

Attachments 2, 6, 9, 12, 15, 18 and 21 are to be withheld from public disclosure under 10 CFR § 2.390.

When separated from these attachments, this letter is decontrolled.



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

November 14, 2011

10 CFR 50.4

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

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

Reference: 1. Supplemental Safety Evaluation Report (SSER) 22, 23 and 24 Appendix HH
Watts Bar Unit 2 Action Items Table

The purpose of this letter is to provide TVA's responses to NRC's information requests on:

- SSER 22, 23 and 24 Appendix HH "Watts Bar Unit 2 Action Items Table," Items 38, 77, 121, 125, 126 and 127
- E-Mail from NRC (J. Poole) to TVA Licensing (G. Arent), "DRAFT Request for Additional Information Regarding Open Item #127," sent October 31, 2011
- Various commitments

Enclosure 1 to this letter provides TVA's responses to the information requested by NRC. Enclosure 2 contains the supporting documents for TVA's responses to NRC's requests/questions provided in Enclosure 1. Enclosure 3 contains a list of references on which TVA's responses are based. Enclosure 4 contains a list of new regulatory commitments.

Attachments 2, 6, 9, 12, 15, 18 and 21 contain information proprietary to Westinghouse Electric Company LLC (WEC). TVA requests that the WEC proprietary information be withheld from public disclosure in accordance with 10 CFR § 2.390.

If you have any questions, please contact Gordon Arent at (423) 365-2004.

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NRK

U.S. Nuclear Regulatory Commission

Page 2

November 14, 2011

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 14th day of November 2011.

Respectfully,

A handwritten signature in black ink, appearing to read 'D. Stinson', with a long horizontal line extending to the right.

David Stinson

Watts Bar Unit 2 Vice President

Enclosures:

1. TVA Responses to Instrumentation and Controls Staff Information Requests
2. List of Attachments
3. List of References
4. List of New 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 14, 2011
TVA Responses to Instrumentation and Controls Staff Information Requests

The following acronyms/abbreviations are used in this letter:

CET	Core Exit Thermocouple
¹ DMIMS-DX™	Digital Metal Impact Monitoring System
DPL	Data Point Library
EMC	Electro-Magnetic Compatibility
EMI	Electro-Magnetic Interference
EQ	Environmental Qualification
ERDS	Emergency Response Data System
GA	General Atomics
GA-ESI	General Atomics-Electronic Systems, Inc.
HRCAR	High Range Containment Accident Radiation
I&C	Instrument and Controls
IIS	Incore Instrument System
IITA	Incore Instrument Thimble Assembly
MI	Mineral Insulated
NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
NSSS	Nuclear Steam Supply System
PAMS	Post Accident Monitoring System
PER	Problem Evaluation Report
RAI	Request for Additional Information
RFI	Radio Frequency Interference
RRAS	Repair, Replacement & Automation Services
SPD	Self Powered Detector
SPND	Self Powered Neutron Detector
TVA	Tennessee Valley Authority
V&V	Verification and Validation
VDC	Volts Direct Current
WBN	Watts Bar Nuclear Plant
WEC	Westinghouse Electric Corporation
² WINCISE™	Westinghouse In-Core Information Surveillance & Engineering

Notes:

1. In some instances, the term Self Powered Neutron Detector (SPND) is used. In other instances the term Self Powered Detector (SPD) is used. The terms SPD and SPND are interchangeable and refer to the vanadium neutron detectors contained in the Incore Instrument Thimble Assemblies (IITA).
2. In some instances, the abbreviation GA is used to refer to General Atomics. In some instances, the abbreviation GA-ESI is used to refer to General Atomics-Electronic Systems Inc. GA and GA-ESI are the same company and the abbreviations can be used interchangeably.

¹ DMIMS-DX is a registered trademark of the Westinghouse Electric Corporation LLC

² WINCISE is a registered trademark of the Westinghouse Electric Corporation LLC

Enclosure 1
TVA Letter Dated November 14, 2011
TVA Responses to Instrumentation and Controls Staff Information Requests

Notes (continued):

3. For some NRC requests for additional information (RAIs), this letter provides TVA's initial response. For the other NRC RAIs in this letter, a response has been provided in previous TVA letters to the NRC, and the NRC has subsequently requested additional information. For these requests, the initial TVA response is not repeated below. The additional NRC information requests are identified in this letter as "**Follow-up NRC Requests.**" TVA responses to these items are identified as "**TVA Response to Follow-up NRC Request.**"

Responses:

1. NRC Request (SSER 23 Appendix HH Item Number 38)

The NRC staff will confirm the availability and operability of the ERDS for Unit 2 prior to issuance of the Unit 2 OL. (SSER 22, Section 13.3.2.6, pg 13-14).

TVA Partial Response to NRC Request

In order to confirm the availability and operability of the WBN Unit 2 ERDS, Engineering is required to develop and issue the WBN 2 Emergency Response Data System (ERDS) Data Point Library (DPL) and provide the DPL to the TVA Computer Engineering Group for addition to the ERDS software. In addition, TVA is required to provide the DPL to the NRC. Engineering has issued the DPL Revision 0 to the TVA Computer Engineering Group for incorporation. TVA Computer Engineering is in the process of incorporating the DPL into the ERDS software. Attachment 1 contains the "Watts Bar Nuclear Plant (WBN) Unit 2 Emergency Response Data System (ERDS) Data Point Library (DPL)," Revision 0.

Problem Evaluation Report (PER) 450041 was written to document a problem during the last NRC graded exercise where actual data was sent to the NRC instead of the drill simulated data. This PER has the potential to require a revision to the WBN 2 DPL. If changes to the DPL are required by the PER, then TVA will submit a revised DPL to the NRC no later than June 15, 2012.

2. NRC Request (SSER 23 Appendix HH Item Number 77)

It is unclear to the NRC staff which software V&V documents are applicable to the HRCAR monitors. TVA should clarify which software V&V documents are applicable, in order for the staff to complete its evaluation. (SSER 23, Section 7.5.2.3, pg 7-109)

Follow up NRC Request

TVA needs to obtain V&V documents from vendor and provide to NRR. NRR tech staff will review and document in SER.

Enclosure 1
TVA Letter Dated November 14, 2011
TVA Responses to Instrumentation and Controls Staff Information Requests

TVA Response to Follow up NRC Request

TVA to NRC letter dated September 1, 2011 (Reference 5), identified the following Verification and Validation (V&V) documents as applicable to the High Range Containment Accident Radiation (HRCAR) monitors:

- a) Software Version 1.0: (initial issue) General Atomics Electronic Systems, Inc. (GA-ESI) document 04507007-1TR, "RM-1000 System Verification Test Results Engineering Report Sequoyah Nuclear Plant Units 1 and 2," Original Release: July, 1999.
- b) Software Version 1.1: GA-ESI document 04508005, "RM-1000 Version 1.1 Software Verification Report," January 2002
- c) Software Version 1.2: GA-ESI document 04508006, "RM-1000 Version 1.2 Software Verification Report," Revision A, April 2008.

