

U.S. NUCLEAR REGULATORY COMMISSION March 1977 REGULATORY GUIDE

# **OFFICE OF STANDARDS DEVELOPMENT**

## **REGULATORY GUIDE 1.84**

### CODE CASE ACCEPTABILITY ASME SECTION III DESIGN AND FABRICATION

### A. INTRODUCTION

Section 50.55a, "Codes and Standards," of 10 CFR Part 50, "Licensing of Production and Utilization Facilities," requires, in part, that components of the reactor coolant pressure boundary be designed. fabricated, erected, and tested in accordance with the requirements for Class 1 components of Section III, "Nuclear Power Plant Components,"\* of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code or equivalent quality standards. Footnote 6 to §50.55a states that the use of specific Code Cases may be authorized by the Commission upon request pursuant to §50.55a(a)(2)(ii), which requires that proposed alternatives to the described requirements or portions thereof provide an acceptable level of quality and safety.

General Design Criterion 1, "Quality Standards and Records," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50 requires, in part, that structures, systems, and components important to safety be designed, fabricated, erected, and tested to quality standards commensurate with the importance of the safety function to be performed. Where generally recognized codes and standards are used, Criterion 1 requires that they be identified and evaluated to determine their applicability, adequacy, and sufficiency and be supplemented or modified as necessary to ensure a quality product in keeping with the required safety function.

Criterion 20, "Quality of Reactor Coolant Pressure Boundary," of the same appendix requires, in part, that components which are part of the reactor coolant pressure boundary be designed, fabricated, erected, and tested to the highest quality standards practical.

\*Copies may be obtained from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, New York 10017.

### USNRC REGULATORY GUIDES

Regulatory Gordes are issued to describe and make available to the public methods acceptable to the NRC staff of anoteneering specific parts of the Commission's regulations, to define ate techniques used by the staff or evaluating specific problems or postilated accidents, or to univide guidance to anotenatic problems are not solistifues for regulations, and compliance with them is not required Arithods and solutions different from those set out in the guides will be accent able if they provide a basis for the fusiling regulate to the issuance or continuance of a permit or begins by the Commission.

Comments and suggestions for improvements in these guides are encouraged at all times, and guides will be revised, as appropriate, to accommodate comments and to reflect new information or experience. This guide was revised as a result of substantive comments received from the public and additional staff review.

Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50 requires, in part, that measures be established for the control of special processing of materials and that proper testing be performed.

**Revision 9** 

This regulatory guide lists those Section III ASME Code Cases oriented to design and fabrication that are generally acceptable to the NRC staff for implementation in the licensing of light-water-cooled nuclear power plants.

#### **B. DISCUSSION**

The ASME Boiler and Pressure Vessel Committee publishes a document entitled "Code Cases."\* Generally, the individual Code Cases that make up this document explain the intent of Code rules or provide for alternative requirements under special circumstances.

Most Code Cases are eventually superseded by revision to the Code and then are annulled by action of the ASME Council. In such cases, the intent of the annulled Code Case becomes part of the revised Code, and therefore continued use of the Code Case intent is sanctioned under the rules of the Code. In other cases, the Code Case is annulled because it is no longer acceptable or there is no further requirement for it. A Code Case that was approved for a particular situation and not for a generic application should be used only for construction of the approved situation because annulment of such a Code Case could result in construction that would not meet Code requirements.

The Code Cases listed in this guide are limited to those cases applicable to Section III that are oriented toward design and fabrication.

Comments should be sent to the Screetary of the Commission, U.S. Nuclear Reginistry Commission, Washington,  $D_{\rm s}C_{\rm s}$  20555, Attention – On Keinig and Service Branch

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All published Code Cases in the area of design and fabrication that are applicable to Section III of the \*| Code and were in effect on September 10, 1976, were reviewed for inclusion in this guide. In addition to the listing of acceptable Code Cases, this revision of the guide includes listings of (1) Code Cases that were identified as acceptable in a prior version of this regulatory guide and that were annulled after the original issuance of this guide (June 1974) and (2) Code Cases that were identified as acceptable in a prior version of this regulatory guide and that were superseded by revised Code Cases after the original issuance of this guide (June 1974). Code Cases that are not listed herein are either not endorsed or will require supplementary provisions on an individual basis to attain endorsement status.

