

**Enclosure 1 is to be withheld from public disclosure under 10 CFR § 2.390. When separated from this enclosure, this letter is decontrolled.**



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

May 22, 2014

10 CFR 50.46  
10 CFR 2.390(b)(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 UNIT 2 - FUEL THERMAL  
CONDUCTIVITY DEGRADATION, RESPONSE TO SUPPLEMENTAL  
SAFETY EVALUATION REPORT OPEN ITEM 61**

References: TVA Letter to NRC dated August 6, 2013, "Watts Bar Nuclear Plant (WBN) Unit 2 - Fuel Thermal Conductivity Degradation, Response to Supplemental Safety Evaluation Report Open Item 61 (ADAMS Accession No. ML 12296A226)

The purpose of this letter is to provide computer code input data that the Nuclear Regulatory Commission (NRC) can use to perform a confirmatory evaluation of the Thermal Conductivity Degradation (TCD) effect on the Large-Break Loss of Coolant Accident (LOCA) analysis for Watts Bar Nuclear Plant (WBN) Unit 2. This information was requested in an email from Siva Lingam (NRC) to Gordon Arent and Bob Bryan dated March 5, 2014.

Enclosure 1 provides the requested information and this information is proprietary to Westinghouse Electric Co. Accordingly, TVA respectfully requests that this proprietary information be withheld from public disclosure in accordance with 10 CFR 2.390. Enclosure 2 provides the supporting 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. NRC correspondence with

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LRR

U.S. Nuclear Regulatory Commission  
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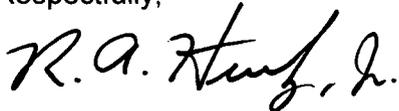
respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-14-3956 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, 1000 Westinghouse Drive, Building 3 Suite 301, Cranberry Township, Pennsylvania 16066.

Enclosure 3 provides the non-proprietary version of Enclosure 1.

There are no regulatory commitments in this letter. If you have any questions, please contact me at (423) 365-1260 or Gordon Arent at (423) 365-2004.

I declare under penalty of perjury that the foregoing is true and correct to the best to my knowledge. Executed on the 22<sup>nd</sup> day of May, 2014.

Respectfully,

A handwritten signature in black ink that reads "R. A. Hruby, Jr." in a cursive style.

Raymond A. Hruby, Jr.  
General Manager, Technical Services  
Watts Bar Unit 2

U.S. Nuclear Regulatory Commission  
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Enclosures:

1. Proprietary Attachment to Westinghouse Letter to TVA WBT-D-4833, dated May 16, 2014, "TDC NRC Audit"
2. Westinghouse Affidavit CAW-14-3956 for Withholding Proprietary Information from Public Disclosure
3. Non-Proprietary Attachment to Westinghouse Letter to TVA WBT-D-4833, dated May 16, 2014, "TDC NRC Audit"

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 2**  
**Tennessee Valley Authority**  
**Watts Bar Nuclear Plant, Unit 2**  
**Docket No. 50-391**

**WESTINGHOUSE AFFIDAVIT CAW-14-3956 FOR WITHHOLDING PROPRIETARY  
INFORMATION FROM PUBLIC DISCLOSURE**



Westinghouse Electric Company  
Engineering, Equipment and Major Projects  
1000 Westinghouse Drive, Building 3  
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) 940-8560  
e-mail: greshaja@westinghouse.com  
Proj letter: WBT-D-4833

CAW-14-3956

May 15, 2014

APPLICATION FOR WITHHOLDING PROPRIETARY  
INFORMATION FROM PUBLIC DISCLOSURE

Subject: Response to Watts Bar Unit 2 NRC Audit for the Fuel Rod Design Effects of Thermal Conductivity Degradation (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-14-3956 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 CAW-14-3956, and should be addressed to James A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, 1000 Westinghouse Drive, Building 3 Suite 310, Cranberry Township, Pennsylvania 16066.

Very truly yours,

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

James A. Gresham, Manager  
Regulatory Compliance

Enclosures

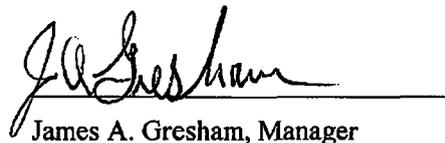
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF BUTLER:

Before me, the undersigned authority, personally appeared James 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:

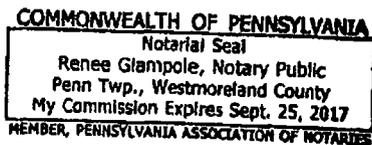


James A. Gresham, Manager  
Regulatory Compliance

Sworn to and subscribed before me  
this 15th day of May 2014



Notary Public



- (1) I am Manager, Regulatory Compliance, 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 constitute Westinghouse policy and provide 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.
- (iii) 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.
- (iv) 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.
- (v) 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.
- (vi) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in CE-14-371, Attachment 1, "Response to Watts Bar Unit 2 NRC Audit for the Fuel Rod Design Effects of Thermal Conductivity Degradation" (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 NRC approval of the Watts Bar Unit 2 completion program, and may be used only for that purpose.

- (a) This information is part of that which will enable Westinghouse to:
- (i) Provide input to Tennessee Valley Authority to provide to the U. S. Nuclear Regulatory Commission in response to NRC Request for Additional Information Regarding the Watts Bar Unit 2 completion program.
  - (ii) Provide licensing support for customer submittal.
- (b) Further this information has substantial commercial value as follows:
- (i) Westinghouse plans to sell the use of the information to its customers for the purpose of obtaining license changes for a Westinghouse pressurized water reactor (PWR).
  - (ii) Westinghouse can sell support and defense of the technology to its customer in the licensing process.
  - (iii) The information requested to be withheld reveals the distinguishing aspects of a methodology which was 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 technical evaluation justifications 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.