The engineering approved proprietary versions of these documents were submitted in TVA to NRC letter dated October 13, 2011 (Reference 1). The non proprietary versions and affidavit for withholding were submitted in TVA to NRC letter dated July 15, 2010 (Reference 2).

3. NRC Request (SSER 24 Appendix HH Item Number 121)

TVA should submit the results to the NRC staff of a dielectric strength test performed on the IITA assembly. (SSER 24, Section 7.7.1.9.5)

TVA Partial Response to NRC Request

By agreement between Westinghouse Electric Corp. (WEC) and NRC staff, testing of the non-safety-related Incore Instrument Thimble Assembly (IITA) Self Powered Neutron Detector (SPND) Mineral Insulated (MI) cables is not required. The agreement is that testing of the safety-related Core Exit Thermocouple (CET) MI cables would be performed and documentation of the test results provided. The results of the testing are documented in WEC document WBT-D-3548 P-Enclosure, "Closure of WNA-CN-00157-WBT Open Items," dated October 2011.

Attachment 2 contains proprietary WEC document WBT-D-3548 P-Enclosure, "Closure of WNA-CN-00157-WBT Open Items," dated October 2011. Attachment 3 contains non-proprietary WEC document WBT-D-3548 NP-Enclosure, "Closure of WNA-CN-00157-WBT Open Items," dated October 2011. Attachment 4 contains WEC document CWA-11-3272, "Application for Withholding Proprietary Information from Public Disclosure WBT-D-3548 P-Enclosure, "Closure of WNA-CN-00157-WBT Open Items," (Proprietary)" dated October 17, 2011.

Not all documents requested/necessary to support the response to this question are releasable to TVA or the NRC. As identified in WEC to TVA letters dated October 12, 2011, "NRC Access to WINCISE Documents at the Westinghouse Rockville Office" (Reference 3) and WEC to TVA letter dated October 27, 2011, "NRC Access to WINCISE

Enclosure 1
TVA Letter Dated November 14, 2011
TVA Responses to Instrumentation and Controls Staff Information Requests

Document at the Westinghouse Rockville Office" (Reference 4), copies of the documents listed below have been placed in the WEC Rockville office and are available for NRC audit

Document Title	Document #	Revision
Quality Release & Certificate of Conformance	QR-121284-01	01
Westinghouse Certificate of Qualification Report	CQ-121284-01	01
Packing List	N/A	N/A
Quality Release & Certificate of Conformance	QR-QR-IO-192	00
Quality Release & Certificate of Conformance	QR-10-351	00
Quality Release & Certificate of Conformance	QR-4500298582-001	00
Class IE Qualification of the Incore Instrument (Core Exit Thermocouple Portion) and Mineral Insulated Cable Assembly	CE-NPSD-240-P	0

4. NRC Request (SSER 24 Appendix HH Item Number 125)

TVA should provide clarification to the NRC staff of the type of connector used with the MI cable in Unit 2, and which EQ test is applicable. (SSER 24, Section 7.7.1.9.5)

TVA Expanded Response

A response to this item was provided in TVA to NRC letter dated September 30, 2011 (Reference 5). Subsequently, WEC provided additional information on the voltage breakdown testing of the connectors.

The IITA electrical connectors were ordered per WEC Design Specification 00000-FEA-6101, which is a requirement of the IITA Design Specification (418A28). Per the connector specification, a voltage breakdown test was performed on each unit per MIL-STD-202, Method 301, "Dielectric Withstand Voltage." Testing was performed by the electrical connector manufacturer, Meggitt Safety Systems. The acceptance criterion for the test was that each electrical connector indicates no voltage breakdown when a potential of 1000 VDC is applied between the individual conductors and between the conductors and the backshell. Documentation was provided by Meggitt Safety Systems via Document Submittal Forms 4500278579-2, 4500278579-3, and 4500307957-6, which show passing results for the connectors provided to WEC for use in the WBN IITAs.

Additionally, note that a dielectric withstanding voltage test will be performed on a sample of completed IITAs to show no voltage breakdown. Documentation of the completion of this test will be provided to WEC. A test summary will be added to WNA-CN-00157-WBT which is scheduled to be delivered to TVA by November 18, 2011, and will be provided to the NRC no later than November 30, 2011.

Note that WNA-CN-00157-WBT will be revised to show no open items, and a non-proprietary version of the calculation note will be made available. Both the proprietary and the non-proprietary versions will be provided to TVA by November 18, 2011. WEC Design Specification 00000-FEA-6101, and IITA Design Specification 418A28 will be made available to the NRC to review at the WEC Office in Rockville, Maryland, no later than November 30, 2011.

Enclosure 1
TVA Letter Dated November 14, 2011
TVA Responses to Instrumentation and Controls Staff Information Requests

5. Not Used

6. **NRC Request (SSER 24 Appendix HH Item Number 127)**

TVA should provide a summary to the NRC staff of the electro-magnetic interference/radio-frequency interference (EMI/RFI) testing for the MI cable electro-magnetic compatibility (EMC) qualification test results. (SSER 24, Section 7.7.1.9.5)

Follow up NRC Request

Action Item No. 127 identified in the NRC NUREG-0847 Supplement 24 (ADAMS Accession No. ML1277A148), SSER Section 7.7.1.9, "In-Core Instrumentation System," [IIS] requires TVA to "provide a summary to the NRC staff of the electro-magnetic interference/radio-frequency interference (EMI/RFI) testing for the MI cable electro-magnetic compatibility (EMC) qualification test results."

In TVA's September 30, 2011 letter (ADAMS Accession No. ML11287A254), TVA provided a response for this item. To complete our review on this item, the NRC requires TVA to confirm the NRC staff's understanding regarding the validity of the following descriptions about the EMI, RFI and EMC protection:

- (1) Within the Incore Instrumentation Thimble Assembly (IITA), the Core Exit Thermocouple (CET) is insulated with crushed Alumina (Al₂O₃) contained in an overall stainless steel tubular sheath. Each individual Self-powered Neutron Detector (SPND) consists of a Vanadium emitter wire, surrounded by crushed Alumina, which is surrounded by a grounded stainless steel tubular sheath. The thermocouple sheath, the SPND sheaths, and the overall IITA sheath are all electrically grounded at the reactor vessel.*
- (2) The Mineral Insulated (MI) cable assembly consists of aluminum oxide (Al₂O₃) insulation, enclosing the SPNDs and core exit thermocouples, each one surrounded by a separate grounded stainless steel tubular sheath. The combination of the stainless steel sheath material joined to the stainless steel connectors provides for 100 percent shielding coverage. The exterior surfaces of the IIS MI Cable Assemblies are post accident qualified, and as such, are required to be 100 percent hermetic. This hermeticity of the MI Cable Assembly design and construction also demonstrates the absence of any apertures or seams that would compromise the shielding effectiveness of the assemblies, and thus providing the necessary protection against EMI/RFI interferences. To provide the necessary grounding of the MI cable, the cable assemblies are to be directly secured to seismically qualified in-containment cable supports at regular intervals along the length of the cable run. The frequency of this support arrangement provides multiple low impedance paths to ground for the cable assemblies to effectively divert EMI/RFI.*
- (3) Westinghouse explained that the maximum current from a Vanadium detector is sufficiently low which, in the event of a short circuit from emitter to sheath within the cable, restricts the energy available to an amount that will preclude melting or other damage to the protective sheath. In case of breakage to the sheath, the detector leakage current will be shunted to common (plant ground) via the detector sheath.*

Enclosure 1
TVA Letter Dated November 14, 2011
TVA Responses to Instrumentation and Controls Staff Information Requests

Further, the design maximum emitter current is sufficiently low that any short within the IITA will so restrict the energy available that further damage is precluded. Thus, the dual barrier design combined with the low detector current provides inherent EMI/RFI protection.

TVA Response to Follow Up Request

- (1) TVA and WEC concur with the NRC staff's understanding.
- (2) TVA and WEC concur with the NRC staff's understanding with the corrections shown below:
- (3) TVA and WEC concur with the NRC staff's understanding.

7. TVA Commitment

The non-proprietary version of Westinghouse document "WBT DMIMS-DX™ Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2," EQ-QR-33-WBT, Revision 0 and affidavit for withholding will be submitted within two weeks of receipt from Westinghouse.

Commitment Closure

As committed to in Enclosure 4 of TVA letter to NRC dated May 6, 2011, (Reference 6), Attachment 6 contains proprietary WEC document "WBT DMIMS-DX™ Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2," EQ-QR-33-WBT, Revision 0 (proprietary). Attachment 7 contains non-proprietary WEC document "WBT DMIMS-DX™ Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2," EQ-QR-33-WBT, Revision 0 (non-proprietary). Attachment 8 contains WEC document CAW-11-3291, Application For Withholding Proprietary Information From Public Disclosure EQ-QR-33-WBT-P, Revision 0, "WBT DMIMS-DX™ Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2, EQ-QR-33-WBT, Revision 0 (proprietary)."

8. TVA Commitment

TVA will submit the nonproprietary version of Westinghouse document 00000-ICE-30156, Revision 7, System Requirements Specification for the Common Q Post Accident Monitoring System (Proprietary), dated April 2010 to NRC within two weeks of receiving it from the vendor.

Commitment Closure

In order to meet this commitment, WEC created WCAP-17529, "System Requirements Specification for the Common Q Post Accident Monitoring System."

As committed to in Enclosure 4 of TVA letter to NRC dated September 2, 2010, (Reference 7), Attachment 9 contains proprietary WEC document "System Requirements

Enclosure 1
TVA Letter Dated November 14, 2011
TVA Responses to Instrumentation and Controls Staff Information Requests

Specification for the Common Q Post Accident Monitoring System," WCAP-17529-P, Revision 0 (proprietary). Attachment 10 contains non-proprietary WEC document "System Requirements Specification for the Common Q Post Accident Monitoring System," WCAP-17529-NP, Revision 0 (non-proprietary). Attachment 11 contains WEC document CAW-11-3292, Application For Withholding Proprietary Information From Public Disclosure WCAP-17529-P, Revision 0, "System Requirements Specification for the Common Q Post Accident Monitoring System, (proprietary)."

9. TVA Commitment

TVA will submit the nonproprietary version of Westinghouse document WNA-SD-00248-WBT, RRAS Watts Bar 2 NSSS Completion Program I&C Projects, Software Design Description for the Post Accident Monitoring System Flat Panel Display (Proprietary), dated April 20, 2010, to NRC within two weeks of receiving it from the vendor.

Commitment Closure

As committed to in Enclosure 4 of TVA letter to NRC dated September 2, 2010, (Reference 7), Attachment 12 contains proprietary WEC document WNA-SD-00248-WBT-P, Revision 3, "RRAS Watts Bar 2 NSSS Completion Program I&C Projects, Software Design Description for the Post Accident Monitoring System Flat Panel Display (Proprietary)." Attachment 13 contains non-proprietary WEC document WNA-SD-00248-WBT-NP, Revision 3, "RRAS Watts Bar 2 NSSS Completion Program I&C Projects, Software Design Description for the Post Accident Monitoring System Flat Panel Display (Non-Proprietary)." Attachment 14 contains WEC document CAW-11-3285, "Application for Withholding Proprietary Information for Public Disclosure, WNA-SD-00248-WBT-P, RRAS Watts Bar 2 NSSS Completion Program I&C Projects, Software Design Description for the Post Accident Monitoring System Flat Panel Display (Proprietary)."

10. TVA Commitment

TVA will submit the nonproprietary versions of WNA-SD-00250-WBT Revision 0, WNA-VR-00283-WBT, Revision 0 and WNA-VR-00279-WBT, Revision 0, to NRC within two weeks of receiving them from the vendor.

Commitment Closure

As committed to in Enclosure 4 of TVA letter to NRC dated August 20, 2010 (Reference 8), Attachment 15 contains proprietary WEC document WNA-SD-00250-WBT-P, Revision 3, "Software Design Description for the Post Accident Monitoring System AC160 Software (Proprietary)." Attachment 16 contains non-proprietary WEC document WNA-SD-00250-WBT-NP, Revision 3, "Software Design Description for the Post Accident Monitoring System AC160 Software (Non-Proprietary)." Attachment 17 contains WEC document CAW-11-3286, Application for Withholding Proprietary Information for Public Disclosure, WNA-SD-00250-WBT-P, Revision 0, "Software Design Description for the Post Accident Monitoring System AC160 Software (proprietary)."

Enclosure 1
TVA Letter Dated November 14, 2011
TVA Responses to Instrumentation and Controls Staff Information Requests

11. TVA Commitment

The nonproprietary versions of Westinghouse documents Post Accident Monitoring System (PAMS) Test Plan (Attachment 9), PAMS Channel Integration Test/Factory Acceptance Test (Attachment 12), IV&V Summary Reports for PAMS (Attachments 14 and 16), and PAMS Licensing Technical Report (Attachment 19) will be provided upon issuance of the final proprietary documents.

