



U.S. NUCLEAR REGULATORY COMMISSION  
**STANDARD REVIEW PLAN**  
OFFICE OF NUCLEAR REACTOR REGULATION

5.2.1.2 APPLICABLE CODE CASES

REVIEW RESPONSIBILITIES

Primary - Mechanical Engineering Branch (MEB)

Secondary - None

I. AREAS OF REVIEW

The MEB determines the acceptability of American Society of Mechanical Engineers (ASME) and American National Standards Institute (ANSI) Code Case interpretations specified in the safety analysis report (SAR). These Code Cases must be approved before being applied to ASME Boiler and Pressure Vessel Code, Section III, Division 1, Subsection NB - Class 1 Components, Subsection NC - Class 2 Components, Subsection ND - Class 3 Components, and Subsection NE - Class MC Components, as stated in the Codes and Standards Rule, Section 50.55a(a)(2)(ii) of 10 CFR Part. 50. The review also includes the approval of Code Cases applied to ASME Boiler and Pressure Vessel Code, Section III, Division 1, Subsection NF - Component Supports, and Subsection NG - Core Support Structures, and ASME Boiler and Pressure Vessel Code, Section III, Division 2, Concrete Containments. These Code Cases contain requirements or special rules which may be used for application in the construction of components for light-water-cooled nuclear power plants.

The MEB, the Materials Engineering Branch (MTEB), and the Structural Engineering Branch (SEB) on a generic basis, determine the acceptability of ASME and ANSI Code Case interpretations that may be applied to ASME Section III, Division 1 and 2 components. These branches review each revision to applicable Code Cases. Code Cases pertaining to materials, fabrication, and nondestructive testing are evaluated by the MTEB. Code Cases pertaining to ASME Section III, Division 2, are evaluated by the SEB. All other areas covered by ASME Code Cases are evaluated by the MEB.

II. ACCEPTANCE CRITERIA

Acceptance criteria is based on meeting the relevant requirements of the following regulations:

Rev. 2 - July 1981

**USNRC STANDARD REVIEW PLAN**

Standard review plans are prepared for the guidance of the Office of Nuclear Reactor Regulation staff responsible for the review of applications to construct and operate nuclear power plants. These documents are made available to the public as part of the Commission's policy to inform the nuclear industry and the general public of regulatory procedures and policies. Standard review plans are not substitutes for regulatory guides or the Commission's regulations and compliance with them is not required. The standard review plan sections are keyed to the Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants. Not all sections of the Standard Format have a corresponding review plan.

Published standard review plans will be revised periodically, as appropriate, to accommodate comments and to reflect new information and experience.

Comments and suggestions for improvement will be considered and should be sent to the U.S. Nuclear Regulatory Commission Office of Nuclear Reactor Regulation, Washington, D.C. 20555.

1. 10 CFR Part 50, Appendix A, General Design Criterion 1, as it relates to the requirement that structures, systems, and components important to safety shall be designed, fabricated, erected, and tested to quality standards commensurate with the importance of the safety function to be performed.
2. 10 CFR Part 50, § 50.55a, as it relates to the rule that establishes minimum quality standards for the design, fabrication, erection, construction, testing, and inspection of certain components of boiling and pressurized water reactor nuclear power plants by requiring conformance with appropriate editions of specified published industry codes and standards.

To meet the requirements of General Design Criterion 1 and 10 CFR Part 50, § 50.55a, the following regulatory guides are used:

- a. Regulatory Guide 1.84, "Code Case Acceptability in ASME Section III - Design and Fabrication." This guide lists those Section III ASME Code Cases oriented to design and fabrication which are acceptable to the staff for implementation in the licensing of nuclear power plants.
- b. Regulatory Guide 1.85, "Code Case Acceptability in ASME Section III - Materials." This guide lists those Section III ASME Code Cases oriented to materials and testing which are acceptable to the staff for implementation in the licensing of nuclear power plants.
- c. Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1." This guide lists those Section XI ASME Code Cases which are acceptable to the staff for use in the inservice inspection of light-water-cooled nuclear power plants.

