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Document Control Desk
U.S. Nuclear Regulatory Commission
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ATTENTION: Mr. Thomas Kenyon

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Your ref: Project Number 726
Our ref: STD-ST-07-3

Transmittal of WCAP-16842-P, "IRIS (International Reactor Innovative & Secure): SPES3-IRIS Test Facility" (Proprietary) and the related WCAP-16842-NP (Non-proprietary) September 26, 2007

Dear Mr. Thomas Kenyon:

References:

1. STD-ST-06-3, "Status and Schedule for Iris Pre-Application Activities," Letter to U. Bhachu (NRC) from C. L. Kling (W), September 7, 2006
2. WCAP-16318-P, "IRIS Small Break LOCA Phenomena Identification and Ranking Table (PIRT)" and Addendum 1 "IRIS SBLOCA Sensitivity Report for PIRT Development," August, 2004.
3. STD-ST-07-4, "Invitation to Attend Initial SPES3-IRIS Test on October 8, 2007 at the SIET Facilities in Piacenza, Italy," August 2007
4. ML063450316, "Matjaz Prah Thank You Letter," Letter to M. Prah (SONS, Croatia) from J. D. Lee (NRC). December 21, 2006

Enclosed are copies of topical reports WCAP-16842-P, "IRIS (International Reactor Innovative & Secure): SPES3-IRIS Test Facility" (Proprietary) and the related WCAP-16842-NP (Non-proprietary) related to the pre-application review of the IRIS reactor. Westinghouse requests a meeting to obtain initial NRC feedback on this submittal during the week of November 12, 2007.

The topical report provides a complete description of the SPES3-IRIS test facility and the related test matrix. The intent of this topical is to confirm that sufficient integral effects test data will be generated to support the Evaluation Model Development and Assessment Process (EMDAP) outlined in Regulatory Guide DG-1.203, "Transient and Accident Analysis Methods". Westinghouse is requesting the NRC to provide near term review of this topical via informal and written staff feedback. This feedback will support the SIET preparation for and implementation of the planned test program.

This submittal completes one of the action items identified in Reference 1. In this reference Westinghouse requested NRC staff review and feedback on the expected acceptability of the test scope, instrumentation, variable range, etc. to assure that the test objectives will adequately support the IRIS Design Certification application.

This test plan topical should be reviewed in conjunction with Reference 2, submitted in August 2004. The primary objective of this IRIS SBLOCA PIRT project was to identify the relative importance of phenomena in the IRIS response to SBLOCAs. This relative importance, coupled with the current relative state of knowledge for the phenomena, has provided the framework for the planning of the experimental test program and continuing analytical efforts. The phenomena for all other transients are expected to be enveloped by this SBLOCA PIRT and/or related PIRTs for AP1000.

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The IRIS consortium will hold its first SPES3-IRIS review meeting this October at the SIET facilities in Italy. While the NRC was not able to accept our invitation to this meeting (Reference 3), we note that a representative of DOE and the Director General of the State Office for Nuclear Safety (SONS) of the Republic of Croatia, Dr. Matjaz Prah, will attend both the review meeting and the subsequent IRIS team meeting in Tirrenia, Italy. In addition, Jeff Jacobson, Gary Holahan and Donna Williams will attend the IRIS team meeting.

It is extremely important to have NRC feedback before the subsequent, near term initiation of the SPES3-IRIS test program. Therefore, Westinghouse requests a meeting to obtain initial NRC feedback on these submittals during the week of November 12, 2007. Items we want to discuss at this meeting include:

1. Will the proposed test demonstrate satisfactory system performance of the IRIS safety features, as required by 10 CFR 52.47?
2. Does the test adequately cover the system response phenomena identified in the IRIS PIRT (Ref.2)?
3. Is the test instrumentation adequate to measure these phenomena?
4. To what extent can SONS support the NRC by monitoring and evaluating these tests (Ref. 4) as part of Step 1 of the NRC sponsored Multinational Design Evaluation Program (MDEP)?

This material is for your internal use only and may be used 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 Commission, the Office of Nuclear Reactor Regulation, the Office of Nuclear Regulatory Research and the necessary subcontractors that have signed a proprietary non-disclosure agreement with Westinghouse, without the express written approval of Westinghouse.