The endorsement of a Code Case by this guide constitutes acceptance of its technical position for applications not precluded by regulatory or other requirements or by the recommendations in this or other regulatory guides. Contingent endorsement is indicated in regulatory position C.1.c for specific cases. However, it is the responsibility of the user to make certain that no regulatory requirements are violated and that there are no conflicts with other recommended limitations resulting from Code Case usage.

Acceptance or endorsement by the NRC staff applies only to those Code Cases or Code Case revisions with the date of "Council Approval" as shown in the regulatory position of this guide. Earlier or later revisions of a Code Case are not endorsed by this guide. New Code Cases will require evaluation by the NRC staff to determine if they qualify for inclusion in the approved list. Because of the continuing change in the status of Code Cases, it is planned that this guide will require periodic updating to accommodate new Code Cases and any revisions of existing Code Cases.

#### C. REGULATORY POSITION

1. The Section III ASME Code Cases\*\* listed below (by number, date of Council approval, and title) are acceptable to the NRC staff for application in the construction of components for water-cooled nuclear power plants. Their use is acceptable within the limitations stated in the "Inquiry" and "Reply" sections of each individual Code Case, within the limitations of such NRC or other requirements as may exist, and within the additional limitations recommended by the NRC staff given with the individual Code Case in the list. The categorization of Code Cases used in this guide is intended to facilitate the Code Case listing and is not intended to indicate a limitation on its usage.

\* Lines indicate substantive changes from previous issue.

\*\* A numerical listing of the Code Cases appears in the appendix.

a. Design-oriented Code Cases (Code Case number, date of Council approval, and title):

(1) Code Cases applicable to piping design:

(1)	Code Cas	es applicable to piping design.
1477-1	3-9-72	Use of 1970 Addenda of ANSI B31.7, Section III
1506	12-13-71	Stress Intensification Factors, Section III, Class 2 and 3 Pip-
İ614	11-5-73	ing Hydrostatic Testing of Piping Prior To or Following the In-
1623	3-2-74	stallation of Spray Nozzles for Section III, Classes 1, 2, and 3 Piping Systems Design by Analysis for Section III, Class 1 Sleeve-Coupled and Other Patented Piping Joints
1659	11-4-74	Interconnection of Two Piping Systems for Section III, Class
1676	12-16-74	1, 2 and 3 Construction Clarification of Stress Inten- sities in Curved Pipe or Welded Elbows, Section III
1677	12-16-74	Clarification of Flange Design Loads, Section III, Class 1, 2
1744	3-1-76	and 3 Carbon Steel Pipe Flanges Larger than 24 in. Section III, Division 1, Class 2 and 3
1745	3-1-76	Construction Stress Indices for Structural Attachments, Class 1, Section 111, Division 1
(2)	Code Cas	es applicable to valve design:
1533	6-14-72	Pressure Temperature Ratings of SA-351 Grades CF8A, CF3,
1539	11-6-72	and CF3M, Section III Metal Bellows and Metal Diaphragm Stem Sealed Valves, Section III, Classes 1,
1540-1	3-3-73	2, and 3 Elastomer Diaphragm Valves, Section III, Classes 2 and 3
1552	12-18-72	Design by Analysis of Section
1555	12-18-72	III, Class 1 Valves Certification of Safety Relief
1573	4-30-73	Valves on Liquids Vacuum Relief Valves, Section
1581	6-25-73	III Power-Operated Pressure Relief Valves, Section III
1665	11-4-74	Pressure-Temperature Ratings for Class 1 Valves Made from
1672	11-4-74	5 Cr-1/2 Mo, Section III Nuclear Valves for Section III, Division 1. Class 1. 2 and 3

11-4-74 Nuclear Valves for Section III, Division 1, Class 1, 2 and 3 Construction