Commitment Closure

As committed to in Enclosure 4 of TVA letter to NRC dated December 3, 2010 (Reference 9), Attachment 18 contains proprietary WEC document WNA-TP-02988-WBT-P, Revision 0, "Nuclear Automation Watts Bar Unit 2 NSSS Completion Program I&C Projects, Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test, (Proprietary)." Attachment 19 contains non-proprietary WEC document WNA-TP-02988-WBT-NP, Revision 0, "Nuclear Automation Watts Bar Unit 2 NSSS Completion Program I&C Projects, Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test, (Non-Proprietary)." Attachment 20 contains WEC document CAW-11-3287, "Application For Withholding Proprietary Information From Public Disclosure WNA-TP-02988-WBT-P, Revision 0, "Nuclear Automation Watts Bar Unit 2 NSSS Completion Program I&C Projects, Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test (Proprietary)."

12. TVA Commitment

TVA will submit the nonproprietary versions of WNA-SD-00250-WBT Revision 0, WNA-VR-00283-WBT, Revision 0 and WNA-VR-00279-WBT, Revision 0, to NRC within two weeks of receiving them from the vendor.

Commitment Closure

As committed to in Enclosure 4 of TVA letter to NRC dated August 20, 2010 (Reference 8), Attachment 21 contains proprietary WEC document WNA-VR-0279-WBT-P, Revision 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System (Proprietary)." Attachment 22 contains non-proprietary WEC document WNA-VR-0279-WBT-P, Revision 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System (Non-Proprietary)." Attachment 23 contains WEC document CAW-11-3287, Application For Withholding Proprietary Information From Public Disclosure WNA-VR-0279-WBT-P, Revision 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System (Proprietary)."

13. TVA Commitment

A corrected proprietary version of, a non-proprietary version of, and an affidavit for withholding for Thermo Fisher Scientific Qualification Report No. 864, Rev. 0 will be submitted to the NRC by November 15, 2010.

Enclosure 1
TVA Letter Dated November 14, 2011
TVA Responses to Instrumentation and Controls Staff Information Requests

Partial Commitment Closure

As committed to in Enclosure 4 of TVA letter to NRC dated July 31, 2010, (Reference 10) Attachment 24 contains "Thermo Fisher Affidavit for Withholding Qualification Report No. 864, REV.1 - Class 1E Qualification of Source Range, Intermediate Range and Wide Range Channels," dated March 11, 2011. This completes the response to this commitment.

Enclosure 2
TVA Letter Dated November 14, 2011
List of Attachments

Note: While project coversheets have not been included, all attachments have been reviewed and approved by Engineering prior to submittal.

1. Watts Bar Nuclear Plant (WBN) Unit 2 Emergency Response Data System (ERDS) Data Point Library (DPL), Revision 0 (Letter Item 1, SSER 23 Appendix HH Item Number 38)
2. Proprietary Westinghouse Electric Company document WBT-D-3548 P-Enclosure, "Closure of WNA-CN-00157-WBT Open Items" dated October 2011 (Letter Item 3, SSER 23 Appendix HH Item Number 121)
3. Non-proprietary Westinghouse Electric Company document WBT-D-3548 NP-Enclosure, "Closure of WNA-CN-00157-WBT Open Items" dated October 2011 (Letter Item 3, SSER 23 Appendix HH Item Number 121)
4. Westinghouse Electric Company document CWA-11-3272, Application for Withholding Proprietary Information from Public Disclosure WBT-D-3548 P-Enclosure, "Closure of WNA-CN-00157-WBT Open Items (Proprietary)" dated October 17, 2011 (Letter Item 3, SSER 23 Appendix HH Item Number 121)
5. Not Used
6. Proprietary Westinghouse Electric Company document EQ-QR-33-WBT-P, Revision 0, "WBT DMIMS-DX™ Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2," (proprietary) dated October 2011 (Letter Item 7)
7. Non-proprietary Westinghouse Electric Company document EQ-QR-33-WBT-NP, Revision 0, "WBT DMIMS-DX™ Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2," (non-proprietary) dated October 2011 (Letter Item 7)
8. Westinghouse Electric Company document CAW-11-3291, Application For Withholding Proprietary Information From Public Disclosure EQ-QR-33-WBT-P, Revision 0, "WBT DMIMS-DX™ Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2, EQ-QR-33-WBT, Revision 0 (proprietary)" dated October 31, 2011 (Letter Item 7)
9. Proprietary Westinghouse Electric Company document WCAP-17529-P, Revision 0, "System Requirements Specification for the Common Q Post Accident Monitoring System," (proprietary) dated November 2011 (Letter Item 8)
10. Non-proprietary Westinghouse Electric Company document WCAP-17529-NP, Revision 0, "System Requirements Specification for the Common Q Post Accident Monitoring System," (non-proprietary) dated November 2011 (Letter Item 8)
11. Westinghouse Electric Company document CAW-11-3292, Application For Withholding Proprietary Information From Public Disclosure WCAP-17529-P, Revision 0, "System Requirements Specification for the Common Q Post Accident Monitoring System, (proprietary)" dated October 31, 2011 (Letter Item 8)

Enclosure 2
TVA Letter Dated November 14, 2011
List of Attachments

12. Proprietary Westinghouse Electric Company document WNA-SD-00248-WBT-P, Revision 3, "RRAS Watts Bar 2 NSSS Completion Program I&C Projects, Software Design Description for the Post Accident Monitoring System Flat Panel Display (Proprietary)" dated October 2011 (Letter Item 9)
13. Non-proprietary Westinghouse Electric Company document WNA-SD-00248-WBT-NP, Revision 3, "RRAS Watts Bar 2 NSSS Completion Program I&C Projects, Software Design Description for the Post Accident Monitoring System Flat Panel Display (Non-Proprietary)" dated October 2011 (Letter Item 9)
14. Westinghouse Electric Company document CAW-11-3285, "Application for Withholding Proprietary Information for Public Disclosure, WNA-SD-00248-WBT-P, RRAS Watts Bar 2 NSSS Completion Program I&C Projects, Software Design Description for the Post Accident Monitoring System Flat Panel Display (Proprietary)" dated October 26, 2011 (Letter Item 9)
15. Proprietary Westinghouse Electric Company document WNA-SD-00250-WBT-P, Revision 3, "Software Design Description for the Post Accident Monitoring System AC160 Software (Proprietary)" dated October 2011 (Letter Item 10)
16. Non-proprietary Westinghouse Electric Company document WNA-SD-00250-WBT-NP, Revision 3, "Software Design Description for the Post Accident Monitoring System AC160 Software (Non-Proprietary)" dated October 2011 (Letter Item 10)
17. Westinghouse Electric Company document CAW-11-3286, Application for Withholding Proprietary Information for Public Disclosure, WNA-SD-00250-WBT-P, Revision 0, "Software Design Description for the Post Accident Monitoring System AC160 Software (proprietary)" dated October 26, 2011 (Letter Item 10)
18. Proprietary Westinghouse Electric Company document WNA-TP-02988-WBT-P, Revision 0, "Nuclear Automation Watts Bar Unit 2 NSSS Completion Program I&C Projects, Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test, (Proprietary)" dated October 2011 (Letter Item 11)
19. Non-proprietary Westinghouse Electric Company document WNA-TP-02988-WBT-NP, Revision 0, "Nuclear Automation Watts Bar Unit 2 NSSS Completion Program I&C Projects, Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test, (Non-Proprietary)" dated October 2011 (Letter Item 11)
20. Westinghouse Electric Company document CAW-11-3287, Application For Withholding Proprietary Information From Public Disclosure WNA-TP-02988-WBT-P, Revision 0, "Nuclear Automation Watts Bar Unit 2 NSSS Completion Program I&C Projects, Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test (Proprietary)" dated October 26, 2011 (Letter Item 11)
21. Proprietary Westinghouse Electric Company document WNA-VR-0279-WBT-P, Revision 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System (Proprietary)" dated October 2011 (Letter Item 12)

