Docket File

WESTINGHOUSE ELECTRIC COMPANY

DOCKET NO. STN 50-480

REFERENCE SAFETY ANALYSIS REPORT
(RESAR-41 NUCLEAR STEAM SUPPLY SYSTEM STANDARD DESIGN)

PRELIMINARY DESIGN APPROVAL (PDA)

Preliminary Design Approval No. PDA-3

Amendment No. 1

(1) The Westinghouse Electric Corporation has submitted to the Nuclear Regulatory Commission's (NRC) staff for its review a proposed standardized preliminary design for major portions of a nuclear power reactor of the type described in 10 CFR 50.22. The preliminary design is described in the Westinghouse Electric Corporation Standard Safety Analysis Report, RESAR-41, along with 25 amendments thereto (hereinafter collectively referred to as RESAR-41).

(2) RESAR-41 contains preliminary design information in accordance with 10 CFR Part 50 Appendix O, paragraph 3, for the nuclear steam supply system portion of a pressurized water reactor nuclear power plant, which encompasses the reactor coolant system, emergency core cooling system, emergency boration system, reactor control and protection systems, engineered safety features actuation system, chemical and volume control system, boron recycle system, residual heat removal system, fuel handling equipment, and related systems and features. The RESAR-41 reference design is designed to operate at a core thermal power level of 4100 megawatts, but in accordance with Regulatory Guide 1.49, "Power Levels of Nuclear Power Plants," the application for the Preliminary Design Approval was based on a core thermal power level of 3800 megawatts.

(3) The RESAR-41 reference design has been reviewed by the NRC staff and by the Advisory Committee on Reactor Safeguards (ACRS). The results of the NRC staff evaluation of the RESAR-41 reference design are presented in the Safety Evaluation Report (SER), NUREG-75/103, dated December 1975. The ACRS comments, including identification of items which the ACRS will review on a case-by-case basis, are set forth in its letter of September 18, 1975 (Appendix F of the SER).

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(4) Based on its review, and the findings set forth in Section 19 of the SER, the NRC staff has concluded that subject to the conditions set forth herein, the information provided in RESAR-41 with respect to the major portions of the preliminary design encompassed by RESAR-41, as described in paragraph 2 above, complies with the requirements of 10 CFR Part 50, Appendix O and is acceptable for incorporation by reference in applications for construction permits. In accordance with 10 CFR Part 50, Appendix O, subject to the conditions set forth herein and in Appendix O, the approved design shall be utilized and relied upon by the staff and the ACRS in their review of any individual facility license application which incorporates by reference the approved design, unless there exists significant new information which substantially affects the determination set forth in this Preliminary Design Approval or other good cause.

(5) RESAR-41 and the RESAR-41 reference design are acceptable for use as a reference design for construction permit applications:

(a) for facilities to be located at sites whose characteristics conform to the envelope of site parameters postulated for the preliminary design of the RESAR-41 reference design, which are set forth in RESAR-41, provided that

(b) the design of portions of the balance of plant which interface with the approved design shall conform to the safety-related interface requirements set forth in RESAR-41 and in the SER.

(6) This Preliminary Design Approval is applicable to those systems and design features of the RESAR-41 design described and evaluated in Sections 1 through 19 of the SER; those systems and design features described and evaluated in Appendix A of the SER (these systems and features are not within the scope defined for a standard nuclear steam supply system) are not included in this Preliminary Design Approval.

(7) This Preliminary Design Approval is subject to the satisfactory and timely completion of the development and verification test programs described in Table 1-2 of the SER and is subject to the satisfactory and timely submission of further information concerning the matters of (a) anticipated transients without scram, and (b) seismic and environmental qualification of electrical equipment.

(8) This Preliminary Design Approval is subject to a review by the Nuclear Regulatory Commission staff to confirm the adequacy of the Westinghouse Electric Corporation responses to the PDA-3 extension review matters contained in Amendments 24 and 25 to the RESAR-41 Safety Analysis Report. Such a review would be conducted as soon as the Nuclear Regulatory Commission staff is informed by a utility-applicant that it intends to reference the RESAR-41 design in a construction permit application filed after December 31, 1978. Such a review would be scheduled for completion prior to the tendering of the utility application.

(9) This Preliminary Design Approval and all applications for construction permits incorporating it by reference, are subject to all applicable provisions of the Atomic Energy Act of 1954, as amended, and the rules and regulations and Orders of the Commission now or hereafter in effect.

(10) This Preliminary Design Approval does not constitute a commitment to issue a permit or license or in any way affect the authority of the Commission, Atomic Safety and Licensing Appeal Board, Atomic Safety and Licensing Boards and other presiding officers in any proceeding under Subpart G of 10 CFR Part 2.

(11) This Preliminary Design Approval is effective as of its date of issuance and shall expire on December 31, 1980, unless earlier superseded by the issuance of a Final Design Approval for the RESAR-41 reference design, or unless extended by the NRC staff. The expiration of this PDA on December 31, 1980, shall not affect the use of this PDA for reference in any construction permit application docketed prior to such date.

FOR THE NUCLEAR REGULATORY COMMISSION

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance:

DEC 28 1978