



Program Management Office  
1000 Westinghouse Drive  
Cranberry Township, Pennsylvania 16066

PROJ 694

Project Number 1073

August 7, 2012

OG-12-285

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555-0001

Subject: PWR Owners Group  
**NRC/PWROG Meeting to Discuss the PWROG Program for Providing an Estimate of the Impact of TCD on the LBLOCA PCT for Plants with Westinghouse Fuel - Transmittal of Presentation Slides (PA-ASC-1073)**

References:

1. FORTHCOMING PARTIALLY CLOSED MEETING WITH PRESSURIZED WATER REACTOR OWNERS GROUP REGARDING THE THERMAL CONDUCTIVITY DEGRADATION, June 27, 2012 (ADAMS Accession Number: ML12165A495)

On June 27, 2012 the Pressurized Water Reactor Owners Group (PWROG) met with the NRC Staff in a partially closed meeting to discuss the PWROG Program for Providing an Estimate of the Impact of TCD on the LBLOCA PCT for Plants with Westinghouse Fuel.

The purpose of this letter is to transmit the presentation material provided by the PWROG during this meeting.

Enclosures include:

1. One copy of the Application for Withholding, CAW-12-3515, (Non-proprietary) with accompanying Affidavit, Proprietary Information Notice and Copyright Notice.
2. One copy of Presentation " PWROG-NRC June 27 2012 TCD Mtg to Discuss TCD on LBLOCA Final 6-26-12.pdf " July 2012, (Proprietary)
3. AREVA June 27, 2012 PWROG-NRC LBLOCA TCD Meeting Presentation.pdf (Non-proprietary)

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This submittal contains proprietary information of Westinghouse Electric Company LLC. In conformance with the requirements of 10 CFR Section 2.390, as amended, of the Commission's regulations, we are enclosing with this submittal an Application for Withholding Proprietary Information from Public Disclosure and an Affidavit. The Affidavit sets forth the basis on which the information identified as proprietary may be withheld from public disclosure by the Commission.

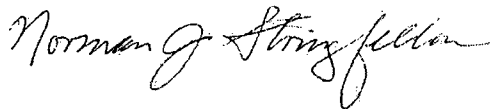
Correspondence with respect to this Affidavit or Application for Withholding should reference CAW-12-3515 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance and Plant Licensing, Westinghouse Electric Company LLC, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

Correspondence related to this transmittal should be addressed to:

Mr. W. Anthony Nowinowski  
Manager, Owners Group Program Management Office  
Westinghouse Electric Company  
1000 Westinghouse Drive, Suite 380  
Cranberry Township, PA 16066

If you have any questions, please do not hesitate to contact me, Jack Stringfellow, at (205) 992-7037 or Mr. W. Anthony Nowinowski of the Owners Group Program Management Office at 412-374-6855.

Sincerely,



Jack Stringfellow, Chairman  
PWR Owners Group

/rfn

Enclosures (3)

cc: PWROG Steering Committee  
PWROG ASC Subcommittee  
PWROG LSC Subcommittee  
PWROG PMO  
Rowley, J. USNRC  
Gresham, James A. (W)  
Crytzer, Dawn M. (W)  
Colussy, Amy J. (W)  
Frepoli, Cesare. (W)

Barnett, Mary K. (W)  
DiLullo, Ann Marie (W)  
Olinski, Dewey C. (W)  
Rodack, Thomas (W)  
Sepp, Hank A. (W)  
Andracheck, J. (W)



Westinghouse Electric Company  
Nuclear Services  
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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: OG-12-285

CAW-12-3515

August 3, 2012

APPLICATION FOR WITHHOLDING PROPRIETARY  
INFORMATION FROM PUBLIC DISCLOSURE

Subject: LTR-PEP-12-30, "Technical Approach to Address the Impact of TCD on the BE LBLOCA Safety Analyses for Medium-to-High Margin Plants with Westinghouse Fuel" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced document is further identified in Affidavit CAW-12-3515 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.

The subject document was prepared and classified as Westinghouse Proprietary Class 2. Westinghouse requests that the document be considered proprietary in its entirety. As such, a non-proprietary version will not be issued.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Pressurized Water Reactor Owners Group (PWROG).

