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**Project Number 726  
STD-ST-05-01**

July 15, 2005

Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC. 20555-0001  
ATTENTION: MR. J. F. WILLIAMS

**SUBJECT: Transmittal of WCAP-16392-P, "IRIS (International Reactor Innovative & Secure) Test Plan" (Proprietary) and the related WCAP-16392-NP (Non-Proprietary)**

Dear Mr. Williams:

Enclosed are copies of topical reports WCAP-16392-P, "IRIS (International Reactor Innovative & Secure) Test Plan" (Proprietary) and WCAP-16392-NP (Non-Proprietary) related to the pre-licensing review of the IRIS reactor. Westinghouse requests a meeting to review our submittals during the week of September 19, 2005.

The intent of this topical is to confirm that sufficient data will be generated to support the Evaluation Model Development and Assessment Process (EMDAP) outlined in draft Regulatory Guide DG-1120, "Transient and Accident Analysis Methods". Per STD-ES-04-050, Westinghouse requested the NRC provide near term review of this topical via informal and written staff feedback. This feedback will support the IRIS consortium preparation for and implementation of the planned test program. NRC-Westinghouse concurrence on this test program is one of the two current objectives of the pre-application effort.

This test plan topical should be reviewed in conjunction with WCAP-16318-P, "IRIS Small Break LOCA Phenomena Identification and Ranking Table (PIRT)" and Addendum 1 "IRIS SBLOCA Sensitivity Report for PIRT Development." The primary objective of the 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.

Therefore, in addition to feedback on the testing program, Westinghouse also requests NRC concurrence that the relative importance of the phenomena, as well as the current relative state of knowledge for the phenomena, provides an adequate basis for these ongoing test and analytical efforts.

DOT2

NRC review and documented feedback on the PIRT and test plan topicals is important 1) to identify all necessary tests to support the EMDAP, 2) to establish the range of tests to be performed and 3) to limit, to the extent possible, the future need to perform new and different tests or to significantly extend the ranges of proposed test. Westinghouse and the other IRIS consortium members realize that the testing program itself and the licensing process may indicate additional tests need to be performed; however, we want to avoid, to the extent possible, either additional testing or retesting. A well conceived test program, based on our understanding of unique IRIS features and appropriate NRC feedback should allow us to attain this goal.

The IRIS Consortium has identified funding, performers and facilities for most of the design certification tests. The majority of the tests, including the integral tests, will be conducted in Italy, utilizing facilities (e.g., the SIET SPES in Piacenza) that are familiar to the NRC, since they were used for AP600 testing. An IRIS team review meeting is scheduled for end of October 2005 in Italy and we expect to kick off the testing program at this meeting. Because the NRC recently stipulated that all necessary information, including test data, be included in the application for Design Certification, we have focused our efforts to start the experimental program as soon as possible.

It is extremely important to have NRC feedback and advice before kicking off the IRIS test program; therefore, Westinghouse requests a meeting to review our submittals during the week of September 19, 2005.

Since we only recently identified SIET as the facility for performing the integral testing, our submittal will not include Part 2 of the scaling topical, which requires knowledge of the test facility in order to iterate between Stage 3 and Stage 4 (facility dependent). We expect to submit this report to NRC by mid-September. We understand that the NRC probably will not have time to review this scaling topical before the October IRIS meeting. However, because the scaling topical and SIET facility will only address integral tests, while the testing topical addresses the entire test program, Westinghouse still requests the NRC to schedule an early meeting, as requested, to review the test plan and PIRT documents to the extent practical. A subsequent review meeting can be scheduled after the October IRIS meeting in Italy to factor in NRC comments on the scaling topical and to further refine the integral tests as appropriate.

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

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 organisation 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.

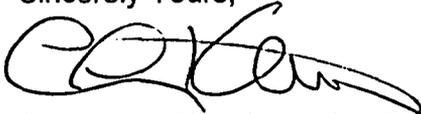
July 15, 2005

Page 3

Correspondence with respect to the application for withholding should reference AW-05-xxxx, 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 Larry Conway (412) 256-1189 or myself (860) 731-6604 if you have any questions concerning the enclosed material.

Sincerely Yours,



Charles L. Kling, Licensing Manager  
IRIS Project

/Enclosures:

1. AW-05-2023, APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE, July 14, 2005
2. WCAP-16392-P, "IRIS (International Reactor Innovative & Secure) Test Plan" (Proprietary), July 2005
3. WCAP-16392-NP, "IRIS (International Reactor Innovative & Secure) Test Plan" (Non-Proprietary), July 2005

cc: M. D. Carelli (W) w/o Enclosures 2&3  
C. B. Brinkman (W)  
J. S. Kim (NRC)



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Our ref: AW-05-2023

July 14, 2005

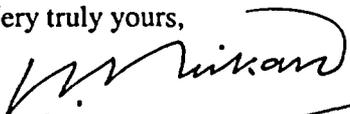
APPLICATION FOR WITHHOLDING PROPRIETARY  
INFORMATION FROM PUBLIC DISCLOSURE

Subject: WCAP-16392-P, Rev. 0, "IRIS (International Reactor Innovative & Secure) Test Plan"

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit AW-05-2023 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.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, AW-05-2023, 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,

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

Enclosures



- (1) I am the Licensing Project Manager, 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 Enclosure 2 to Letter, C. L. Kling (Westinghouse) to U.S. NRC Document Control Desk, "Transmittal of WCAP-16392-P, 'IRIS (International Reactor Innovative & Secure) Test Plan' (Proprietary) and the related WCAP-16392-NP (Non-Proprietary)," STD-ST-05-01, dated July 15, 2005, being transmitted by the Westinghouse letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted for use by Westinghouse is expected to be applicable for other licensee submittals in response to certain NRC requirements for justification of use of information regarding IRIS.

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

(a) Obtain certification of an advanced nuclear reactor design.

Further this information has substantial commercial value as follows:

- (a) The information requested to be withheld reveals the distinguishing aspects of an advance nuclear power plant design and related methodology that was developed by Westinghouse and its partners.
- (b) Westinghouse plans to sell the use of similar information to future customers for purposes of meeting NRC requirements for licensing documentation.
- (c) Westinghouse can sell support and defense of IRIS Design Certification.

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 products 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 information transmitted herewith bears 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 approval 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 version of this report, 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 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.