



Project Number 694

October 20, 2004

WOG-04-541

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

Subject: **Westinghouse Owners Group**  
**Comparison of CROSSFLOW and ASME Flow Section Feedwater**  
**Flow Measurement at Kewaunee Nuclear Power Plant**  
**(Proprietary) (PA-SEE-0162)**

As part of its regulatory oversight function, the Nuclear Regulatory Commission (NRC) has been reviewing ultrasonic flow measurement technologies. To this end, the NRC reviewer of the CROSSFLOW Ultrasonic Flow Measurement System (CROSSFLOW) inquired whether Westinghouse Electric Company LLC (Westinghouse) could provide information regarding a comparison between feedwater flow measurements made using CROSSFLOW and an ASME flow section installed at the Kewaunee Nuclear Power Plant. The Westinghouse Owners Group – CROSSFLOW Task Force (WOG CTF) is pleased to be able to voluntarily provide the NRC with this information. The subject information is tabulated in Enclosure 1-P (Proprietary). Because of the large volume of data, the information is provided on a compact disk (CD).

Enclosure 2 contains:

1. One (1) copy of the Application for Withholding, CAW-04-1907.
2. One (1) copy of Affidavit (Attachment to CAW-04-1907).
3. Proprietary Information Notice.

Enclosure 1-P contains information proprietary to Westinghouse. This classification 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 10 CFR 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. Since all of the information, including the data on the CD is proprietary in its entirety, it is not practical to create a non-proprietary version of this submittal; consequently, such is not provided herewith.

**Domestic Members**  
AmerenUE  
Callaway  
American Electric Power Co.  
D.C. Cook 1 & 2  
Arizona Public Service Co.  
Palo Verde 1, 2 & 3  
Constellation Energy Group  
Calvert Cliffs 1 & 2  
R. E. Ginna  
Dominion Nuclear Connecticut  
Millstone 2 & 3  
Dominion Virginia Power  
North Anna 1 & 2  
Surry 1 & 2  
Duke Energy  
Catawba 1 & 2  
McGuire 1 & 2  
Entergy Nuclear Northeast  
Indian Point 2 & 3  
Entergy Nuclear South  
ANO 2  
Waterford 3  
Exelon Generation Company LLC  
Braidwood 1 & 2  
Byron 1 & 2  
FirstEnergy Nuclear Operating Co.  
Beaver Valley 1 & 2  
FPL Group  
St. Lucie 1 & 2  
Seabrook  
Turkey Point 3 & 4  
Nuclear Management Co.  
Kewaunee  
Palisades  
Point Beach 1 & 2  
Prairie Island  
Omaha Public Power District  
Fort Calhoun  
Pacific Gas & Electric Co.  
Diablo Canyon 1 & 2  
Progress Energy  
H. B. Robinson 2  
Shearon Hams  
PSEG – Nuclear  
Salem 1 & 2  
South Carolina Electric & Gas Co.  
V. C. Summer  
Southern California Edison  
SONGS 2 & 3  
STP Nuclear Operating Co.  
South Texas Project 1 & 2  
Southern Nuclear Operating Co.  
J. M. Farley 1 & 2  
A. W. Vogtle 1 & 2  
Tennessee Valley Authority  
Sequoyah 1 & 2  
Watts Bar 1  
TXU Power  
Comanche Peak 1 & 2  
Wolf Creek Nuclear Operating Corp.  
Wolf Creek

**International Members**  
Electrabel  
Doel 1, 2, 4  
Tihange 1 & 3  
Electricité de France  
Kansai Electric Power Co.  
Mihama 1  
Takahama 1  
Ohi 1 & 2  
Korea Hydro & Nuclear Power Co.  
Kon 1 – 4  
Uichin 3 & 4  
Yonggwang 1 - 5  
British Energy plc  
Sizewell B  
NEK  
Krško  
Spanish Utilities  
Asco 1 & 2  
Vandellos 2  
Almaraz 1 & 2  
Rijnhals AB  
Rijnhals 2 – 4  
Taiwan Power Co.  
Maanshan 1 & 2

D748

Correspondence with respect to the Application for Withholding should reference CAW-04-1907 and should be addressed to:

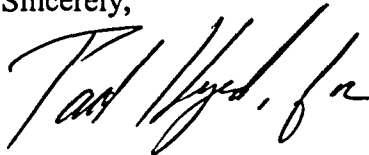
J. A. Gresham, Manager  
Regulatory Compliance and Plant Licensing  
Westinghouse Electric Company LLC  
Box 355  
Pittsburgh, Pennsylvania 15230-0355.

Correspondence related to the information transmitted herewith should be addressed to:

Mr. Gordon Bischoff, Project Manager  
Westinghouse Owners Group  
Westinghouse Electric Company (Mail Stop ECE 5-16)  
P. O. Box 355  
Pittsburgh, PA 15230-0355

If you have questions regarding this submittal, feel free to contact Mr. Steve Lurie (Westinghouse) at 860-731-6241 or Mr. Steve DiTommaso in the WOG Program Management Office at 412-374-5217.