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1506	12-13-71	Stress Intensification Factors, Section III, Class 2 and 3 Pip-	
1614	11- <b>5</b> -73	ing Hydrostatic Testing of Piping Prior To or Following the In- stallation of Spray Nozzles for Section III, Classes 1, 2, and 3	
1623	3-2-74	Piping Systems Design by Analysis for Section III, Class I Sleeve-Coupled and Other Patented Piping	
1659	11-4-74	Joints Interconnection of Two Piping Systems for Section III, Class	
1676	12-16-74	1, 2 and 3 Construction Clarification of Stress Inten- sities in Curved Pipe or Wolded Elbourg Section III	
1677	12-16-74	Welded Elbows, Section III Clarification of Flange Design Loads, Section III, Class 1, 2 and 3	
1744	3-1-76	Carbon Steel Pipe Flanges Larger than 24 in. Section III, Division 1, Class 2 and 3	
1745	3-1-76	Construction Stress Indices for Structural Attachments, Class 1, Section III, Division 1	
(2)	Code Case	es applicable to valve design:	
1533	6-14-72	Pressure Temperature Ratings of SA-351 Grades CF8A, CF3,	
1539	11-6-72	and CF3M, Section III Metal Bellows and Metal Diaphragm Stem Sealed Valves, Section III, Classes 1, 2, and 3	
1540-1	3-3-73	Elastomer Diaphragm Valves, Section 111, Classes 2 and 3	
1552	12-18-72	Design by Analysis of Section III, Class 1 Valves	
1555	12-18-72	Certification of Safety Relief Valves on Liquids	
1573	4-30-73	Vacuum Relief Valves, Section	
1581	6-25-73	Power-Operated Pressure Relief Valves, Section III	
1665	11-4-74	Pressure-Temperature Ratings	

for Class 1 Valves Made from 5 Cr-1/2 Mo, Section III 11-4-74 Nuclear Valves for Section III, Division 1, Class 1, 2 and 3 Construction

1672





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	1678	12-16-74	Butterfly Valves of Circular Cross Section Larger than 24 in. NPS for Section III, Class 2 and 3 Construction	1729	11-3-75	Minimum Edge Distance- Bolting for Section III, Divi- sion 1, Class 1, 2 and 3 and
	1700	11-3-75	Determination of Capacities of Liquid Relief Valves, Sec- tion III, Division 1, Class 1, 2, and 3	1733	11-3-75	MC Construction of Compo- nent Supports Evaluation of Safe Shut Down Earthquake Loadings for Sec-
	1701	6-30-75	Determination of Capacities of Vacuum Relief Valves Sec- tion III, Class MC	1769	8-13-76	tion III, Division 1, Class MC Containment Vessels Qualification of NDE Level
	1702	6-30-75	Flanged Valves Larger than 24 inches for Section III, Class 1, 2 and 3 Construction	1775	8-13-76	III Personnel, Section III, Division I Data Report Forms for Core
	1732	11-3-75	Hardsurfaced Valves with Inlet Connections less than 2- in. Nominal Pipe Size for Sec- tion III, Division 1, Class 1	B. I number.	Fabrication	Support Structures, Class CS, Section III, Division 1 -oriented Code Cases (Code Case buncil approval, and title):
	1761	4-26-76	and 2 Construction Use of SB-148 Alloy CA954 for Section III, Division 1,			ses related to welding and braz-
	1774	8-13-76	Class 2 or 3 Flanged End Valves Minimum Wall Thickness for	1461-1	3-9-72	Electron Beam Welding, Sec- tions I, III, and VIII, Division 1 and 2
		(3) Other Co	Class 2 and 3 Valves, Section III, Division 1 de Cases related to design:	1471-1	3-9-72	Vacuum Electron Beam Welding of Tube Sheet Joints,
	1536	8-14-72	Closing Seam for Electrical Penetration for Section III,	1494-1	3-3-73	Section III Weld Procedure Qualification Tests, Section III
	1620	3-2-74	Classes 2, 3, and MC Stress Category for Partial Penetration Welded Penetra- tions, Section III, Class 1	1516-2	8-11-75	Welding of Seats or Minor Internal Permanent Attach- ments in Valves for Section III Applications
	1630	11-4-74	Construction External Pressure Charts for High Yield Strength Carbon Steels and Low Alloy Steels. (Yield Strength above 38 Ksi	1580-1	11-5-73	Buttwelded Alignment Tolerance and Acceptable Slopes for Concentric Centerlines for Section III, Class 1, 2 and 3 Construction
			to 60 Ksi Inclusive.) For Sec- tion III, Class 1, 2, 3, and MC; and Section VIII, Division 1 and 2	1609-1	3-1-76	Inertia and Continuous Drive Friction Welding, Section I, III, IV, VIII, Division 1 and 2, and IX
	1633	4-29-74	Brazing of Seats to Class 1, 2, and 3 Valve Body or Bonnets, Section III	1661	11-4-74	Postweld Heat Treatment for P-No. 1 Materials for Section III, Class 1 Vessels
	1657	]]-4-74	Stress Criteria for Class 2 and 3 Atmospheric and Low Pres- sure (0-15 psig) Steel Storage	1685	4-28-75	Furnace Brazing Section III, Class 1, 2, 3 and MC Construction
	1660	11-4-74	Tanks Overpressure Protection Under Emergency Operating Conditions for Section III,	1686 1695-1	3-3-75	Furnace Brazing, Section III, Subsection NF, Component Supports Brazing, Section III, Division
	1692	4-28-75	Class 1 Rules for Design of Welded Class 1 Pumps	1703	6-30-75	1, Class 3 Brazing of Copper Alloys Sec-
	1718	8-11-75	Design of Structural Connec- tions for Linear Type Compo- nent Supports Section III, Division 1, Class 1, 2, 3 and MC	1719	8-11-75	tion III, Class 2 Single-Welded, Full- Penetration, Sidewall Butt Joints in Atmospheric Storage Tanks Section III, Division 1, Class 2