Correspondence with respect to the application for withholding should reference AW-07-2322, and should be addressed to James Gresham, Manager of Regulatory Compliance and Plant Licensing, Westinghouse Electric Company, P.O. Box 355, Pittsburgh, Pennsylvania, 15230-0355.

Please contact me (860-731-6604), 1) if you have any questions about the enclosed topical and 2) to discuss details of the requested meeting.

Sincerely,


Dr. Charles L. Kling
IRIS Licensing Manager

/Enclosures:

1. WCAP-16842-P, "IRIS (International Reactor Innovative & Secure): SPES3-IRIS Test Facility" (Proprietary), August 2007
2. WCAP-16842-NP, "IRIS (International Reactor Innovative & Secure): SPES3-IRIS Test Facility" (Non-Proprietary), August 2007
3. AW-07-2322, APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE, August 24, 2007

Cc: M. D. Carelli, (W)
R. Ferri (SIET)
F. Bianchi (ENEA)



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Our ref: AW-07-2322

August 24, 2007

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: Transmittal of WCAP-16842-P/WCAP-16842-NP, Revision 0, "IRIS SPES3-IRIS Facility," dated August 2007 (Proprietary and Non-Proprietary)

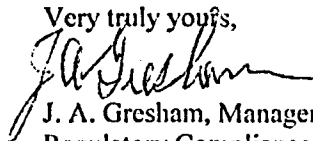
Reference: Letter STD-ST-07-3, "Transmittal of WCAP-16842-P/WCAP-16842-NP, Revision 0, "IRIS (International Reactor Innovative & Secure): SPES3-IRIS Test Facility" (Proprietary/Non-proprietary)

The Application for Withholding 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 material for which withholding is being requested is identified in the proprietary version of the subject report. In conformance with 10 CFR Section 2.390, Affidavit AW-07-2322 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 AW-07-2322 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.

Very truly yours,

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

Enclosures

cc: Jon Thompson (NRC O-7E1A)

bcc: J. A. Gresham (ECE 4-7A) 1L
R. Bastien, 1L (Nivelles, Belgium)
C. Brinkman, 1L (Westinghouse Electric Co., 12300 Twinbrook Parkway, Suite 330, Rockville, MD 20852)
RCPL Administrative Aide (ECE 4-7A) (Letter and affidavit only)
C. L. Kling (Windsor, CT)

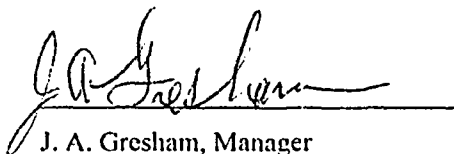
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STATE OF PENNSYLVANIA:

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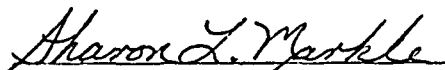
COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared James 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:

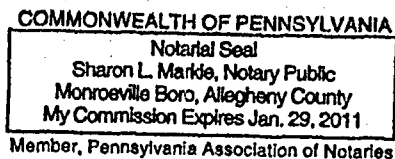

J. A. Gresham, Manager

Regulatory Compliance and Plant Licensing

Sworn to and subscribed before me
this 24th day of August, 2007



Notary Public



- (1) I am Manager, Regulatory Compliance and Plant Licensing, 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" 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 appropriately marked in WCAP-16842-P, "IRIS SPES3-IRIS Facility" (Proprietary) dated August, 2007, for providing details of the test matrix and test facility design description for the integral tests planned for the IRIS nuclear power plant, being transmitted by Westinghouse letter (STD-ST-07-3) and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse for the IRIS plant is expected to be applicable in other licensee submittals in response to certain NRC requirements for justification of compliance of the safety system to regulations.

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

- (a) Examine, through testing, the integrated performance of components and/or systems which are also required for design certification of IRIS.

- (b) Provide thermal-hydraulic data for computer code validation and/or will ensure that new components and system functions important to plant safety are demonstrated.

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 plant design, construction and operation.
- (b) Westinghouse can sell support and defense of safety systems and analyses based on the technology in these reports.
- (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 computer models 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/or 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).

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.