



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

February 5, 2010

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Stop: OWFN P1-35  
Washington, D.C. 20555-0001

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

**Subject: Watts Bar Nuclear Plant (WBN) Unit 2 – Information Available For NRC Review and Setpoint Methodology for Protection Systems**

During a meeting with NRC staff and TVA on January 13, 2010, NRC requested the opportunity to review several Westinghouse proprietary documents related to the Common Q Post-Accident Monitoring System. Enclosure 1 lists the documents available for NRC review at the Westinghouse Rockville office.

Enclosure 2 provides the Westinghouse Setpoint Methodology for Protection Systems (WCAP-17044). Attachment 1 to Enclosure 2 contains information proprietary to Westinghouse. Accordingly, Attachment 2 to Enclosure 2 includes the Westinghouse Application for Withholding Proprietary Information from Public Disclosure with an accompanying affidavit signed by Westinghouse, the owner of the information. The affidavit provides the basis for withholding the information from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR § 2.390. TVA requests that the Westinghouse proprietary information be withheld from public disclosure in accordance with 10 CFR § 2.390.

Attachment 3 to Enclosure 2 provides the non-proprietary version of the Westinghouse Setpoint Methodology.

DOBO  
NRK

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There are no new commitments contained in this letter. If you have any questions, please contact me at (423) 365-2351.

Sincerely,



Masoud Bajestani  
Watts Bar Unit 2 Vice President

Enclosures:

1. List of Westinghouse Available Information
2. Westinghouse Setpoint Methodology for Protection Systems (Proprietary and Non-Proprietary versions enclosed)

cc (Enclosures):

U. S. Nuclear Regulatory Commission  
Region II  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW, Suite 23T85  
Atlanta, Georgia 30303-8931

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

**Enclosure 1**

**List of Westinghouse Available Information**



Westinghouse Electric Company  
Nuclear Services  
P.O. Box 355  
Pittsburgh, Pennsylvania 15230-0355  
USA

Mr. Larry Bond  
Tennessee Valley Authority  
Watts Bar Nuclear Plant  
P O Box 2000  
Spring City, TN 37381

WBT-D-1564  
Date: February 3, 2010  
Response Required: None  
Ref Contract No: 65717  
In Response To: N/A  
CWA: WEST-WBT-2008-012  
WBS: 3.1.1  
P3 Activity # N/A  
Originator: Andrew Drake

**TENNESSEE VALLEY AUTHORITY  
WATTS BAR NUCLEAR PLANT UNIT 2  
NRC Access to Common Q Documents at the Westinghouse Rockville Office**

**Reference**

1. WBT-D-1526, NRC Access to Common Q Documents at the Westinghouse Rockville Office, January 28, 2010

Dear Mr. Bond:

This letter re-issues Reference 1 as a non-proprietary letter as request by Mr. Steve Hilmes (TVA) such that the letter can be provided to the US Nuclear Regulatory Commission (USNRC).

At the January 13, 2010 NRC meeting with TVA on I&C licensing the NRC requested the opportunity to review several Westinghouse proprietary documents related to the Common Q PAMS to determine if these documents should be submitted by TVA for licensing review or be auditable documents.

The following table lists the documents that are available at this time as discussed at the meeting and are available for the NRC to review at the Westinghouse Rockville office at 12300 Twinbrook Parkway, Suite #330, Rockville, MD. The documents will not be provided to TVA. The NRC can make arrangements to view these documents by contacting Ms. Leslie Collins at 301-881-7040 (e-mail: collinlj@westinghouse.com).

Document Title	Document #	Rev	File Name (with extension)
Commercial Grade Dedication Report for the QNX Operating System for Common Q Applications	00000-ICE-37722	00	00000-ICE-37722 (Rev 00).pdf
Design and Life Cycle Evaluation Report On Pre-Developed Software in ABB AC160, I/O Modules and Tools	GKWF700777	2	GKWF700777 Rev 2.pdf
Generic Operating History Evaluation Report on Pre-Developed Software in ABB AC160, I/O Module and Tool Software	GKWF800778	2	GKWF800778 rev 2.pdf
Preparation of Commercial Dedication Instructions (CDIs)	NA 7-4	0	NA 7-4 (Rev 0).pdf
Dedication Of Commercial Grade Items	WEC 7-2	1	WEC 7-2 (Rev 1).pdf
COMMERCIAL GRADE SURVEYS	WEC 7-3	0	WEC 7-3 (Rev 0).pdf
COMMERCIAL DEDICATION REPORT FOR QNX 4.25G FOR COMMON Q APPLICATIONS	WNA-CD-00018-GEN	03	WNA-CD-00018-GEN (Rev 03).pdf

Document Title	Document #	Rev	File Name (With extension)
Post Accident Monitoring System- System Requirements Specification	WNA-DS-01617-WBT	1	WNA-DS-01617-WBT (Rev 1).pdf
Post Accident Monitoring System – System Design Specification	WNA-DS-01667-WBT	0	WNA-DS-01667-WBT (Rev 0).pdf
Project Plan Title: Common Q Post Accident Monitoring System	WNA-PD-00073-WBT	0	WNA-PD-00073-WBT (Rev 0).pdf
Testing Process for Common Q Safety Systems	WNA-PT-00058-GEN	0	WNA-PT-00058-GEN (Rev 0).pdf
Software Requirements Specification for the Post Accident Monitoring System	WNA-SD-00239-WBT	0	WNA-SD-00239-WBT (Rev 0).pdf
Element Software Test Procedure	WNA-TP-00357-GEN	4	WNA-TP-00357-GEN (Rev 4).pdf

As these documents contain information that is PROPRIETARY to Westinghouse they are being made available to the NRC for review under the following restrictions.