Enclosure 2
TVA Letter Dated November 14, 2011
List of Attachments

22. Non-proprietary Westinghouse Electric Company document WNA-VR-0279-WBT-P, Revision 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System (Non-Proprietary)" dated October 2011 (Letter Item 12)
23. Westinghouse Electric Company document CAW-11-3287, Application For Withholding Proprietary Information From Public Disclosure WNA-VR-0279-WBT-P, Revision 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System (Proprietary)" dated October 18, 2011 (Letter Item 12)
24. "Thermo Fisher Affidavit for Withholding Qualification Report NO. 864, REV.1 - Class 1E Qualification of Source Range, Intermediate Range and Wide Range Channels," dated March 11, 2011 (Letter Item 13)

Enclosure 3
TVA Letter Dated November 14, 2011
List of References

1. TVA to NRC letter dated October 13, 2011 "Watts Bar Nuclear Plant (WBN) Unit 2 – Instrumentation and Controls Staff Information Requests" (Letter Item 2, SSER 23 Appendix HH Item Number 77)
2. TVA to NRC letter dated July 15, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Instrumentation and Controls Staff Information Requests" (Letter Item 2, SSER 23 Appendix HH Item Number 77)
3. Westinghouse to TVA letter dated October 12, 2011, "NRC Access to WINCISE Documents at the Westinghouse Rockville Office" (Letter Item 3, SSER 23 Appendix HH Item Number 121)
4. Westinghouse to TVA letter dated October 27, 2011, "NRC Access to WINCISE Document at the Westinghouse Rockville Office" (Letter Item 3, SSER 23 Appendix HH Item Number 121)
5. Not Used
6. TVA to NRC letter dated May 6, 2011, "Watts Bar Nuclear Plant (WBN) Unit 2 – Instrumentation and Controls Staff Information Requests" (Letter Item 7)
7. TVA to NRC letter dated September 2, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Instrumentation and Controls Staff Information Requests" (Letter Items 8 and 9)
8. TVA to NRC letter dated August 20, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Instrumentation and Controls Staff Information Requests" (Letter Items 10 and 12)
9. TVA to NRC letter dated December 3, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Instrumentation and Controls Staff Information Requests" (Letter Item 11)
10. TVA to NRC letter dated July 31, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Final Safety Analysis Report (FSAR) – Response to Preliminary Requests for Additional Information and Requests For Additional Information" (Letter Item 13)

Enclosure 4
TVA Letter Dated November 14, 2011
List of New Regulatory Commitments

1. Problem Evaluation Report (PER) 450041 was written to document a problem during the last NRC graded exercise where actual data was sent to the NRC instead of the drill simulated data. This PER has the potential to require a revision to the WBN 2 DPL. If changes to the DPL are required by the PER, then TVA will submit a revised DPL to the NRC no later than June 15, 2012. (Letter Item 1, SSER 23 Appendix HH Item Number 38)
2. Revision 1 of WNA-CN-00157-WBT will be provided to the NRC no later than November 30, 2011. (Letter Item 4, SSER 23 Appendix HH Item Number 125)
3. WEC Design Specification 00000-FEA-6101, and IITA Design Specification 418A28 will be made available to the NRC to review at the WEC Office in Rockville, Maryland, no later than November 30, 2011. (Letter Item 4, SSER 23 Appendix HH Item Number 125)

Attachment 4

Westinghouse Electric Company document CWA-11-3272, Application for Withholding Proprietary Information from Public Disclosure WBT-D-3548 P-Enclosure, "Closure of WNA-CN-00157-WBT Open Items (Proprietary)" dated October 17, 2011 (Letter Item 3, SSER 23 Appendix HH Item Number 121)



Westinghouse Electric Company
Nuclear Services
1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Direct tel: (412) 374-4643
Direct fax: (724) 720-0754
e-mail: greshaja@westinghouse.com
Proj letter: WBT-D-3548

CAW-11-3272

October 17, 2011

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: WBT-D-3548 P-Enclosure, "Closure of WNA-CN-00157-WBT Open Items" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-11-3272 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Tennessee Valley Authority.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-11-3272, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. A. Gresham".
J. A. Gresham, Manager
Regulatory Compliance

Enclosures

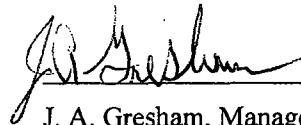
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

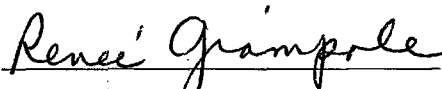
COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

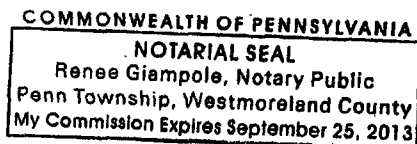


J. A. Gresham, Manager
Regulatory Compliance

Sworn to and subscribed before me
this 17th day of October 2011



Notary Public



- (1) I am Manager, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in WBT-D-3548 P-Enclosure, "Closure of WNA-CN-00157-WBT Open Items" (Proprietary) dated October 2011 for submittal to the Commission, being transmitted by Tennessee Valley Authority letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with the Incore Instrument System (IIS) and may be used only for that purpose.

