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Project Number 726 STD-ES-03-28

July 28, 2003

Document Control Desk U.S. Nuclear Regulatory Commission Washington, DC. 20555-0001 ATTENTION: MS. L. C. FIELDS

## SUBJECT: Transmittal of WCAP-16082-P, "IRIS Preliminary Safety Assessment, Vol. I" (Proprietary) and WCAP-16082-NP (Non-Proprietary)

Dear Ms. Fields:

Enclosed are copies of topical reports WCAP-16082-P, "IRIS Preliminary Safety Assessment, Vol. I" (Proprietary) and WCAP-16082-NP (Non-Proprietary) related to the pre-licensing review of the International Reactor Innovative And Secure (IRIS) reactor.

The topicals provide a preliminary safety assessment of the IRIS reactor and include an overview of the IRIS approach to safety. The main purpose of this study is to assist in the identification of 1) the important phenomena, 2) sequences that IRIS Evaluation Models will have to address and 3) component test requirements. The events analyzed in this study are a subset of those studied for AP1000 and AP600, and have been selected (1) to address those events where IRIS response is different from AP1000, and (2) to provide an initial overview of the IRIS response to different anticipated operational occurrences and design basis events.

In addition to the overview of the IRIS approach to safety, Volume I of this topical (enclosed) includes analyses for the following transient categories:

Increase In Heat Removal From The Primary System Decrease In Heat Removal By The Secondary System Decrease In Reactor Coolant System Flow

Volume II of this topical (to be submitted in August) will include analyses for the following transient categories:

Reactivity And Power Distribution Anomalies Increase In Reactor Coolant Inventory Decrease In Reactor Coolant Inventory Radioactive Release From A Subsystem Or Component Anticipated Transients Without Scram 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.

Correspondence with respect to the application for withholding should reference AW-03-1637, and should be addressed to Hank A. Sepp, Manager of Regulatory Compliance and Plant Licensing, Westinghouse Electric Company, P.O. Box 355, Pittsburgh, Pennsylvania, 15230-0355.

Please contact Luca Oriani (412) 256-1692 or myself (860) 731-6604 if you have any questions concerning the enclosed material.

Charles L. Kling, Licensing Manager, IRIS Project

/Enclosures:

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- 1. AW-03-1674, APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE, July 24, 2003
- WCAP-16082-P, "IRIS Preliminary Safety Assessment, Vol. I" (Proprietary), July 2003
- WCAP-16082-NP, "IRIS Preliminary Safety Assessment, Vol. I" (Non-Proprietary), July 2003
- cc: M. D. Carelli (<u>W</u>) w/o Enclosures 2&3 C. B. Brinkman (<u>W</u>)