

March 10, 2006

Mr. W. E. Cummins, Director  
AP600 and AP1000 Projects  
Westinghouse Electric Company  
P.O. Box 355  
Pittsburgh, PA 15230-0355

SUBJECT: REVISED FINAL DESIGN APPROVAL FOR AP1000

Dear Mr. Cummins:

This letter provides the revised final design approval (FDA) for the AP1000 standard plant design issued under Appendix O of 10 CFR Part 52. This FDA allows an applicant to reference the AP1000 standard plant design in an application for a construction permit or operating license under 10 CFR Part 50 or in an application for a combined license under 10 CFR Part 52. The duration of this FDA conforms with the duration of the AP1000 design certification (Appendix D of 10 CFR Part 52). If you have questions about this document, please contact Jerry N. Wilson at 301-415-3145.

Sincerely,

*/RA/*

J. E. Dyer, Director  
Office of Nuclear Reactor Regulation

Docket No. 52-006

Enclosure:

1. Revised FDA

cc: w/encl - See next page

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See previous concurrence  
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DOCKET NO. 52-006

AP1000 STANDARD DESIGN

FINAL DESIGN APPROVAL (FDA)

PURSUANT TO 10 CFR PART 52, APPENDIX O

- (1) Westinghouse Electric Company, LLC (Westinghouse), has submitted a standardized design for a major portion of a nuclear power facility of the type described in 10 CFR 50.22 to the Nuclear Regulatory Commission (NRC) staff for review. Westinghouse's standard plant design is described in the AP1000 Design Control Document (DCD), including Revisions 1 through 15, and the AP1000 Probabilistic Risk Assessment (PRA), including Revisions 1 through 8.
- (2) The DCD and its references contain design information required by 10 CFR Part 52, Appendix O, Paragraph 3, for a standard plant design. The AP1000 design, whose scope is defined in DCD Tier 2, Section 1.8, is a nuclear power facility with a rated reactor core power level of 3400 megawatts thermal.
- (3) The NRC staff and the Advisory Committee on Reactor Safeguards (ACRS) have reviewed the AP1000 design. The staff's evaluation of the AP1000 design is presented in the final safety evaluation report (FSER) dated September 2000 (NUREG-1793) and Supplement 1 to NUREG-1793, dated December 2005. The ACRS reported on the application for design certification in letters dated July 20 and November 15, 2005, as required by 10 CFR 52.53.
- (4) On the basis of its review and the findings reported in the FSER and the supplement thereto, the NRC staff concludes that the information in the DCD and PRA on the AP1000 standard design described in paragraph 2 above complies with the requirements of 10 CFR Part 52, Appendix O.
- (5) The AP1000 standard design is acceptable for use as a reference design for construction permit, operating license, and combined license applications for facilities that are located at sites whose characteristics are within the envelope of site parameters given in the DCD and where the out-of-scope portions of the plant that interface with the approved design conform to the interface requirements given in the DCD.
- (6) This FDA and all applications for licenses incorporating it by reference are subject to all applicable provisions of the Atomic Energy Act, as amended, and the rules, regulations, and orders of the Commission now or hereafter in effect. In addition, licensees who reference the AP1000 design shall comply with the operational requirements in the DCD, including the technical specifications and availability controls in Chapter 16 of the DCD.

- (7) This FDA does not constitute a commitment to issue a permit, a design certification, or a license, or in any way affect the authority of the Commission, the Atomic Safety and Licensing Board, and other presiding officers in any proceeding pursuant to 10 CFR Part 2.
- (8) This FDA is effective on the date it is issued. The FDA supersedes previous FDAs for the AP1000 standard plant design and will expire on February 27, 2021, unless the NRC staff extends the date. The expiration of this FDA shall not affect its use in applications docketed before that date.

Dated in Rockville, Maryland, this 10<sup>th</sup> day of March 2006.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

J. E. Dyer, Director  
Office of Nuclear Reactor Regulation

UNITED STATES NUCLEAR REGULATORY COMMISSION  
NOTICE OF ISSUANCE OF FINAL DESIGN APPROVAL AND  
FINAL SAFETY EVALUATION REPORT, SUPPLEMENT 1,  
FOR AP1000 STANDARD PLANT DESIGN  
WESTINGHOUSE ELECTRIC COMPANY, LLC

The U.S. Nuclear Regulatory Commission (NRC) has issued a revised final design approval (FDA) to Westinghouse for the AP1000 design under 10 CFR Part 52, Appendix O. This FDA allows the AP1000 design to be referenced in an application for a construction permit or an operating license under 10 CFR Part 50 or in an application for a combined license under 10 CFR Part 52. The FDA was revised to make it coterminous with the design certification rule that was issued on January 27, 2006, (Appendix D to 10 CFR Part 52). This FDA supersedes the FDA dated September 13, 2004.

The U.S. Nuclear Regulatory Commission has also issued Supplement 1 to the final safety evaluation report (FSER) related to the certification of the AP1000 standard plant design. The FSER (NUREG-1793) and Supplement 1 thereto supports issuance of the revised FDA.

A copy of the AP1000 FDA and Supplement 1 to the FSER have been placed in the NRC's Public Document Room for review and copying by interested persons.

Dated at Rockville, Maryland, this 10<sup>th</sup> day of March 2006.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Laura A. Dudes, Branch Chief  
New Reactor Licensing Branch  
Division of New Reactor Licensing  
Office of Nuclear Reactor Regulation

AP 1000

cc:

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