



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

JUN 23 2000

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Gentlemen:

In the Matter of)	Docket Nos. 50-327
Tennessee Valley Authority)	50-328
		50-390

SEQUOYAH (SQN) AND WATTS BAR (WBN) NUCLEAR PLANTS - TRITIUM PROGRAM

As previously announced by the Department of Energy (DOE), the Tennessee Valley Authority (TVA) SQN and WBN have been selected for the production of tritium. In anticipation of a license amendment request by TVA for that purpose, Enclosure 1 of this letter provides 10 copies of Westinghouse WCAP-15409, "Description of the Westinghouse LOCTA_JR 1-D Heat Conduction Code for LOCA Analysis of Fuel Rods," April 2000, for the Nuclear Regulatory Commission (NRC) review and approval.

In July 1998, the DOE submitted a report (NDP-98-153) prepared by Westinghouse Electric Company, entitled "Tritium Production Core (TPC) Topical Report," which presented technical information related to production of tritium in a commercial light-water reactor. In support of that report, the LOCTA_JR code was used to evaluate the impact of a LOCA on Tritium Producing Burnable Absorber Rods (TPBAR). As a result of its review of the TPC topical report, the NRC issued a safety evaluation report (NUREG-1672, May 1999) which listed 17 interface issues which must be addressed to support a plant-specific amendment for operation with a tritium production core. One of those issues is the need for NRC review and approval of the LOCTA_JR code for use in licensing applications.

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This letter transmits the topical report (WCAP-15409, Revision 0) which describes the LOCTA_JR code. It should be noted that the evaluation of the response of TPBARs to a LOCA is just one specific application of the LOCTA_JR code which is capable of a much broader range of uses. Although not explicitly stated in the WCAP, the TPBAR application is one of the options described in Section 4. In addition, the use of the LOCTA_JR code is independent of the particular LOCA model used for the licensing basis analysis of the LOCA transient. Approved licensing models provide the boundary conditions for use in LOCTA_JR, and those models may be either deterministic or statistical (e.g., the Westinghouse 1981 Evaluation Model plus BASH, Framatome Recirculating Steam Generator Evaluation Model, or the Westinghouse Best Estimate Evaluation Model WCOBRA/TRAC). The use of LOCTA_JR does not impact the analysis of the LOCA itself, but provides an evaluation of the response of a thimble insert such as a TPBAR.

TVA and Westinghouse are planning to use the LOCTA_JR code to support the license amendment request for tritium production in WBN Unit 1 and SQN Units 1 and 2, which are planned to be submitted in early 2001. Therefore, a timely review and approval of the LOCTA_JR code for licensing applications is requested. TVA and Westinghouse are prepared to fully support the review process as needed. The plant-specific license amendment requests for tritium production in WBN Unit 1 and SQN Units 1 and 2 will address the interface of LOCTA_JR with the approved plant licensing LOCA models for each plant.

This submittal contains Westinghouse proprietary information of trade secrets, commercial or financial information which Westinghouse considers privileged or confidential pursuant to 10 CFR 9.17(a)(4) and 10 CFR 2.790(a)(4). Therefore, it is requested that the Westinghouse proprietary information enclosed hereto be handled on a confidential basis and be withheld from public disclosure.

This material is for your internal use only and may be used solely for the purpose for which it is submitted. It should not be otherwise used, disclosed, duplicated, or disseminated, in whole or in part, to any other person or organization outside the Office of Nuclear Reactor Regulation without the express prior written approval of Westinghouse.

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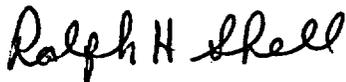
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Correspondence with respect to any Application for Withholding should reference the letter, CAW-00-1400, Revision 2, (provided in Enclosure 2), and should be addressed to H. A. Sepp, Manager of Regulatory and Licensing Engineering, Westinghouse Electric Company, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

During a March 23, 2000 meeting held with the NRC Staff, TVA requested an expedited review of this WCAP upon submittal; however, based on discussions at this meeting, NRC indicated that this review may not necessarily be completed prior to submittal of a license amendment. Therefore, TVA requests that any concerns the Staff has with this code be identified as soon as practicable.

If you should have any questions, please contact Rickey Stockton at (423) 365-1818.