1. All documents will be bound.
2. The NRC project manager must schedule appointments with Ms. Leslie Collins for viewing documents during normal business hours (8 AM – 4 PM).
3. The NRC project manager shall make sure the NRC and their Contractors understand they cannot make copies or faxed any document or portion(s) of a document.
4. To provide NRC staff with electronic search capability we are providing a CD appropriately marked as proprietary with the documents. Not all documents can be searched as some are image files. The NRC staff can view the documents on their PCs at the Westinghouse office. No copies of CDs can be made and information on the CD can not be stored on their computers.
5. All CDs and documents must remain in the Westinghouse office.

Attached, for reference, is the table of documents presented at the January 13, 2010 NRC meetings with the addition of the applicable documents identified. Please make the necessary notification to the NRC regarding access to the documents along with the restrictions as noted in this letter.

If you have any questions regarding this letter, please contact me at 412-374-6515.

Very truly yours,



G. A. Gisoni  
Vice President and Project Director

cc:	Frank Koontz	Mike Easter	Andy Drake	Mark Marscher
	Greg Gisoni	Jack Moseley	John Merkovsky	Mark Stofko
	Pete Olson	Dave Ellis	Nick Norante	Mike Norrell
	Tsing-Y Liu	Susan Napolitano	Mike Warshafsy	Patricia Schaffer
	Leslie Collins			

**Watts Bar 2 – NRC Licensing Documents**  
(List from January 13, 2010 NRC Meeting)

ISG-6 Document	WEC Equivalent Document	Submittal (S) or Available for Audit (A)	Completion Date	WEC Document Number
Commercial Grade Dedication Plan	Common Q Topical Report (Section 11)	S	Completed	<u>ML050350234</u>
D3 Analysis	WB2 PAMS D3 Analysis	N/A	N/A	N/A
Design Report on Computer Integrity, Test and Calibration, and Fault Detection	Common Q Topical Report (Sections 6.4 and 9)	S	Completed	<u>ML050350234</u>
Theory of Operation Description	Common Q Topical Report (Sections 6.2 and 6.3)	S	Completed	<u>ML050350234</u>
EQ Testing Plans	Common Q Topical Report (Section 8)	S	Completed	<u>ML050350234</u>
SQA Plans and Procedures	Common Q Software Program Manual (Section 4)	S	Completed	<u>ML050350234</u>
System Description to Block Diagram Level	Watts Bar 2 PAMS System Design Specification	A	Completed	WNA-DS-01667-WBT, Rev. 0
HW and SW Architecture Descriptions	Watts Bar 2 PAMS System Design Specification and Software Requirements Specification	A	Completed	<ul style="list-style-type: none"> <li>• WNA-DS-01667-WBT, Rev. 0</li> <li>• WNA-SD-00239-WBT, Rev. 0</li> </ul>
Preliminary FMEA	Watts Bar 2 PAMS specific FMEA	S	September 2010	Document not available at this time
Safety Analysis	Part of IV&V Report	A	September 2010	Document not available at this time
System Requirements Specification	Watts Bar 2 PAMS specific System Requirements Specification	A	Completed	WNA-DS-01617-WBT, Rev. 1
System Test Plan	Testing Process for Common Q Safety Systems	A	Completed	WNA-PT-00058-GEN, Rev. 0
Software Design Spec	Watts Bar 2 PAMS Software Design Spec	A	March 2010	Documents not available at this time
Software Development Plan	Watts Bar 2 PAMS Software Project Plan	A	Completed	WNA-PD-00073-WBT, Rev. 0
Software Maintenance Plan	Common Q Software Program Manual (Section 7)	S	Completed	<u>ML050350234</u>
Software Operation Plan	Watts Bar 2 PAMS Technical Manual	A	October 2010	Document not available at this time
Application SRS	Watts Bar 2 PAMS Software Requirements Specification	A	Completed	WNA-SD-00239-WBT, Rev. 0
Software Safety Plan	Common Q Software Program Manual (Section 3)	S	Completed	<u>ML050350234</u>