This information is part of that which will enable Westinghouse to:

- (a) Assist the customer in providing technical licensing information to the NRC that is required for approval of the Watts Bar Nuclear Unit 2 IIS System.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for the purpose of licensing in-core instrumentation systems.
- (b) Its use by a competitor would improve his competitive position in the development and licensing of a similar product.
- (c) The information requested to be withheld reveals the distinguishing aspects of a design developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations, analysis and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

COPYRIGHT NOTICE

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

Tennessee Valley Authority
Letter for Transmittal to the NRC

The following paragraphs should be included in your letter to the NRC:

Enclosed are:

1. ____ copies of WBT-D-3548 P-Enclosure, "Closure of WNA-CN-00157-WBT Open Items"
(Proprietary)
2. ____ copies of WBT-D-3548 NP-Enclosure, "Closure of WNA-CN-00157-WBT Open Items"
(Non-Proprietary)

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-11-3272, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

As Item 1 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b) (4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-11-3272 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Attachment 8

**Westinghouse Electric Company document CAW-11-3291, Application For Withholding
Proprietary Information From Public Disclosure EQ-QR-33-WBT-P, Revision 0, "WBT
DMIMS-DX™ Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-
DX™) for Watts Bar Unit 2, EQ-QR-33-WBT, Revision 0 (proprietary)"
dated October 31, 2011 (Letter Item 7)**



Westinghouse Electric Company
Nuclear Services
1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Direct tel: (412) 374-4643
Direct fax: (724) 720-0754
e-mail: greshaja@westinghouse.com
Proj letter: WBT-D-3576

CAW-11-3291

October 31, 2011

**APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE**

Subject: EQ-QR-33-WBT-P, Rev. 0, "Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-11-3291 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Tennessee Valley Authority.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-11-3291, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. A. Gresham".
J. A. Gresham, Manager
Regulatory Compliance

Enclosures

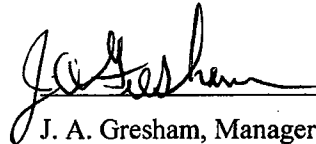
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



J. A. Gresham, Manager
Regulatory Compliance

Sworn to and subscribed before me
this 31st day of October 2011



Notary Public

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Cynthia Olesky, Notary Public
Manor Boro, Westmoreland County
My Commission Expires July 16, 2014
Member, Pennsylvania Association of Notaries

- (1) I am Manager, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
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-
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390; it is to be received in confidence by the Commission.
 - (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
 - (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in EQ-QR-33-WBT-P, Rev. 0, "Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2" (Proprietary) for submittal to the Commission, being transmitted by Tennessee Valley Authority letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with the Digital Metal Impact Monitoring System (DMIMS-DX™) and may be used only for that purpose.

This information is part of that which will enable Westinghouse to:

- (a) Assist the customer in providing technical licensing information to the NRC that is required for approval of the Watts Bar Nuclear Unit 2 Digital Metal Impact Monitoring System (DMIMS-DX™).

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for the purpose of licensing in-core instrumentation systems.
- (b) Its use by a competitor would improve his competitive position in the development and licensing of a similar product.
- (c) The information requested to be withheld reveals the distinguishing aspects of a design developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations, analysis and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

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In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

COPYRIGHT NOTICE

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

Tennessee Valley Authority
Letter for Transmittal to the NRC

The following paragraphs should be included in your letter to the NRC:

Enclosed are:

1. ___ copies of EQ-QR-33-WBT-P, Rev. 0, "Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2" (Proprietary)
2. ___ copies of EQ-QR-33-WBT-NP, Rev. 0, "Seismic Evaluation of the Digital Metal Impact Monitoring System (DMIMS-DX™) for Watts Bar Unit 2" (Non-Proprietary)

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-11-3291, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

As Item 1 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b) (4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-11-3291 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Attachment 11

**Westinghouse Electric Company document CAW-11-3292, Application For Withholding
Proprietary Information From Public Disclosure WCAP-17529-P, Revision 0, "System
Requirements Specification for the Common Q Post Accident Monitoring System,
(proprietary)" dated October 31, 2011 (Letter Item 8)**



Westinghouse Electric Company
Nuclear Services
1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Direct tel: (412) 374-4643
Direct fax: (724) 720-0754
e-mail: greshaja@westinghouse.com
Proj letter: WBT-D-3596

CAW-11-3292

October 31, 2011

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: WCAP-17529-P, Revision 0, "System Requirements Specification for the Common Q
Post Accident Monitoring System" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-11-3292 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Tennessee Valley Authority.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-11-3292, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'J. A. Gresham'.

J. A. Gresham, Manager
Regulatory Compliance

Enclosures

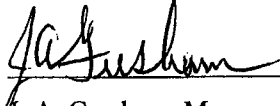
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COMMONWEALTH OF PENNSYLVANIA:

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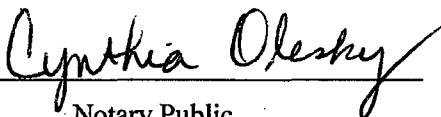
COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

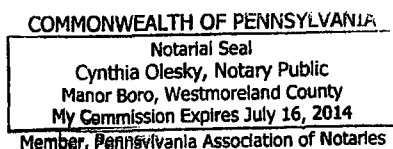


J. A. Gresham, Manager
Regulatory Compliance

Sworn to and subscribed before me
this 31st day of October 2011



Notary Public



- (1) I am Manager, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

 - (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390; it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in WCAP-17529-P, Revision 0, "System Requirements Specification for the Common Q Post Accident Monitoring System" (Proprietary) for submittal to the Commission, being transmitted by Tennessee Valley Authority letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with the Post-Accident Monitoring System (PAMS) and may be used only for that purpose.

This information is part of that which will enable Westinghouse to:

- (a) Assist the customer in providing technical licensing information to the NRC that is required for approval of the Watts Bar Nuclear Unit 2 PAMS System.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for the purpose of licensing in-core instrumentation systems.
- (b) Its use by a competitor would improve his competitive position in the development and licensing of a similar product.
- (c) The information requested to be withheld reveals the distinguishing aspects of a design developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations, analysis and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

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In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

COPYRIGHT NOTICE

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Tennessee Valley Authority
Letter for Transmittal to the NRC

The following paragraphs should be included in your letter to the NRC:

Enclosed are:

1. ___ copies of WCAP-17529-P, Revision 0, "System Requirements Specification for the Common Q Post Accident Monitoring System" (Proprietary)
2. ___ copies of WCAP-17529-NP, Revision 0, "System Requirements Specification for the Common Q Post Accident Monitoring System" (Non-Proprietary)

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-11-3292, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

As Item 1 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b) (4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-11-3292 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Attachment 14

**Westinghouse Electric Company document CAW-11-3285, "Application for Withholding
Proprietary Information for Public Disclosure, WNA-SD-00248-WBT-P, RRAS Watts Bar 2
NSSS Completion Program I&C Projects, Software Design Description for the Post
Accident Monitoring System Flat Panel Display (Proprietary)"
dated October 26, 2011 (Letter Item 9)**



Westinghouse Electric Company
Nuclear Services
1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Direct tel: (412) 374-4643
Direct fax: (724) 720-0754
e-mail: greshaja@westinghouse.com
Proj letter: WBT-D-3558