1.84-3

	1726	11-3-75	Refinement of Low Alloy Steel	1606-1 12-16-74 Stress Criteria Section III,
		• . •	Heat Affected Zone Under	Classes 2 and 3 Piping Subject
			Overlay Cladding Section III,	to Upset, Emergency, and
			Division 1, Class 1 Compo-	Faulted Operating Conditions
1			nents	
	1768	6-29-76	Permanent Attachments to	Code Case 1606-1 is approved subject to the in-
			Containment Vessels-Class	terpretation that the stress limit designations of
ł			MC, Section III, Division 1	"Upset," "Emergency," and "Faulted" do not
	(2)	Other Co	de Cases related to fabrication:	necessarily imply agreement with specified plant conditions applicable to ASME Code Class 2
	1535-2	4-30-73	Hydrostatic Testing of Section	and 3 components for fluid systems. These
			III, Class 1 Valves	designations should be established and justified
	1541-1	8-13-73	Hydrostatic Testing of	in the design specifications.
			Embedded Class 2 and Class 3	
			Piping for Section III	1607-1 11-4-74 Stress Criteria for Section III,
			Construction	Classes 2 and 3 Vessels
	1553-1	3-3-75	Upset Heading and Roll	Designed to NC/ND-3300 Ex-
			Threading of SA-453 for	cluding the NC-3200 Alternate
			Bolting in Section III	clouing the rec-5200 Anternate
	1588	8-13-73	Electro-Etching of Section III	Code Case 1607-1 is approved subject to the in-
			Code Symbols	terpretation that the stress limit designations of
	1651	8-12-74	Interim Requirements for Cer-	"Upset," "Emergency," and "Faulted" do not
			tification of Component Sup-	necessarily imply agreement with specified plant
			ports, Section III, Subsection	conditions applicable to ASME Code Class 2
			NF	and 3 components for fluid systems. These
	1662	11-4-74	Shop Assembly of Compo-	designations should be established and justified
			nents, Appurtenances and Pip-	in the design specifications.
			ing Subassemblies for Section	<b>-</b> .
			III Class 1, 2, 3 and MC	
	1/01 18	2 2 76	Construction	1635-1** 8-12-74 Stress Criteria for Section III,
	1681-1*	3-3-75	Organizations Accepting	Class 2 and 3 Valves Subjected
			Overall Responsibility for Sec-	to Upset, Emergency, and
	1712	8-11-75	tion III Construction	Faulted Operating Conditions
	1712	8-11-75	Nameplates and Stamping for	
			Section 111, Division 1, Class	Code Case 1635-1 is approved subject to the in-
			1, 2, 3 and MC Construction	terpretation that the stress limit designations of
	1765	4-26-76	as Referenced in NA-8300	"Upset," "Emergency," and "Faulted" do not
	1705	4-20-70	Machining After Hydrostatic	necessarily imply agreement with specified plant
			Testing Class 2 and 3 Construction, Section III,	conditions applicable to ASME Code Class 2
			Division I	and 3 components for fluid systems. These designations should be established and justified
				in the design specifications.
	c. Co	de Cases w	with contingent approval:	in the design specifications,