### III. REVIEW PROCEDURES

The table provided by the applicant identifying those ASME Code Cases applied to Section III, Division 1 and Division 2 components is checked for compliance with the list of acceptable Code Cases identified in Regulatory Guides 1.84, 1.85, and 1.147.

ASME Section III, Division 2, Code Cases oriented to Concrete Containments are reviewed by the MEB on a case-by-case basis for implementation in the licensing of nuclear power plants pending approval of Section III, Division 2 of the Code and the associated Code Cases by the Commission.

In the event an applicant should propose to use a Code Case not previously approved by the staff, upon request, a review of the Code Case is performed by MEB with assistance from MTEB or SEB, as appropriate.

### IV. EVALUATION FINDINGS

The staff review should verify that only acceptable ASME and ANSI Code Cases are specified in the SAR in order to arrive at conclusions of the following type, which are to be included in the staff's safety evaluation report:

The specified ASME and ANSI Code Cases whose requirements will be applied in the construction of ASME Section III, Division 1, Class 1, Class 2, Class 3, and Class MC components are in accordance with the rules of 10 CFR Part 50, §50.55a and the guidance provided in Regulatory Guides 1.84, 1.85, and 1.147. We conclude that compliance with the requirements of these Code Cases will result in a component quality level commensurate with the importance of the safety function of these components and constitutes an acceptable basis for satisfying the requirements of General Design Criterion 1 and is therefore acceptable.

#### V. IMPLEMENTATION

The following is intended to provide guidance to applicants and licensees regarding the NRC staff's plans for using this SRP section.

Except in those cases in which the applicant proposes an acceptable alternative method for complying with specified portions of the Commission's regulations, the method described herein will be used by the staff in its evaluation of conformance with Commission regulations.

Implementation schedules for conformance to parts of the method discussed herein are contained in the referenced regulatory guides.

#### VI. REFERENCES

1. 10 CFR Part 50, Appendix A, General Design Criterion 1, "Quality Standards and Records."
2. 10 CFR Part 50, § 50.55a, "Codes and Standards Rule."
3. ASME Boiler and Pressure Vessel Code, 1980 Edition, Section III, "Nuclear Power Plant Components," American Society of Mechanical Engineers (1980).
4. ASME Boiler and Pressure Vessel Code, 1980 Edition, "Code Cases, Nuclear Components," American Society of Mechanical Engineers (1980).
5. Regulatory Guide 1.84, "Code Case Acceptability in ASME Section III - Design and Fabrication."
6. Regulatory Guide 1.85, "Code Case Acceptability in ASME Section III - Materials."
7. Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1."

TABLE 5.2.1.2-1 CODE CASE ACCEPTABILITY, ASME SECTION  
V-NONDESTRUCTIVE EXAMINATION, AND ASME SECTION IX  
WELDING AND BRAZING QUALIFICATIONS

This table has been superseded by:

1. Code Cases 1400, 1452, 1632, and 1707 have been annulled as the contents of these Code Cases have been incorporated in Sections V and Section IX of the ASME Boiler and Pressure Vessel Code.
2. Code Case 1693 (N-212) has been identified as an acceptable Code Case in Regulatory Guide 1.84.
3. Code Case 1698 (N-92) has been identified as an acceptable Code Case in Regulatory Guide 1.85.
4. The technical content of Code Case 1816 is identical to that of Code Case 1820 which has been identified as an acceptable Code Case in Regulatory Guide 1.85.

TABLE 5.2.1.2-2 CODE CASE ACCEPTABILITY, ASME SECTION XI-  
INSERVICE INSPECTION OF NUCLEAR POWER PLANT COMPONENTS

This table has been superseded by Regulatory Guide 1.147.