Sincerely,



for
Mark J. Burzynski
Manager
Nuclear Licensing

Enclosures

cc (Enclosures):

NRC Senior Resident Inspector
Watts Bar Nuclear Plant
1260 Nuclear Plant Road
Spring City, Tennessee 37381

NRC Senior Resident Inspector
Sequoyah Nuclear Plant
2600 Igou Ferry Road
Soddy Daisy, Tennessee 37379-3624

cc: (Continued on page 4)

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cc (Enclosures):

Mr. Ronald W. Hernan, Senior Project Manager
U.S. Nuclear Regulatory Commission
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852-2739

Mr. Robert E. Martin, Senior Project Manager
U.S. Nuclear Regulatory Commission
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852-2739

U.S. Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303-8931

ENCLOSURE 1

**WCAP-15409, REVISION 0
DESCRIPTION OF THE WESTINGHOUSE LOCTA_JR
1-D HEAT CONDUCTION CODE FOR LOCA ANALYSIS FOR FUEL RODS**

ENCLOSURE 2

WESTINGHOUSE LETTER CAW-00-1400, REVISION 2

Westinghouse Electric Company LLC



Nuclear Services Business Unit

Box 355
Pittsburgh, Pennsylvania 15230-0355

CAW-00-1400
Revision 2
June 20, 2000

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

Attention: Mr. Samuel J. Collins

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

Subject: WCAP-15409, Revision 0, "Description of the Westinghouse LOCTA_JR 1-D Heat Conduction Code for LOCA Analysis of Fuel Rods", April 2000 (Proprietary)

Dear Mr. Collins:

The subject document contains information proprietary to the Westinghouse Electric Company.

This report is being submitted for generic review and approval and is accompanied by affidavit CAW-00-1400, Revision 2 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. At this time, the material is not being employed as part of a license application or other action identified in 10CFR 2.790(a). It will be separately submitted with another Application for Withholding accompanied by an affidavit meeting the requirements of 10CFR 2.790(b) prior to such use.

Accordingly, we request that the material be treated as proprietary information within the provisions of 10CFR 9.17(a)(4), "Freedom of Information Act Regulations" and 10CFR 2.790(a). If there is a need to make public disclosure of the material prior to a separate Westinghouse submittal for docket in accordance with the provisions of 10CFR 2.790(a), please notify Westinghouse prior to making a disclosure determination. Accordingly, this letter authorizes utilization of the accompanying affidavit by the Tennessee Valley Authority.

Correspondence with respect to the proprietary aspects of this submittal should reference this letter, CAW-00-1400, Revision 2, and should be addressed to the undersigned.

Very truly yours,

H. A. Sepp, Manager
Regulatory and Licensing Engineering

cc: S. Bloom, NRR/OWFN/DRPW/PDIV2 (Rockville, MD) 1L, 1

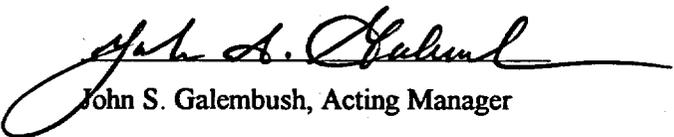
AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

SS

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared John S. Galembush, 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:

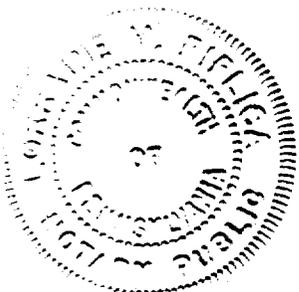


John S. Galembush, Acting Manager
Regulatory and Licensing Engineering

Sworn to and subscribed
before me this 20th day
of June, 2000



Notary Public



Notarial Seal
Lorraine M. Piplica, Notary Public
Monroeville Boro, Allegheny County
My Commission Expires Dec. 14, 2003
Member, Pennsylvania Association of Notaries

- (1) I am Acting Manager, Regulatory and Licensing Engineering, in the Nuclear Services Business Unit of the 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 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 10CFR Section 2.790 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 Westinghouse Electric Company LLC 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 2.790 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 10CFR Section 2.790, 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 WCAP-15409, "Description of the Westinghouse LOCTA_JR 1-D Heat Conduction Code for LOCA Analysis of Fuel Rods" (Proprietary), April, 2000, transmitted by the Tennessee Valley Authority letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk, Attention Mr. Samuel J. Collins. The proprietary information was provided by Westinghouse Electric Company LLC.

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

- (a) Evaluate fuel rod performance under loss of coolant accident (LOCA) conditions, as well as the performance of components inserted into thimble tubes.
- (b) Assist the customer to obtain NRC approval.

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 the technology to its customers in the licensing process.

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 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 testing and analytical methods and performing tests.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary documents furnished to the NRC in connection with a request for generic review and approval.

This material is not being employed, at this time, as part of a license application or other action identified in 10CFR 2.790(a).

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 10CFR 2.790 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 and the proprietary notice.