1361-2 3-9-72 Socket Welds, Section III

Code Case 1361-2 is approved when used in connection with Section III, paragraph NB-3356, Fillet Welds.

1569 3-3-72 Design of Piping for Pressure Relief Valve Station, Section III

Code Case 1569 is approved subject to compliance with the recommendations contained in Regulatory Guide 1.67, "Installation of Overpressure Protection Devices." Faulted Operating Conditions Code Case 1636-1 is acceptable subject to the interpretation that the stress limit designations of "Upset," "Emergency," and "Faulted" do not necessarily imply agreement with specified plant conditions applicable to ASME Code Class 2

Stress Criteria for Section III,

Class 2 and 3 Pumps Subjected to Upset, Emergency, and

and 3 components for fluid systems. These designations should be established and justified in the design specifications. \*\* Code Cases 1635 and 1636 were approved by Council on July 1, 1974, and revised on August 12, 1974. Because Code Cases 1635

1636-1\*\* 8-12-74

<sup>•</sup> Code Case 1681 was approved by Council on 12-16-74 and revised on 3-3-75. Because Code Case 1681 was not in effect on March 31, 1975, the Code Case was not included in this guide.

<sup>1, 1974,</sup> and revised on August 12, 1974. Because Code Cases 1635 and 1636 were not in effect on September 1, 1974, they are not included in this guide.

1689-1 9-10-76

76 Alternate PWHT Time and Temperature for SA-182 Grade F22, SA-387 Grade 22, Class 2, and SA-335 Grade P-22 Section III, Division 1, Class 1, 2, 3 and CS

Code Case 1689-1 is acceptable subject to the following condition in addition to that specified in the Code Case: The alternate postweld heat treatment should be prequalified along with the applicable welding procedure in accordance with ASME Section IX.

- 1711
- 11-3-75 Pressure Relief Valve Design Rules, Section III, Division 1, Class 1, 2 and 3

Code Case 1711 is acceptable subject to the following conditions in addition to those conditions specified in the Code Case. The following information should be provided in the Safety Analysis Report:

- (1) If stress limits are utilized in excess of those specified for the upset operating condition, it should be demonstrated how the pressure relief function is assured. Refer to paragraph 3.1, Section 1, of the Case for Class 1, and paragraph 3.2, Section II of the Case for Class 2 and 3 pressure relief valves.
- (2) If Case 1660 is to be used in conjunction with this Case, it should be stated that the stress limits of Case 1660 supersede those of paragraph 3.2(b), Section I, of Case 1711. Functional assurance of (1) above is required in all situations.

1720-1 3-1-76 Weld End Preparation for Section III, Division 1 Construction

Code Case 1720-1 is acceptable subject to the following condition in addition to those conditions specified in the Code Case: Weld end preparations other than those shown in Figures 1, 2, and 3 of the Code Case are not acceptable on a generic basis. Such alternate end preparations should be treated on a case-by-case basis.

1727 12-22-75 Alternate Test Fluids, Section III, Division 1

Code Case 1727 is acceptable subject to the following condition in addition to those conditions specified in the Code Case: The applicant should provide justification in the referencing Safety Analysis Report for the fluid selected for use in the pressure test. The information provided should demonstrate that the fluid selected will not have deleterious effects on the material of the pressure boundary and that the fluid may be safely utilized at the specified temperature and pressure of the test. When the fluid selected for use is the operating fluid, additional information is not required.