CAW-11-3285

October 26, 2011

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: WNA-SD-00248-WBT-P, Revision 3, "Software Design Description for the Post Accident Monitoring System Flat Panel Display" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-11-3285 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Tennessee Valley Authority.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-11-3285, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. A. Gresham".
J. A. Gresham, Manager
Regulatory Compliance

Enclosures

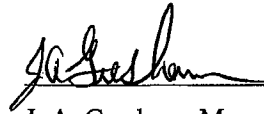
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COMMONWEALTH OF PENNSYLVANIA:

SS

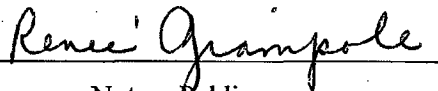
COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

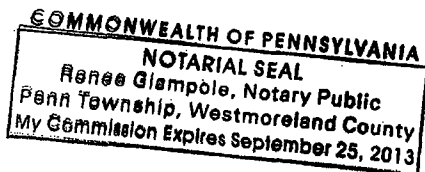


J. A. Gresham, Manager
Regulatory Compliance

Sworn to and subscribed before me
this 26th day of October 2011



Notary Public



- (1) I am Manager, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
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Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

 - (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
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- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390; it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in WNA-SD-00248-WBT-P, Revision 3, "Software Design Description for the Post Accident Monitoring System Flat Panel Display" (Proprietary) dated October 2011 for submittal to the Commission, being transmitted by Tennessee Valley Authority letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with the post-accident monitoring system (PAMS) and may be used only for that purpose.

This information is part of that which will enable Westinghouse to:

- (a) Assist the customer in providing technical licensing information to the NRC that is required for approval of the Watts Bar Nuclear Unit 2 PAMS.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for the purpose of licensing in-core instrumentation systems.
- (b) Its use by a competitor would improve his competitive position in the development and licensing of a similar product.
- (c) The information requested to be withheld reveals the distinguishing aspects of a design developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations, analysis and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

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In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

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Tennessee Valley Authority
Letter for Transmittal to the NRC

The following paragraphs should be included in your letter to the NRC:

Enclosed are:

1. ___ copies of WNA-SD-00248-WBT-P, Revision 3, "Software Design Description for the Post Accident Monitoring System Flat Panel Display" (Proprietary)
2. ___ copies of WNA-SD-00248-WBT-NP, Revision 3, "Software Design Description for the Post Accident Monitoring System Flat Panel Display" (Non-Proprietary)

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-11-3285, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

As Item 1 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b) (4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-11-3285 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Attachment 17

**Westinghouse Electric Company document CAW-11-3286, Application for Withholding
Proprietary Information for Public Disclosure, WNA-SD-00250-WBT-P, Revision 0,
"Software Design Description for the Post Accident Monitoring System AC160 Software
(proprietary)" dated October 26, 2011 (Letter Item 10)**



Westinghouse Electric Company
Nuclear Services
1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Direct tel: (412) 374-4643
Direct fax: (724) 720-0754
e-mail: greshaja@westinghouse.com
Proj letter: WBT-D-3559

CAW-11-3286

October 26, 2011

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: WNA-SD-00250-WBT-P, Revision 3, "Software Design Description for the Post Accident Monitoring System AC160 Software" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-11-3286 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Tennessee Valley Authority.

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Very truly yours,

A handwritten signature in black ink, appearing to read 'J. A. Gresham', written over a horizontal line.

J. A. Gresham, Manager
Regulatory Compliance

Enclosures

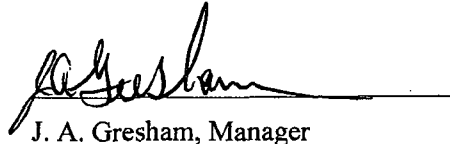
AFFIDAVIT

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SS

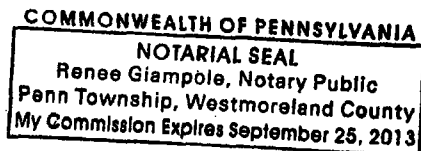
COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



J. A. Gresham, Manager
Regulatory Compliance

Sworn to and subscribed before me
this 26th day of October 2011


Notary Public

- (1) I am Manager, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
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- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in WNA-SD-00250-WBT-P, Revision 3, "Software Design Description for the Post Accident Monitoring System AC160 Software" (Proprietary) dated October 2011 for submittal to the Commission, being transmitted by Tennessee Valley Authority letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with the Post-Accident Monitoring System (PAMS) and may be used only for that purpose.

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Further this information has substantial commercial value as follows:

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- (c) The information requested to be withheld reveals the distinguishing aspects of a design developed by Westinghouse.

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Further the deponent sayeth not.

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In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

COPYRIGHT NOTICE

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

Tennessee Valley Authority
Letter for Transmittal to the NRC

The following paragraphs should be included in your letter to the NRC:

Enclosed are:

1. ___ copies of WNA-SD-00250-WBT-P, Revision 3, "Software Design Description for the Post Accident Monitoring System AC160 Software" (Proprietary)
2. ___ copies of WNA-SD-00250-WBT-NP, Revision 3, "Software Design Description for the Post Accident Monitoring System AC160 Software" (Non-Proprietary)

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-11-3286, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

As Item 1 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b) (4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-11-3286 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Attachment 20

**Westinghouse Electric Company document CAW-11-3287, Application For Withholding
Proprietary Information From Public Disclosure WNA-TP-02988-WBT-P, Revision 0,
"Nuclear Automation Watts Bar Unit 2 NSSS Completion Program I&C Projects, Post
Accident Monitoring System Channel Integration Test/Factory Acceptance Test
(Proprietary)" dated October 26, 2011 (Letter Item 11)**



Westinghouse Electric Company
Nuclear Services
1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Direct tel: (412) 374-4643
Direct fax: (724) 720-0754
e-mail: greshaja@westinghouse.com
Proj letter: WBT-D-3560

CAW-11-3287

October 26, 2011

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: WNA-TP-02988-WBT-P, Revision 0, "Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-11-3287 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Tennessee Valley Authority.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-11-3287, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

A handwritten signature in black ink, appearing to read 'J. A. Gresham', written over a horizontal line.
J. A. Gresham, Manager
Regulatory Compliance

Enclosures

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

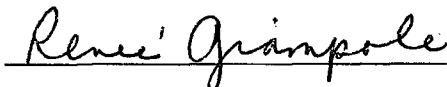
COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

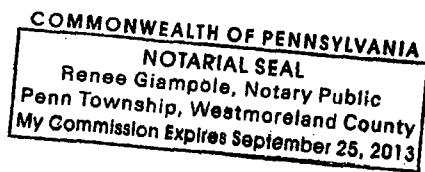


J. A. Gresham, Manager
Regulatory Compliance

Sworn to and subscribed before me
this 26th day of October 2011



Notary Public



- (1) I am Manager, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
- (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
- (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390; it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in WNA-TP-02988-WBT-P, Revision 0, "Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test" (Proprietary) dated October 2011 for submittal to the Commission, being transmitted by Tennessee Valley Authority letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with the Post-Accident Monitoring System (PAMS) and may be used only for that purpose.

