

January 18, 2008

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

SUBJECT: ACCEPTANCE REVIEW OF THE AP1000 DESIGN CERTIFICATION
AMENDMENT APPLICATION FOR REVISION 16

Dear Mr. Cummins:

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 Design Certification (DC) Rule per Title 10 of the *Code of Federal Regulations* (10 CFR), Subpart 52.63, "Finality of Standard Design Certifications." The AP1000 DC rule for the AP1000 design is found in 10 CFR, Part 52, Appendix D, "Design Certification Rule for the AP1000 Design." This DC amendment request and its supplements (collectively referred to as the amendment or Revision 16) support changes to the current AP1000 DC, which is Revision 15. The DC Revision 16 design is, or will be, the design referenced in current Combined License (COL) applications and future COL applications referencing the AP1000 design.

This letter is to inform Westinghouse that the NRC staff has completed its acceptance review and has determined that Revision 16 to the AP1000 DC can be docketed. In its decision to docket, the NRC found that the information provided in most parts of the amendment request meets NRC regulations with respect to completeness and technical sufficiency. One notable exception is Westinghouse's proposal to generically resolve COL Item 6.3-2 through the addition of design information on verification of water sources for long-term recirculation cooling and debris generation from a LOCA, including chemical and downstream effects. In its submittal, dated May 26, 2007, Westinghouse had not selected a recirculation screen design that would permit the staff to evaluate the capability of the design to meet our regulatory requirements and did not provide analyses or test information that demonstrated that the proposed design change would be adequate to allow for a conclusion 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. The recirculation screens are design features that contribute directly to the capability of the ECCS systems to provide long-term cooling capability. This deficiency was communicated to Westinghouse on January 9, 2008.

In your January 11, 2008 letter, Westinghouse proposed to resolve the COL item by providing additional design detail for the Incontainment Refueling Water Storage Tank screens and the Containment Recirculation Screens and creating a COL Holder item to provide an assessment of the acceptability of the screens through performance testing and analysis to confirm the long-term cooling of the core. The staff does not view the submitted screen design information to provide a level of detail such that the staff can begin its detailed technical review and complete it in a predictable time frame. In addition, the NRC believes the confirmation of adequate long-term core cooling must be completed before issuance of a COL.

The NRC's review schedule, for both Westinghouse's amendment request and the COLs that reference that amendment request, will be affected by the date on which Westinghouse provides its plan and schedule for the resolution of the long term cooling issues. The staff plans to hold a public meeting to discuss review schedules with Westinghouse and COL applicants referencing the AP1000 design. Where possible, the staff intends to publish a schedule for review for the DC amendment request within 30 days of this letter.

Enclosed is a notice of acceptance for docketing. This notice is being forwarded to the Office of the Federal Register. A separate notice will be published, as required by 10 CFR 52.51, in accordance with the provisions of 10 CFR 2.804, announcing the proposed design certification rulemaking and opportunity for submission of comments.

Should you have any questions, please contact Billy Gleaves, the Sr. Project Manager for the AP1000 DC amendment request acceptance review, at (301) 415-5848 or bcg@nrc.gov.

Sincerely,

/RA/

David B. Matthews, Director
Division of New Reactor Licensing
Office of New Reactors

Project No. 0740
Docket 52-006

Enclosure:
As stated

cc: See next page

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U.S. NUCLEAR REGULATORY COMMISSION
WESTINGHOUSE ELECTRIC COMPANY
ACCEPTANCE FOR DOCKETING OF A DESIGN CERTIFICATION
RULE AMENDMENT REQUEST FOR THE AP1000 DESIGN
DOCKET NO. 52-006

By letter dated May 26, 2007, as supplemented by letters dated October 26, November 2, December 12, 2007, January 11, and January 14, 2008, Westinghouse Electric Company, Pittsburgh, Pennsylvania, submitted an amendment request to the U.S. Nuclear Regulatory Commission (NRC) to revise AP1000 Design Certification (DC) Rule, filed pursuant to Section 103 of the Atomic Energy Act and Subpart B, "Standard Design Certifications," of Title 10 of the *Code of Federal Regulations* (10 CFR), Part 52, "License Certifications and Approvals for Nuclear Power Plants." The reactor design proposed for amendment in the request is the AP1000 design, Revision 15, as referenced in 10 CFR 52, Appendix D, "Design Certification Rule for the AP1000 Design."

The NRC staff has determined that Westinghouse has submitted sufficient information in accordance with 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," and 10 CFR Part 52 such that it is acceptable for docketing. The docket number established for this review is 52-006. Docketing of the amendment request does not preclude the NRC from requesting additional information from the applicant as the review proceeds, nor does it predict whether the Commission will grant or deny the amendment request.

Enclosure

Finally, the Commission will announce in a future Federal Register notice the opportunity to comment on the proposed rulemaking.

Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, Public File Area O-1F21, 11555 Rockville Pike (first floor), Rockville, Maryland 20852, and will be accessible electronically through the Agencywide Documents Access System (ADAMS) Public Electronic Reading Room link at the NRC Web site <http://www.nrc.gov/reading-rm/adams.html>. The application is also available at <http://www.nrc.gov/reactors/new-licensing/col.html>. Persons who do not have access to ADAMS, or who encounter problems in accessing documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1-800-397-4209, 301-415-4737, or by e-mail to pdr@nrc.gov.

Dated at Rockville, Maryland this 18th day of January 2008.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

David B. Matthews, Director
Division of New Reactor Licensing
Office of New Reactors

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(Revised 1/3/08)

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