1734

11-3-75 Weld Design for Use for Section III, Division 1, Class 1, 2, 3 and MC Construction of Component Supports

Code Case 1734 is acceptable subject to the following conditions in addition to those conditions specified in the Code Case: If the configuration of Figure 1 of the Code Case is used for Class 1 and MC component supports, full penetration welds should be used. The application of the configuration shown in Figures 2 and 3 should be restricted to the welding of cans for spring encapsulation in spring hangers. In Figure 3, the length of the leg of the fillet weld adjacent to the plate should be equal to the thickness of the exposed end of the plate; also, the leg of the fillet weld adjacent to the shell should be equal to the thickness of the exposed end of the shell.

1780 9-10-76 Hydrostatic Testing and Stamping of Pumps for Class 1 Construction, Section 111, Division 1

Code Case 1780 is acceptable subject to the following condition in addition to those conditions specified in the Code Case: Each licensing application in which the Code Case is to be used should present information that satisfactorily demonstrates that the subassembly tests not only adequately simulate the pressure loadings, but also the discontinuity loads that will be present during the completed assembly plant hydrostatic test.

1783 9-10-76 Qualification of Nondestructive Personnel, Section III, Division 1

> Code Case 1783 is acceptable subject to the following condition in addition to those conditions specified in the Code Case: The first sentence of paragraph (1) should be replaced with the following: "The certification of the Level III nondestructive examination personnel for the purpose of this Section of the Code shall be the responsibility of the employer of the Level III individual. If the employer is not a Certificate Holder, then the verification of such certificate is the responsibility of the Certificate Holder."

2. Code Cases that were endorsed by the NRC in a prior version of this guide and were later annulled by action of the ASME Council should be considered as

deleted from the list of acceptable Code Cases as of the date of the ASME Council action that approved the annulment. Such Code Cases, which were annulled on or after July 1, 1974, are listed below by number, effective dates,\* anc title.\*\*

1470-2***	12-18-72 11-4-74	External Pressure Charts for High-Strength Carbon Steels and for Low-Alloy Steels, Sec- tion VIII, Division 1 and 2, and Section III
1574	4-30-73 12-31-74	Hydrostatic Test Pressure for Safety Relief Valves, Section III
1601	11-5-73 7-1-74	Limits of Reinforcement for Two-thirds Area, Section III, Class 1
1675	12-16-74 7-1-76	Tubesheet 10 Shell or Formed Head Weld Joints, Section III, Class 1 Vessels
1683-1	3-1-76 7-1-76	Bolt Holes for Section III, Class 1, 2, 3 and MC Compo- nent Supports
1706	6-30-75 12-31-75	Data Report Forms for Com- ponent Supports, Section III, Class 1, 2 and 3

3. Code Cases that were endorsed by the NRC in a prior version of this guide and were superseded by revised Code Cases on or after July 1, 1974, should be considered as not endorsed as of the date of the Council action that approved the revised version of the Code Cases. These Code Cases that are no longer endorsed are listed in the following by number, effective dates, † and title.

1508++	12-13-71	Allowable stresses, Design
	6-30-75	Intensity and/or yield strength
		values, Section I, III, and VIII,
		Divisions 1 and 2
1516-1	6-25-73	Welding of Seats in Valves
	8-11-75	for Section III Applications
1553	12-18-72	Upset Heading and Roll
	3-3-75	Threading of SA-453 for
		Bolting, Section III
• Earlier	– date—date Co	de Case approved by ASME Council;
	-date Code Ca	

<sup>••</sup> Code Cases 1355-3, 1534, and 1554, which were listed in the original issue of this guide, were annulled by Council action prior to July 1, 1974.

••• The annulment of Code Case 1470-2 was effective upon Council approval of Code Case 1630. However, due to an oversight, the annulment was not noted until publication of Supplement No. 13 to the 1974 Code Cases.

