commitment:**

To address the submittal of these demarcated proprietary and nonproprietary documents, the following is a listing of the documents that are attached to this letter:

Attachment No.	Document Title	Document No.	Revision
4	Watts Bar Unit 2 ARPI System Upgrade, "CERPI System Requirements Specification" (Proprietary),* dated June 2009	WNS-DS-00001-WBT-P	2
5	Watts Bar Unit 2 ARPI System Upgrade, "CERPI System Requirements Specification" (Nonproprietary),* dated June 2009	WNS-DS-00001-WBT-NP	2
6	Application For Withholding Proprietary Information From Public Disclosure, WNS-DS-00001-WBT-P, Rev.2, "Watts Bar Unit 2 ARPI System Upgrade, CERPI System Requirements Specification," (Proprietary), dated October 8, 2010	CAW-10-2981	N/A

\*Note: This is a demarcated version of the vendor document.

**Enclosure 1**

**TVA Letter Dated November 5, 2010**

**Description of Commitments and Requested Vendor Documents**

**3. TVA Commitment Provided in Reference 3 (This commitment was not tracked in "Licensee Open Items to be Resolved for SER Approval List")**

In letter dated April 30, 2010, titled: "Watts Bar Nuclear Plant (WBN) Unit 2 – Instrument and Control Staff Information Requests," TVA committed to provide NRC the nonproprietary version of an excerpt from Westinghouse document WNA-DS-01963, titled: "Eagle 21 Factory Acceptance Test Specification." The proprietary version of this document and the affidavit for withholding were submitted in the April 30, 2010 letter.

**Actions Taken to Address Commitment:**

To address this commitment, the following attachments are provided with this letter:

Attachment No.	Document Title	Document No.	Revision
7	RRAS, Watts Bar NSSS Completion I&C Projects, Eagle 21 Factory Acceptance Test Specification, Westinghouse Proprietary Class 2,* Section 7, Cabinet Specific FAT Test Requirements, page 7-1	WNA-DS-01963-WBT P-Excerpt	0
8	RRAS, Watts Bar NSSS Completion I&C Projects, Eagle 21 Factory Acceptance Test Specification, Westinghouse Proprietary Class 3,* Section 7, Cabinet Specific FAT Test Requirements, page 7-1	WNA-DS-01963-WBT NP-Excerpt	0
9	Application For Withholding Proprietary Information From Public Disclosure, WNA-DS-01963-WBT P-Excerpt, Revision 0 from "RRAS Watts Bar Unit 2 NSSS Completion I&C Projects, Eagle 21 Factory Acceptance Test Specification" (Proprietary), dated October 25, 2010	CAW-10-2967	N/A

\*Note: This is a demarcated version of the vendor document.

Enclosure 1

TVA Letter Dated November 5, 2010

Description of Commitments and Requested Vendor Documents

- II. The following provides TVA's revised response to Letter Item 30 (Matrix Item 310) contained in TVA Letter dated October 29, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2, Instrumentation and Control Staff Information Request":

**NRC Request (Item Number 310)**

*(1) FSAR amendment 100, Page 7.1-14, TVA setpoint methodology, states that for AAF ....and other measurable uncertainties as appropriate (i.e., those present during calibration....) should be changed to present during normal operation..... (2) Also on page 7.1-15, states that ALT may take calibration history into consideration which is vague and ambiguous.*

**TVA Response:**

- (1) The AAF definition will be revised in FSAR Amendment 102 to read:

"A tolerance band on either side of the NTSP which defines the limits of acceptable instrument performance, beyond which the channel may be considered degraded and must be evaluated for operability prior to returning it to service. Channels which exceed the AAF will be entered into the Corrective Action Program for further evaluation and trending. The Acceptable As Found tolerance is the SRSS combination of drift, maintenance and test equipment (M&TE) accuracy and readability, and calibration/reference accuracy. Other uncertainties may be included in the AAF if applicable."

This revision eliminates the concern regarding uncertainties. Attachment 3 contained in the October 29, 2010 letter provided the revised FSAR Section 7.1.2.1.9 that will be included in FSAR Amendment 102 that reflects this change.

- (2) The AAL definition will be revised in FSAR Amendment 102 to read:

"A tolerance band on either side of the NTSP within which an instrument or instrument loop is left after calibration or setpoint verification. The Acceptable As Left tolerance is equal to or less than the SRSS combination of reference accuracy, M&TE accuracy and M&TE readability. Other uncertainties may be included in the AAL if applicable."

This revision eliminates the concern regarding calibration history. Attachment 3 contained in the October 29, 2010 letter provided the revised FSAR Section 7.1.2.1.9 that will be included in FSAR Amendment 102 that reflects this change.

## Enclosure 1

TVA Letter Dated November 5, 2010

### Attachment Summary

1. Nuclear Automation Watts Bar 2 NSSS Completion Program I&C Projects, "Failure Modes and Effects Analysis (FMEA) for the Post Accident Monitoring System" (Proprietary),\* WNA-AR-00180-WBT-P, Revision 0, dated October 2010
2. Nuclear Automation Watts Bar 2 NSSS Completion Program I&C Projects, "Failure Modes and Effects Analysis (FMEA) for the Post Accident Monitoring System" (Nonproprietary),\* WNA-AR-00180-WBT-NP, Revision 0, dated October 2010
3. Application For Withholding Proprietary Information From Public Disclosure, WNA-AR-00180-WBT-P, Revision 0, "Nuclear Automation Watts Bar 2 NSSS Completion Program I&C Projects, Failure Modes and Effects Analysis (FMEA) for the Post Accident Monitoring System," (Proprietary), CAW-10-2999, dated October 29, 2010
4. Watts Bar Unit 2 ARPI System Upgrade, "CERPI System Requirements Specification" (Proprietary),\* WNS-DS-00001-WBT-P, Revision 2, dated June 2009
5. Watts Bar Unit 2 ARPI System Upgrade, "CERPI System Requirements Specification" (Nonproprietary),\* WNS-DS-00001-WBT-P, Revision 2, dated June 2009
6. Application For Withholding Proprietary Information From Public Disclosure WNS-DS-00001-WBT-P, Revision 2, "Watts Bar Unit 2 ARPI System Upgrade, CERPI System Requirements Specification," (Proprietary), CAW-10-2981, dated October 8, 2010
7. Westinghouse Document: RRAS, Watts Bar NSSS Completion I&C Projects, Eagle 21 Factory Acceptance Test Specification, WNA-DS-01963-WBT P-Excerpt , Revision 0, Westinghouse Proprietary Class 2,\* Section 7, Cabinet Specific FAT Test Requirements, page 7-1
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\*Note: This is a demarcated version of the vendor document.