**Watts Bar 2 – NRC Licensing Documents**  
(List from January 13, 2010 NRC Meeting)

ISG-6 Document	WEC Equivalent Document	Submittal (S) or Available for Audit (A)	Completion Date	WEC Document Number
Software Test Plan	Testing Process for Common Q Safety Systems	A	Completed	WNA-PT-00058-GEN, Rev. 0
Software Tool Verification Program	<ol style="list-style-type: none"> <li>1) 00000-ICE-37722, Rev 00, dated November 11, 1999, "Commercial Grade Dedication Report for the QNX Operating System for Common Q Applications";</li> <li>2) WNA-CD-00018-GEN, Rev 03, dated October 8, 2008, "Commercial Dedication Report for QNX 4.25G For Common Q Applications";</li> <li>3) GWK F 700 778, Rev. 01, dated February 18, 2000, "Generic Operating History Evaluation Report on Previously-Developed Software in ABB AC160, I/O Modules and Tool Software";</li> <li>4) GWK F 700 777, Rev. 02, dated February 22, 2000, "Design and Life Cycle Evaluation Report on Previously-Developed Software in ABB AC160, I/O Modules and Tool Software"</li> </ol>	A	Completed	<ul style="list-style-type: none"> <li>00000-ICE-37722, Rev. 00</li> <li>WNA-CD-00018-GEN, Rev. 03</li> <li>GWK F 700 778, Rev. 02</li> <li>GWK F 700 777, Rev. 02</li> </ul>
Software Training Plan	Watts Bar 2 Software Training Plan (Utility Responsibility)	A	WB2	TVA Responsibility
Software V&V Plan and Procedures	Common Q Software Program Manual (Section 5)	S	Completed	<u>ML050350234</u>
Requirements Traceability Matrix	Watts Bar 2 PAMS specific RTM	A	September 2010	Document not available at this time
Commercial Grade Dedication Report	Commercial Grade Dedication Instructions for AI687, AI688, Upgraded PC node box and flat panels	A	AI Cards February 2011  PC Node Box & FP September 2010	Documents not available at this time
Commercial Grade Dedication Procedures	WEC Level II QA Procedures WEC 7.2, 7.3; RRAS Level II Procedures NA 7.4,	A	Completed	<ul style="list-style-type: none"> <li>WEC Level II QA Procedures WEC 7.2 (Rev 1), WEC 7.3 (Rev. 0)</li> <li>RRAS Level III Procedures NA 7.4 (Rev. 0)</li> </ul>

## Watts Bar 2 – NRC Licensing Documents

(List from January 13, 2010 NRC Meeting)

ISG-6 Document	WEC Equivalent Document	Submittal (S) or Available for Audit (A)	Completion Date	WEC Document Number
Final Design Description	Final Watts Bar 2 PAMS specific SysRS and SRS.	A	September 2010	<ul style="list-style-type: none"> <li>WNA-DS-01617-WBT, Rev.1</li> <li>WNA-SD-00239-WBT, Rev. 0</li> </ul>
Final FMEA	Final Watts Bar 2 PAMS specific FMEA	S	September 2010	Document not available at this time
Final Logic Diagrams	Watts Bar 2 PAMS specific logic diagrams	A	September 2010	Document not available at this time
Final Reliability Analysis	Watts Bar 2 PAMS specific reliability analysis	A	September 2010	Document not available at this time
Final Report on Acceptance of Commercial Grade Dedication	Summary report on acceptance of AI687, AI688, Upgraded PC node box and flat panels	A	AI687/688 November 2011  PC node box and FP September 2010	Documents not available at this time
Final System Configuration Documentation	Watts Bar 2 PAMS specific configuration drawings	A	September 2010	Document not available at this time
Final Factory Acceptance Test Reports	Watts Bar 2 PAMS specific FAT report	A	August 2010	Document not available at this time
Installation Test Plans and Procedures	Watts Bar 2 PAMS specific SAT test plan and procedure	A	August 2010	Document not available at this time
Qualification Test Procedures	EQ test procedures for AI687, AI688, Upgraded PC node box and flat panels	A	TBD	Document not available at this time
Summary of Final EQ Test Results	EQ Summary report for AI687, AI688, Upgraded PC node box and flat panels	A	TBD	Document not available at this time
Summary of Test Results (including FAT)	Watts Bar 2 PAMS specific IV&V Phase Summary Reports	A	September 2010	Document not available at this time
System Test Procedures	Watts Bar 2 PAMS specific FAT Procedure	A	July 2010	Document not available at this time
Software Management Implementation Procedures	Watts Bar 2 PAMS specific Project Plan and Software Project Plan	A	Completed	WNA-PD-00073-WBT, Rev. 0
Software Project Risk Management Report	Watts Bar 2 PAMS specific Project Plan and Software Project Plan	A	Completed	WNA-PD-00073-WBT, Rev. 0



## Watts Bar 2 – NRC Licensing Documents

(List from January 13, 2010 NRC Meeting)

ISG-6 Document	WEC Equivalent Document	Submittal (S) or Available for Audit (A)	Completion Date	WEC Document Number
Software Test Procedures	1) Element Software Test Procedure, WNA-TP-00357-GEN 2) Watts Bar 2 PAMS specific Processor Module Software Test	A	June 2010	1) WNA-TP-00357-GEN, Rev. 4 2) Document not available at this time
Software Tool Analysis Report	See Software Tool Verification Program	A	Completed	See Software Tool Verification Program
V&V Reports	Watts Bar 2 PAMS specific IV&V Phase Summary reports	A	September 2010	Document not available at this time