



Westinghouse

Westinghouse Electric Company
Science and Technology Department
401 Building
1344 Beulah Road
Pittsburgh, Pennsylvania 15235-5083 USA
(412) 256-1042 Direct
(412) 256-2444 Office Fax
Email: carellmd@westinghouse.com

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Document Control Desk
Attn: Mr. Samuel J. Collins, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop: 5 E7
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Subject: Request to Commence Pre-application Review for IRIS

Dear Mr. Collins:

On May 7, 2001, Westinghouse Electric Company met with NRC staff to describe the IRIS (International Reactor Innovative and Secure) conceptual design. We indicated that the IRIS consortium would be completing the preliminary design in 2002 and that we planned to approach the NRC in mid-2002 with a pre-application proposal in accordance with the NRC's Advanced Reactor Policy Statement. The purpose of this letter is to inform the NRC that Westinghouse would now like to start, on behalf of the IRIS consortium, the pre-application licensing review for the IRIS design. Since IRIS is firmly based on proven light water reactor technology, we would like to limit the pre-application review to those areas where early feedback from NRC would be most beneficial, i.e., long lead time items and new safety issues. In particular, we would like to focus this first phase of the pre-application review effort on:

- Review of IRIS proposed approach to confirmatory testing, which will include: identification of proposed tests to confirm the behavior characteristics of integral components (steam generators, pumps, pressurizer) and the IRIS response to accident conditions; similitude analysis; test plans and facilities selection; and expected test results.
- Discussion of possible application of risk informed licensing to IRIS. Because of the IRIS safety-by-design approach, we believe that we have a very strong defense-in-depth design that should essentially meet current safety criteria. However, we would like to explore the potential use of risk informed licensing to best realize the advantages of the advanced design features of IRIS, as modeled in the PSA, in relation to classification of design bases events, severe accident features, and emergency planning.

Westinghouse would like to propose the following schedule for phase 1 of the pre-application review:

1st meeting – IRIS presentation, outline of proposed pre-application scope	9/13/02
Submission of pertinent documentation to NRC	9/30/02
2nd meeting – Introduction of IRIS testing approach	11/1/02
Submission of pertinent documentation to NRC	11/15/02

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NRC issues RAIs	2/3/03
Westinghouse completes response to RAIs	4/1/03
NRC documents conclusions of review of the proposed IRIS test program	6/2/03
3rd meeting – Introduction of IRIS approach to risk informed licensing	4/1/03
Pertinent documentation to be provided at the meeting	
NRC written response to IRIS licensing approach	6/2/03

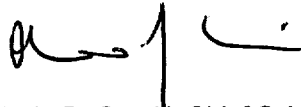
The dates, of course, are only indicative and will be mutually firmed up. Our goal is to have at the end of this initial exchange the NRC's concurrence with the extent of the IRIS test program necessary to achieve design certification, as well as the staff's advice and recommendations regarding the test plans and facilities; and to gain knowledge of the benefits and challenges of adopting risk informed licensing, sufficient to determine the extent to which we should pursue that licensing direction.

Our plans are to initiate a formal design certification application in 2004 (or 2005) when the certification of AP1000 is completed. We wish to emphasize that the AP1000 design certification application would have priority in the event of resource conflicts with the IRIS pre-application activity.

We would like to keep open the option of engaging the NRC with a second phase of the pre-application process between 6/2003 and the start of the formal application, to have NRC involved in the actual testing phase and/or to explore other issues as they may occur. A definition of the second phase activities will be mutually agreed upon later.

We look forward to your comments on the proposed plan and schedule and successfully completing this very important step prior to submittal of a design certification application for IRIS.

Yours truly,



Mario D. Carelli, Chief Scientist
& Manager of Energy Systems

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cc: J. H. Flack (USNRC)
J. E. Lyons (USNRC)
R. A. Matzie (W)
J. E. Goossen (W)
C. B. Brinkman (W)
C. L. Kling (W)