This information is part of that which will enable Westinghouse to:

- (a) Assist the customer in providing technical licensing information to the NRC that is required for approval of the Watts Bar Nuclear Unit 2 PAMS.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for the purpose of licensing in-core instrumentation systems.
- (b) Its use by a competitor would improve his competitive position in the development and licensing of a similar product.
- (c) The information requested to be withheld reveals the distinguishing aspects of a design developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations, analysis and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

COPYRIGHT NOTICE

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

Tennessee Valley Authority
Letter for Transmittal to the NRC

The following paragraphs should be included in your letter to the NRC:

Enclosed are:

1. ____ copies of WNA-TP-02988-WBT-P, Revision 0, "Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test" (Proprietary)
2. ____ copies of WNA-TP-02988-WBT-NP, Revision 0, "Post Accident Monitoring System Channel Integration Test/Factory Acceptance Test" (Non-Proprietary)

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-11-3287, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

As Item 1 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b) (4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-11-3287 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Attachment 23

**Westinghouse Electric Company document CAW-11-3287, Application For Withholding
Proprietary Information From Public Disclosure WNA-VR-0279-WBT-P, Revision 5,
"Requirements Traceability Matrix for the Post-Accident Monitoring System
(Proprietary)" dated October 18, 2011 (Letter Item 12)**



Westinghouse Electric Company
Nuclear Services
1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Direct tel: (412) 374-4643
Direct fax: (724) 720-0754
e-mail: greshaja@westinghouse.com
Proj letter: WBT-D-3538

CAW-11-3273

October 18, 2011

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: WNA-VR-00279-WBT-P, Rev. 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-11-3273 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Tennessee Valley Authority.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-11-3273, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

A handwritten signature in black ink, appearing to read 'J. A. Gresham', written over a horizontal line.

J. A. Gresham, Manager
Regulatory Compliance

Enclosures


AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

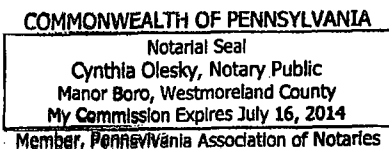


J. A. Gresham, Manager
Regulatory Compliance

Sworn to and subscribed before me
this 18th day of October 2011



Notary Public



- (1) I am Manager, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390; it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in WNA-VR-00279-WBT-P, Rev. 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System" (Proprietary), dated October 2011 for submittal to the Commission, being transmitted by Tennessee Valley Authority letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with the Post-Accident Monitoring System (PAMS) and may be used only for that purpose.

This information is part of that which will enable Westinghouse to:

- (a) Assist the customer in providing technical licensing information to the NRC that is required for approval of the Watts Bar Nuclear Unit 2 PAMS System.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for the purpose of licensing in-core instrumentation systems.
- (b) Its use by a competitor would improve his competitive position in the development and licensing of a similar product.
- (c) The information requested to be withheld reveals the distinguishing aspects of a design developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations, analysis and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

COPYRIGHT NOTICE

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Tennessee Valley Authority
Letter for Transmittal to the NRC

The following paragraphs should be included in your letter to the NRC:

Enclosed are:

1. ___ copies of WNA-VR-00279-WBT-P, Rev. 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System" (Proprietary)
2. ___ copies of WNA-VR-00279-WBT-NP, Rev. 5, "Requirements Traceability Matrix for the Post-Accident Monitoring System" (Non-Proprietary)

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-11-3273, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

As Item 1 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b) (4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-11-3273 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Attachment 24

**Thermo Fisher Affidavit for Withholding Qualification Report NO. 864, REV.1 - Class 1E
Qualification of Source Range, Intermediate Range and Wide Range Channels,"
dated March 11, 2011 (Letter Item 13)**



25402-011-V1A-JA37-00110-001
Thermo Fisher JA37
Affidavit of Withholding

The world leader
in serving science

BECHTEL POWER CORPORATION						Job Number: 25402						
SUPPLIER DOCUMENT REVIEW STATUS												
STATUS CODE:												
1	<input type="checkbox"/>	Work may proceed.					3	<input type="checkbox"/>	Rejected. Revise and resubmit.			
1C	<input type="checkbox"/>	Work may proceed. Editorial comments need only be incorporated if revised for other purposes.					4	<input checked="" type="checkbox"/>	Review not required. Work may proceed.			
2	<input type="checkbox"/>	Revise and resubmit. Work may proceed subject to incorporation of changes indicated.					PO 75148					
Permission to proceed does not constitute acceptance or approval of design details, calculations, analysis, test methods, or materials developed or selected by the Supplier and does not relieve the Supplier from full compliance with contractual obligations.												
Reviewed by	Arch	Civil	CS	Elect	Mech	MET	PD	Constr	Startup	STE		
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Status By:	M.S. Clark M.A. Clark						DATE	10/13/11				

March 11, 2011

Thermo Fisher Scientific
10010 Mesa Rim Road
San Diego, CA 92110

Affidavit

Reference A) Qualification Report NO. 864, REV.1 - Class 1E Qualification of Source Range, Intermediate Range and Wide Range Channels

In accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding", Thermo Fisher Scientific requests withholding from public disclosure of the documents listed in Reference A), which is attached to this affidavit. As required by 10 CFR 2.390, Thermo Fisher Scientific has included in Reference A) the following information:

- Identity of the document or part sought to be withheld;
- Declaration of the basis for proposing the information be withheld, encompassing considerations set forth in § 2.390(a);
- Specific statement of the harm that would result if the information sought to be withheld is disclosed to the public; and
- Locations in the documents of all information sought to be withheld

As required in § 2.390(b)(4); Thermo Fisher Scientific wishes to note that the request for withholding from public disclosure applies to pages that contain commercially sensitive information that Thermo Fisher Scientific normally discloses only under a Non-Disclosure Agreement (NDA). This commercially sensitive information is not available in public sources and is the type of information customarily held in confidence by Thermo Fisher Scientific and our competitors. Thermo Fisher Scientific is transmitting this information to the NRC in confidence.

As noted in Reference A), release of this information in a public forum could cause harm to Thermo Fisher Scientific by revealing trade secrets and/or commercially sensitive design and operational details and technical processes related to designing, building, and/or operating a Neutron Flux Monitoring System.

As Thermo Fisher Scientific Project Manager, Nuclear Products, I am responsible for reviewing the information sought to be withheld, and I am authorized to apply for its withholding on behalf of Thermo Fisher Scientific.

Sincerely,

Marcelo Echeverria
Project Manager, NFMS, Nuclear Products