Sincerely,



Frederick P. "Ted" Schiffley, II, Chairman  
Westinghouse Owners Group

xc: CROSSFLOW Task Force (w/o enclosures)  
Management Committee (w/o enclosures)  
Project Management Office (w/o enclosures)  
I. Ahmed, NRC (w/enclosures)  
G. C. Bischoff, Westinghouse (w/o enclosures)  
C. B. Brinkman, Westinghouse (w/o enclosures)  
G. F. Dick, NRC (w/o enclosures)  
S. M. DiTommaso (w/o enclosures)  
C. T. French, Westinghouse (w/o enclosures)  
R. A. Gramm, NRC (w/o enclosures)  
J. A. Gresham, Westinghouse (w/o enclosures)  
E. A. Marinos, NRC (w/o enclosures)  
J. J. McInerney, Westinghouse (w/o enclosures)  
C. M. Molnar, Westinghouse (w/o enclosures)  
G. S. Shukla, NRC, (w/o enclosures)  
W. M. Turkowski, Westinghouse (w/o enclosures)

**Enclosure 2 to WOG-04-541**

**Westinghouse Electric Company LLC**

**Application for Withholding CAW-04-1907**



Westinghouse Electric Company  
Nuclear Services  
P.O. Box 355  
Pittsburgh, Pennsylvania 15230-0355  
USA

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
One White Flint North  
11555 Rockville Pike  
Rockville, Maryland 20852-2738

Direct tel: 412/374-4643  
Direct fax: 412/374-4011  
e-mail: galembushjs@westinghouse.com  
Project No.: 694  
Our ref: CAW-04-1907  
20 October 2004

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

**Subject: Comparison of CROSSFLOW and ASME Flow Section Feedwater Flow Measurement at Kewaunee Nuclear Power Plant (Proprietary)**

**Reference: Letter, F. P. Schiffler, II (Westinghouse Owners Group) to USNRC Document Control Desk, "Comparison of CROSSFLOW and ASME Flow Section Feedwater Flow Measurement at Kewaunee Nuclear Power Plant (Proprietary)", WOG-04-541, October 20, 2004**

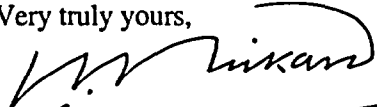
The Application for Withholding is submitted by Westinghouse Electric Company LLC (Westinghouse), a Delaware limited liability company, pursuant to the provisions of paragraph (b)(1) of Section 2.390 of the Commission's regulations. It contains commercial strategic information proprietary to Westinghouse and customarily held in confidence.

The proprietary material for which withholding is being requested is identified in the proprietary version of the Enclosure to the Reference letter. In conformance with 10 CFR Section 2.390, Affidavit CAW-04-1907 accompanies this Application for Withholding, setting forth the basis on which the identified proprietary information may be withheld from public disclosure.

Accordingly, it is respectfully requested that the subject 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 this application for withholding or the accompanying affidavit should reference CAW-04-1907 and should be addressed to the undersigned.

Very truly yours,

  
for J. A. Gresham, Manager  
Regulatory Compliance and Plant Licensing

AFFIDAVIT

STATE OF CONNECTICUT:

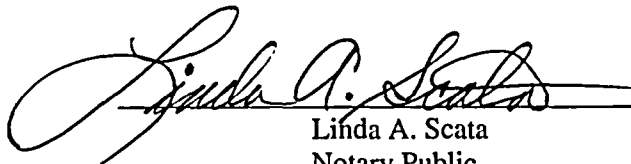
ss: TOWN OF WINDSOR

COUNTY OF HARTFORD:

Before me, the undersigned authority, personally appeared Ian C. Rickard, 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, a Delaware limited liability company ("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:

  
\_\_\_\_\_  
Ian C. Rickard  
Project Licensing Manager

Sworn to and subscribed  
before me this 20<sup>th</sup> day of October, 2004.

  
\_\_\_\_\_  
Linda A. Scata  
Notary Public



My commission expires: May 31, 2008

- (1) I, I. C. Rickard, am the Project Licensing Manager, Regulatory Compliance and Plant Licensing, in Nuclear Services, Westinghouse Electric Company LLC ("Westinghouse"), a Delaware limited liability company 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 rulemaking 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 accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by the 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 which 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 the Enclosure for "Comparison of CROSSFLOW and ASME Flow Section Feedwater Flow Measurement at Kewaunee Nuclear Power Plant (Proprietary)," October 20, 2004, for submittal to the Commission, being transmitted by Westinghouse letter (WOG-04-541) and Application for Withholding Proprietary Information from Public Disclosure, to the NRC Document Control Desk. The proprietary information as submitted for use by Westinghouse is expected to be applicable in other licensee submittals in response to certain NRC requirements for justification of the application of the CROSSFLOW Ultrasonic Flow Measurement System performance within its approved accuracy limit.

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

- (a) Validate CROSSFLOW Ultrasonic Flow Measurement System performance.
- (b) Support licensees in implementing the CROSSFLOW Ultrasonic Flow Measurement System within its approved accuracy limit.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for purposes of meeting NRC requirements for licensing documentation.
- (b) Westinghouse can sell support and defense of CROSSFLOW Ultrasonic Flow Measurement System performance within its approved accuracy limit.
- (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 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 for developing the enclosed improved core thermal performance methodology.

Further the deponent sayeth not.

### Proprietary Information Notice

Transmitted herewith are proprietary and 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).