

March 4, 2002

Mr. W. E. Cummins, Director  
AP600 & AP1000 Projects  
Westinghouse Electric Company  
Post Office Box 355  
Pittsburgh, Pennsylvania 15230-0355

SUBJECT: RESPONSE TO YOUR LETTER DATED JANUARY 18, 2002, REGARDING  
THE AP1000 PRE-APPLICATION REVIEW (TAC NO. MB3979)

Dear Mr. Cummins:

In your letter dated January 18, 2002, as supplemented by letter dated February 6, 2002, you stated that two items needed to be resolved in order for Westinghouse to proceed with its plans for submitting an application for Design Certification for the AP1000 in March 2002. These items included (1) the Nuclear Regulatory Commission (NRC) staff's completion of the pre-application review (Phase 2) and (2) the NRC staff's determination of the cost and schedule for the Design Certification Review (Phase 3).

With respect to the first item, the NRC staff plans to complete its pre-application review by the end of March 2002. The scope of the pre-application review is based on your letter dated August 28, 2000, as supplemented by letter dated February 13, 2002, and is limited to the staff's review of (1) the applicability of the AP600 test program to the AP1000 design, (2) the applicability of the AP600 analysis codes to the AP1000 design, (3) the proposed use of design acceptance criteria in lieu of detailed design in the instrumentation and control, human factors, piping, structural, and seismic areas, and (4) the proposed use of the same exemptions that were granted for the AP600 design certification. The NRC staff's position on these issues has been discussed with your staff at meetings held on January 23, February 14, and February 15, 2002, and will be documented by the end of March 2002.

With respect to the second item, the NRC staff is currently reviewing the enclosures to your January 18 and February 6, 2002, letters for use in producing a preliminary schedule for the Phase 3 review. The preliminary schedule will be based on the assumptions that your Design Certification Request will be of high quality and that review efficiencies will be realized as a result of the similarities between the AP1000 and AP600 designs. Also, consistent with the scope of Phase 2 as requested in your August 28, 2002, letter, the document you forwarded to assist the staff in formulation of the Phase 3 review schedule did not provide all of the Chapter 15 analyses or a probabilistic risk assessment and was based on your proposed use of design acceptance criteria in lieu of providing detailed design information in the seismic, structural, and piping areas. Consequently, there are some areas about which the NRC staff will need to make assumptions regarding the form and content of your intended Design Certification request.

The NRC staff plans to issue a preliminary schedule by the end of March 2002 and to review the schedule after it receives the AP1000 Design Certification Request and completes the acceptance review. At that time the Phase 3 review schedule will be updated as necessary with any changes noted and explained.

The NRC staff provided an initial estimate of the cost to complete the AP1000 Design Certification Review in SECY-01-0188, "Future Licensing and Inspection Readiness Assessment [FLIRA]," dated October 12, 2001. In this document, it was estimated that the Design Certification Review effort would include 30 full time equivalent staff and \$1.5 million in contract funds. The staff will review the need to update the initial cost estimate as presented in the FLIRA paper, based on your January 18, and February 6, 2002, letters and your subsequent Design Certification Request. Any necessary changes to the cost estimate will be documented and explained.

The formulation of an updated cost and preliminary schedule will involve expenditures in NRC staff effort that are outside the specific scope of the Phase 2 review requested in your letter dated August 28, 2000. In its letter dated July 27, 2000, the NRC staff proposed the efforts associated with determination of the Phase 3 review scope (Item 1) for possible inclusion in the Phase 2 review. For reasons stated in your August 28, 2000, letter, you decided not to include this effort as part of the Phase 2 review. However, as discussed with members of your staff, the NRC staff will need to perform some of the tasks associated with Item 1 in order to produce the updated cost estimate and preliminary schedule.

Sincerely,

**/RA/**

Lawrence J. Burkhart, AP1000 Project Manager  
New Reactor Licensing Project Office  
Office of Nuclear Reactor Regulation

Project No. 711

cc: See next page

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Sincerely,

/RA/

Lawrence J. Burkhart, AP1000 Project Manager  
New Reactor Licensing Project Office  
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AP 1000

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