

February 15, 2008

Mr. W. E. Cummins, Vice President  
Regulatory Affairs and Standardization  
Westinghouse Electric Company  
P.O. Box 355  
Pittsburgh, PA 15230-0355

SUBJECT: REVIEW SCHEDULE FOR THE AP1000 DESIGN CERTIFICATION  
AMENDMENT APPLICATION, REVISION 16

Dear Mr. Cummins:

This letter transmits the Westinghouse AP1000 Design Certification (DC) amendment review schedule. The safety review supports the issuance of a Final Safety Evaluation Report (FSER) in March 2010, and the issuance of a regulation in Title 10 of the *Code of Federal Regulations*, Part 52, Appendix D in February 2011. Milestones for the six phases of this review are provided in the enclosure to this letter. The primary driver and risks to this schedule are described below.

By letter dated May 26, 2007, as supplemented by letters dated October 26, November 2, December 12, 2007, January 11 and January 14, 2008, the Westinghouse Electric Company, Pittsburgh, Pennsylvania, submitted an amendment request to the U.S. Nuclear Regulatory Commission (NRC) to revise the AP1000 DC rule per Title 10 of the *Code of Federal Regulations* (10 CFR), Subpart 52.63, "Finality of Standard Design Certifications." This DC amendment request supports changes to the current AP1000 DC, which is Revision 15. The proposed DC Revision 16 design is, or will be, the design referenced in current and future Combined License (COL) applications referencing the AP1000 design. By letter dated January 18, 2008, the NRC docketed Westinghouse's DC amendment request.

The staff discussed in the January 18, 2008 letter an area that introduced significant uncertainty into the review schedule. Your submittal did not contain a recirculation screen design nor did it provide associated analyses or test information that support the ability to demonstrate that the requirements of 10 CFR 50, Appendix A, "General Design Criteria for Nuclear Power Plants," GDC 35, "Emergency Core Cooling," and 10 CFR 50.46(b)(5) were met. This area was discussed with you in the January 31, 2008 public meeting. In your letter dated January 30, 2008, you committed to a schedule for providing additional details on the containment recirculation and in-containment Refueling Water Storage Tank screen designs and analyses and evaluations to demonstrate adequate long-term cooling performance.

The enclosed schedule milestones are based on Westinghouse providing a description of the sump screen design with a complete demonstration that all of the applicable portions of Regulatory Guide 1.82, Revision 3 are met, as well as proposed Inspections, Tests, Analyses and Acceptance Criteria that are necessary and sufficient to provide reasonable assurance the facility will be operated in conformity with the regulations, by April 30, 2008. If you are unable to provide the information on this schedule, please let us know immediately.

Since the NRC has not performed an acceptance review of the sump information, the review schedule established for Chapters 6 and 15 (which both depend on your anticipated submittals described above) is highly uncertain. These chapters are on the critical path for this review; adherence to the schedule relies on complete and timely submittals from you, consistent with the timeframes discussed above. Chapter 16, on Technical Specifications, is on a similar schedule as Chapters 6 and 15 because additional information is expected in March 2008 to address a small number of remaining bracketed items that you wish to remove in the generic technical specifications. Upon receipt of this information, we will determine if any further adjustment to the schedule is needed.

The review of the Bellefonte COL application will proceed in accordance with the review schedule provided to the Tennessee Valley Authority in a separate letter dated February 15, 2008. The Bellefonte COL application incorporates by reference both Appendix D to 10 CFR 52 and the AP1000 Design Control Document submitted by Westinghouse as Revision 16. Thus, a substantial portion of the Bellefonte COL review schedule is dependent on the AP1000 DC amendment review schedule. Schedule dependencies have been established between the two reviews to model this aspect. We want to bring to your attention the review schedule for the Bellefonte COL application. The SER with open items (for both the DC amendment and Bellefonte COL applications) for Chapters 6, 15, and 16 is scheduled for completion on essentially the same date. Therefore, any slippage in the Westinghouse schedule will delay the Bellefonte schedule and possibly other subsequent COL applications that reference the AP1000 DC amendment.

The staff will review and re-baseline, if necessary, the Westinghouse review schedule around the time the SER with open items is issued. At this point, the staff will have a better idea of what target milestones are achievable given the number and complexity of the open items. The schedule assumes technically correct and complete responses within 30 days of receipt to NRC's requests for additional information. Any new and significant changes or additions to the DC or supporting documentation could impact scheduled completion dates.

W. E. Cummins

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Please feel free to contact Billy Gleaves, the Sr. Project Manager for the AP1000 DC amendment acceptance review, at (301) 415-5848 or [bcg@nrc.gov](mailto:bcg@nrc.gov), with any comments, concerns or questions.

Sincerely,

*/RA/*

William C. Gleaves, Sr. Project Manager  
AP1000 Projects Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-006

Enclosure:  
As stated

cc w/encl: See next page

W. E. Cummins

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DATE	02/15/2008	02/15/2008	02/15/2008

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## Westinghouse AP1000 Design Certification Amendment, Revision 16

\*Schedule assumptions are given in NRC's 2/15/2008 letter

Task	Finish
<b>Phase 1</b> - Preliminary Safety Evaluation Report (SER) and Request for Additional Information (RAI) for all Chapters except 6, 15, & 16	6/25/2008
- Preliminary SER and RAIs for Chapters 6, 15, & 16	9/23/2008
<b>Phase 2</b> - SER with Open Items for all chapters except 6, 15, & 16	1/08/2009
- SER with Open Items for Chapters 6, 15, & 16	4/27/2009
<b>Phase 3</b> - ACRS Review of SER with Open Items for all chapters except 6, 15, & 16	4/30/2009
- ACRS Review of SER with Open Items for Chapters 6, 15, & 16	7/28/2009
<b>Phase 4</b> - Advanced SER with No Open Items	10/16/2009
<b>Phase 5</b> - ACRS Review of Advanced SER with No Open Items	1/29/2010
<b>Phase 6</b> – Final SER with No Open Items	3/05/2010
<b>Rulemaking</b>	2/21/2011

**ENCLOSURE**

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