† Earlier date—date Code Case approved by ASME Council; later date—date revision of Code Case approved by ASME Council.

tt Code Case 1508 is no longer listed by ASME as a Section III Code Case and is therefore deleted from the acceptable listing. 11-5-73 Stress Criteria for Section
12-16-74 III, Class 2 and 3 Piping Subjected to Upset, Emergency, and Faulted Operating Conditions

Code Case 1606 was approved subject to the interpretation that the stress limit designations of "Upset," "Emergency," and "Faulted" do not necessarily imply agreement with specified plant conditions applicable to ASME Code Class 2 and 3 components for fluid systems. These designations should be established and justified in the design specifications.

1607 11-5-73 Stress Criteria for Section 11-4-74 III, Classes 2 and 3 Vessels Subjected to Upset, Emergency, and Faulted Operating Conditions

Code Case 1607 was approved subject to the interpretation that the stress limit designations of "Upset," "Emergency," and "Faulted" do not necessarily imply agreement with specified plant conditions applicable to ASME Code Class 2 and 3 components for fluid systems. These designations should be established and justified in the design specifications.

1683	3-3-75	Bolt Holes for Section III,
	3-1-76	Division 1, Class 1, 2, 3 and
		MC Component Supports
1689	6-30-75	Alternate PWHT Time and
	9-10-76	Temperature for SA-182
		Grade F22 Section III, Class
•		1, 2, 3 and CS

Code Case 1689 was acceptable subject to the following condition in addition to that specified in the Code Case: The alternate postweld heat treatment should be prequalified along with the applicable welding procedure in accordance with ASME Section IX.

1695	4-28-75	Brazing, Section III, Class 3	
	11-3-75		
1720	8-11-75	Weld End Preparation for	
	3-1-76	Section III, Division 1	
		Construction	

Code Case 1720 was acceptable subject to the following condition in addition to those conditions specified in the Code Case: Weld end preparations other than those shown in Figures 1, 2, and 3 of the Code Case are not acceptable on a generic basis. Such alternate end preparations should be treated on a case-by-case basis.

1606



4. Code Cases for Class 1 components that are not on the approved list of this guide (paragraph C.1) or other regulatory guides, or for which authorization by the Commission has not been granted, are not acceptable for Class 1 components.

5. Code Cases for other classes of components that are not on the approved list of this guide (paragraph C.1) or other regulatory guides should be considered not acceptable on a generic basis.

## D. IMPLEMENTATION

The purpose of this section is to provide information to applicants regarding the utilization of this regulatory guide.

1. Except for those Code Cases that have been annulled by action of the ASME Council, the NRC staff will authorize appropriate use of the Code Cases listed in this guide under regulatory position C.1 upon specific request by the applicant in accordance with footnote 6 to §50.55a of the Codes and Standards rule.

2. Components ordered to a specific version of a Code Case need not be changed because a subsequent revision to the Code Case is listed as the approved version in this guide.

3. Components ordered to a Code Case that was previously approved for use need not be changed because the Code Case has been subsequently annulled.

4. Code Cases on the approved list may be applied to components that were in process of construction prior to the effective date of the Code Case within the limits specified in the Code Case and applicable regulations or recommended in other regulatory guides.

## APPENDIX

# NUMERICAL LISTING OF CODE CASES\*

1361-2	1620	1701
1461-1	1623	1702
1471-1	1630	1703
1477-1	1633	1711
1494-1	1635-1	1712
1506	1636-1	1718
1516-2	1651	.1719
1533	1657	1720-1
1535-2	1659	1726
1536	1660	1727
1539	1661	1729
1540-1	1662	1732
1541-1	1665	1733
1552	1672	1734
1553-1	1676	1744
1555	1677	1745
1569	1678	1761
1573	1681-1	1765
1580-1	1685	1768
1581	1686	1769
1588	1689-1	1774
1606-1	1692	1775
1607-1	1695-1	1780
1609-1	1700	1783
1614		

\* Code Case 1625 was inadvertently listed in the appendix of Regulatory Guide 1.84, Revision 1, This Code Case is covered in Regulatory Guide 1.85, Revision 1.

Code Case 1575 is a Section VIII Case and therefore  $\log s$  been eliminated from this regulatory guide, which covers Section III Cases.

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

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