



Program Management Office
1000 Westinghouse Drive
Cranberry Township, Pennsylvania 16066

Project Number 694

May 9, 2016

OG-16-120

US Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Subject: PWR Owners Group
Transmittal of PWROG-15060-P Revision 0, "Pump Suction Gas Accumulation Operability Criteria Guidance" for Review (PA-SEE-1280-R1)

References:

1. NEI Letter, "Submittal of PWROG-15060, "Pump Suction Gas Accumulation Operability Criteria Guidance"", May 5, 2016
2. NEI 09-10, Revision 1a-A, "Guidelines for Effective Prevention and Management of System Gas Accumulation," Accession No. ML13136A129, April 2013.
3. Final Safety Evaluation for Nuclear Energy Institute Topical Report NEI 09-10, Revision 1a "Guidelines for Effective Prevention and Management of System Gas Accumulation", January 2013.
4. Westinghouse WCAP-17271-P, Revision 1, "Testing and Evaluation of Gas Transport to the Suction of ECCS Pumps," Volume I, November 2010.
5. Westinghouse WCAP-17276-P, Revision 1, "Investigation of Simplified Equation for Gas Transport," January 2011.
6. NEI Letter "Request for Exemption from NRC Fees to Review PWROG-15060, 'Pump Suction Gas Accumulation Operability Criteria Guidance'", November 13, 2015

Dear Mr. Rowley,

The Pressurized Water Reactor Owner's Group (PWROG) is transmitting to you PWROG-15060-P, "Pump Suction Gas Accumulation Operability Criteria Guidance" for NRC endorsement on behalf of NEI. The letter provides the proprietary version of Topical Report PWROG-15060; the non-proprietary version of PWROG-15060 was submitted via the Reference 1 NEI letter. As stated in Reference 1, the background for the Topical Report is as follows:

"NEI submitted NEI 09-10 Revision 1a-A, "Guidelines for Effective Prevention and Management of System Gas Accumulation" (Reference 2) as part of industry's response to GL 2008-01, "Managing Gas Intrusion in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems". NEI 09-10 provides guidance for the prevention and management of gas intrusion and accumulation in plant systems. The NRC endorsed NEI 09-10 Revision 1a-A

Designated as original 05/24/2016

Jonathan Rowley (Jonathan Rowley)

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in a Safety Evaluation (Reference 3), however, questions regarding the guidance in NEI 09-10 remained. The SE qualified the use of two of NEI 09-10's main references (WCAP-17271 and WCAP-17276, References 4 and 5) that provide suitable correlations for calculating gas volume acceptance criteria. In addition, recent NRC inspections and audits have expressed concern that licensees may not have adequate guidance to apply the correlations in WCAP-17271 in a manner consistent with the limitations and conditions in the SE.

In an attempt to resolve these questions, representatives of NEI, PWROG, and BWROG met with the NRC on January 15, 2015. During that meeting, the NRC concurred with use of the correlations in WCAP-17271 and WCAP-17276, but requested that additional guidance be provided to licensees to ensure the correlations are used within the limitations imposed by the SE. This additional guidance has been prepared and is documented in PWROG-15060, "Pump Suction Gas Accumulation Operability Criteria Guidance".

Enclosed is:

One copy of PWROG-15060-P, "Pump Suction Gas Accumulation Operability Criteria Guidance" (Proprietary)

Enclosure 2 contains Westinghouse authorization letter CAW-16-4404, the accompanying affidavit, Proprietary Information Notice, and Copyright Notice.

As Enclosure 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.

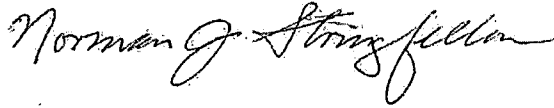
Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse Affidavit should reference CAW-16-4404 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.

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

Please note a fee-waiver request for this Topical Report was previously sent via Reference 6 and NRC Review fees are not expected. If for some reason this fee-waiver is expected to be rejected, the PWROG kindly requests prompt notification.

Sincerely,



Jack Stringfellow, Chairman
PWR Owners Group

NJS:jdb:cah

- Enclosures (2):
1. PWROG-15060-P, "Pump Suction Gas Accumulation Operability Criteria Guidance" (Proprietary)
 2. One copy of the Application for Withholding, CAW-16-4404 (Non-proprietary) with the accompanying affidavit, Proprietary Information Notice and Copyright Notice

cc: Jack Stringfellow – PWROG Chairperson
Lesa Hill – BWROG Chairperson
Steve Benesole – PWROG SEE Chairperson
Jim Riley – NEI
PWROG PMO
Steve Swantner – W
Jim Andrachek – W



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CAW-16-4406

May 5, 2016

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE


Subject: PWROG-15060-P, "Pump Suction Gas Accumulation Operability Criteria Guidance"
(Proprietary)

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 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 CAW-16-4406 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 Pressurized Water Reactor Owners Group.

Correspondence with respect to the proprietary aspects of the Application for Withholding or the Westinghouse Affidavit should reference CAW-16-4406, 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

CAW-16-4406

May 5, 2016

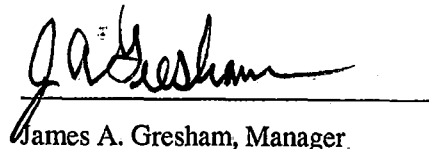
AFFIDAVIT

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 that the averments of fact set forth in this Affidavit are true and correct to the best of my knowledge, information, and belief.

A handwritten signature in black ink, appearing to read "James A. Gresham", is written over a horizontal line.

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 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 PWROG-15060-P, "Pump Suction Gas Accumulation Operability Criteria Guidance" (Proprietary), for submittal to the Commission, being transmitted by Pressurized Water Reactor Owners Group letter OG-16-120 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 request for NRC endorsement of PWROG-15060-P and may be used only for that purpose.
 - (a) This information is part of that which will enable Westinghouse to obtain NRC endorsement of PWROG-15060-P and may be used only for that purpose.
 - (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 providing services relating to gas transport calculations.
- (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 in connection with requests for NRC endorsement of PWROG-15060-P 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).

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.