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference CAW-12-3515 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, 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

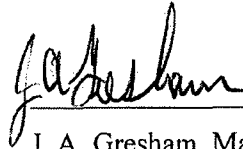
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COMMONWEALTH OF PENNSYLVANIA:

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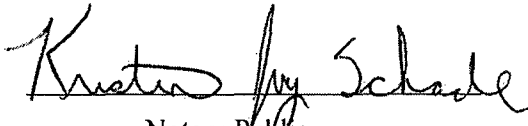
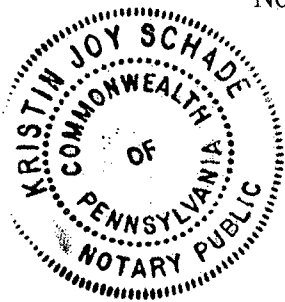
COUNTY OF BUTLER:

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 3rd day of August 2012

  
Notary Public

COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Kristin Joy Schade, Notary Public  
North Huntingdon Twp., Westmoreland County  
My Commission Expires March 11, 2013  
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.
- (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 contained in LTR-PEP-12-30, "Technical Approach to Address the Impact of TCD on the BE LBLOCA Safety Analyses for Medium-to-High Margin Plants with Westinghouse Fuel" (Proprietary) for submittal to the Commission, being transmitted by PWROG letter OG-12-285 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 "Proposed Technical Approach to Address the Impact of TCD on the BE LBLOCA Safety Analyses for Intermediate to High Margin Plants with Westinghouse Fuel" and may be used only for that purpose.

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

- (a) Discuss information regarding a proposed technical approach to address the impact of nuclear fuel thermal conductivity degradation on the BE LBLOCA safety analyses.
- (b) The information requested to be withheld reveals Westinghouse commercial strategy information.

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 resolving the technical issues associated with nuclear fuel thermal conductivity and the impact on BE LBLOCA safety analyses.
- (b) Westinghouse can sell support and defense of technical and licensing strategy for the resolution of the technical issues associated with nuclear fuel thermal conductivity and the impact on BE LBLOCA safety analyses.
- (c) 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 strategies 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 is the proprietary version of a document furnished to the NRC in connection with requests for generic and/or plant-specific review and approval. The document is to be considered proprietary in its entirety.

### **COPYRIGHT NOTICE**

The report transmitted herewith bears a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in this report which is 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. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

## PWROG

### Letter for Transmittal to the NRC

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

Enclosed are:

1. 1 copy of LTR-PEP-12-30, "Technical Approach to Address the Impact of TCD on the BE LBLOCA Safety Analyses for Medium-to-High Margin Plants with Westinghouse Fuel" (Proprietary)

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-12-3515, accompanying Affidavit, Proprietary Information Notice, and Copyright Notice.

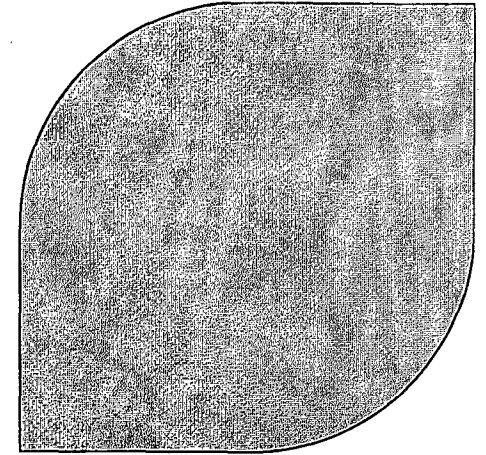
The subject document was prepared and classified as Westinghouse Proprietary Class 2. Westinghouse requests that the document be considered proprietary in its entirety. As such, a non-proprietary version will not be issued.

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-12-3515 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

June 27, 2012



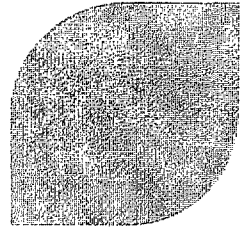
# **Thermal Conductivity Degradation Letter (PWR) – NRC Concerns**

- ❖ Highlights summarized from June 2012  
AREVA Fuel Performance Meeting with  
NRC



June 27, 2012

## TCD Letter (PWR) –



### ► Fuel Rod Mechanical

#### ◆ Rod Internal Pressure Conclusion

- Response has been sent to the NRC. All questions to date have been addressed

### ► AREVA Methods for W/CE Plants with AREVA Fuel

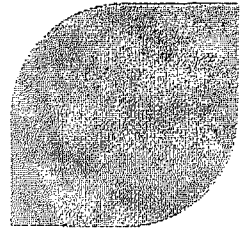
- Clarification received from NRC and commitment made by AREVA to docket specifically requested technical information as part of the response to the NRC TCD letter

### ► AREVA Methods for B&W Plants with AREVA Fuel

- Increased fuel temperature uncertainty is used for all B&W plant LOCA analyses
- Present methods are anticipated to be replaced by GALILEO as methods evolve

June 27, 2012

## TCD Letter (PWR) – Conclusion



### ► AREVA TCD Issue Conclusion

- ◆ Issue has been in discussion with NRC since 2009
- ◆ Safety Analysis Model adjustments have been submitted for NRC review
- ◆ No PCT changes in excess of 50°F have been calculated
- ◆ AREVA considers all NRC questions addressed with submittal of action items from the June 2012 meeting