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LTR-NRC-17-41


May 16, 2017

Subject: Submittal of "Calculation for Technical Specification SLMCPR Values Applying to Westinghouse Fuel in Support of TSTF-564" (Proprietary/Non-Proprietary)

Enclosed are the proprietary and non-proprietary versions of the "Calculation for Technical Specification SLMCPR Values Applying to Westinghouse Fuel in Support of TSTF-564."

This submittal contains proprietary information of Westinghouse Electric Company LLC ("Westinghouse"). In conformance with the requirements of 10 CFR Section 2.390, as amended, of the Nuclear Regulatory Commission's ("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 the proprietary aspects of the Application for Withholding or the Westinghouse Affidavit should reference AW-17-4590 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.


James A. Gresham, Manager
Regulatory Compliance

Cc: Ekaterina Lenning (NRC)
Michelle Honcharik (NRC)

Enclosures

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AW-17-4590

May 16, 2017

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: LTR-NRC-17-41 P-Attachment "Calculation for Technical Specification SLMCPR Values Applying to Westinghouse Fuel in Support of TSTF-564" (Proprietary)

Reference: Letter from James A. Gresham to the Document Control Desk, LTR-NRC-17-41, dated May 16, 2017

The Application for Withholding Proprietary Information from Public Disclosure is submitted by Westinghouse Electric Company LLC ("Westinghouse"), pursuant to the provisions of paragraph (b)(1) of Section 2.390 of the Nuclear Regulatory Commission's ("Commission's") regulations. It contains commercial strategic information proprietary to Westinghouse and customarily held in confidence.

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit AW-17-4590 signed by the owner of the proprietary information, Westinghouse. 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.

Correspondence with respect to the proprietary aspects of the Application for Withholding or the accompanying Affidavit should reference AW-17-4590 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.

James A. Gresham, Manager
Regulatory Compliance

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

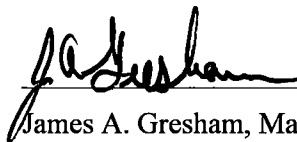
SS

COUNTY OF BUTLER:

I, James A. Gresham, am authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC ("Westinghouse") and declare that the averments of fact set forth in this Affidavit are true and correct to the best of my knowledge, information, and belief.

Executed on:

5/16/17



James A. Gresham, Manager
Regulatory Compliance

- (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 Nuclear Regulatory Commission’s (“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, 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 LTR-NRC-17-41 P-Attachment "Calculation for Technical Specification SLMCPR Values Applying to Westinghouse Fuel in Support of TSTF-564" (Proprietary), for submittal to the Commission, being transmitted by Westinghouse letter LTR-NRC-17-41. The proprietary information as submitted by Westinghouse is that associated with the draft Traveler TSTF-564, proposed as a means for redefining the Technical Specification Safety Limit Minimum Critical Power Ratio (SLMCPR), and may be used only for that purpose.
- (a) This information is Westinghouse vendor-specific data which will enable Westinghouse to support the Boiling Water Reactor Owners Group in obtaining approval from the Commission on the use of TSTF-564.

- (b) Further, this information has substantial commercial value as follows:
- (i) Westinghouse plans to sell the use of similar information to its customers for the purpose of obtaining license approval for use in its boiling water reactor fuel designs.
 - (ii) Westinghouse can sell support and defense of industry guidelines and acceptance criteria for plant-specific applications.
 - (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 non-proprietary versions of a document, furnished to the NRC associated with the draft Traveler TSTF-564, proposed as a means for redefining the Technical Specification Safety Limit Minimum Critical Power Ratio (SLMCPR), and may be used only for that purpose..

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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**Calculation for Technical Specification SLMCPR Values
Applying to Westinghouse Fuel in Support of TSTF-564
(Non-Proprietary)**

May 2017

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Cranberry Township, PA 16066

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Calculation for Technical Specification SLMCPR Values Applying to Westinghouse Fuel in Support of TSTF-564

On November 1, 2016, a pre-submittal meeting was held between members of the NRC staff and representatives of the BWR Owners Group, which included both utility and fuel vendor representatives. The purpose was to discuss the draft Traveler TSTF-564 (Reference 1) which is being proposed as a means for redefining Technical Specification Safety Limit Minimum Critical Power Ratio (SLMCPR) values. As additional information to support the NRC review of Reference 1, each participating fuel vendor is supplying a calculation for their respective fuel types which justifies the proposed Technical Specification SLMCPR values given in Reference 1. While the SLMCPR values themselves are not proprietary, the data and assumptions entering into these calculations are proprietary. The table provided summarizes the input and reference documents for calculating conservative Technical Specification SLMCPR values for the Westinghouse fuel products SVEA-96 Optima2 and SVEA-96 Optima3. The calculation proceeds as follows:

$$\text{TSTF -564 Technical Specification SLMCPR} = \mu + \kappa * \sigma$$

Product Line	SVEA-96 Optima2	SVEA-96 Optima3
Correlation Reference	2	3
Distribution	Bounded by Normal	Bounded by Normal
Mean of ECPR (μ)	1.0	1.0
Standard Deviation of ECPR (σ), %	[] ^{a,c}	[] ^{a,c}
Number of Data Points	[] ^{a,c}	[] ^{a,c}
Statistical Factor for 95/95 (κ)	[] ^{a,c}	[] ^{a,c}
TS SLMCPR	1.06*	1.06*

*[

] ^{a,c}

References:

- 1) Draft Traveler TSTF-564, Revision 0, "Safety Limit MCPR," for November 1 Presubmittal Meeting, October 2016. (ADAMS Accession Number ML16298A007)
- 2) WCAP-16081-P-A, "10x10 SVEA Fuel Critical Power Experiments and CPR Correlation: SVEA-96 Optima2," March 2005.
- 3) WCAP-17794-P, "10x10 SVEA Fuel Critical Power Experiments and New CPR Correlation: D5 for SVEA-96 Optima3," November 2013.
- 4) D.B. Owen, "Factors for One-Sided Tolerance Limits and for Variables Sampling Plans," SCR-607, March 1963. (ADAMS Accession Number ML14031A495)