

# U.S. NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR REGULATORY RESEARCH

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Division 1

#### DRAFT REGULATORY GUIDE

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#### **DRAFT REGULATORY GUIDE DG-1089**

# OPERATION AND MAINTENANCE CODE CASE ACCEPTABILITY, ASME OM CODE

#### A. INTRODUCTION

General Design Criterion (GDC) 1, "Quality Standards and Records," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," 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 functions 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.

Provisions of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code have been used since 1971 as one part of the framework to establish the necessary design, fabrication, construction, testing, and performance requirements for structures, systems, and components important to safety. ASME standards committees develop, among other things, improved methods for the construction, inservice inspection (ISI), and inservice testing (IST) of ASME Class 1, 2, 3, MC (metal containment) and CC (concrete

This regulatory guide is being issued in draft form to involve the public in the early stages of the development of a regulatory position in this area. It has not received complete staff review or approval and does not represent an official NRC staff position.

Public comments are being solicited on this draft guide (including any implementation schedule) and its associated regulatory analysis or value/impact statement. Comments should be accompanied by appropriate supporting data. Written comments may be submitted to the Rules and Directives Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Comments may be submitted electronically or downloaded through the NRC's interactive web site at <<a href="https://www.nrc.gov">www.nrc.gov</a>> through Rulemaking. Copies of comments received may be examined at the

NRC Public Document Room, 11555 Rockville Pike, Rockville, MD. Comments will be most helpful if received by March 25, 2002.

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containment) nuclear power plant components. A broad spectrum of stakeholders participates in the ASME process, which helps to ensure that the various interests are considered.

The NRC has committed through its Strategic Plan to use consensus standards to increase public involvement in the NRC's regulatory development process, consistent with the provisions of Public Law 104-113, the National Technology and Transfer Act of 1995, and Office of Management and Budget (OMB) Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and Conformity Assessment." To further the NRC's commitment in the Strategic Plan and because ASME Code provisions have played a significant role in the regulatory process, the NRC proposes to endorse for the first time ASME Operation and Maintenance (OM) Code Cases.

In 1990, the ASME published the initial edition of the OM Code, which provides rules for IST of pumps and valves. The OM Code was developed and is maintained by the ASME Committee on Operation and Maintenance of Nuclear Power Plants (ASME OM Committee). The OM Code was developed in response to the ASME Board on Nuclear Codes and Standards directive that transferred responsibility for development and maintenance of rules for the IST of pumps and valves from the ASME Section XI Subcommittee on Nuclear Inservice Inspection to the ASME OM Committee. The ASME intended the OM Code to replace Section XI rules for IST of pumps and valves, and the Section XI rules for IST of pumps and valves that had been incorporated by reference into NRC regulations have been deleted from Section XI. The NRC endorsed the OM Code for the first time in an amendment to 10 CFR 50.55a published on September 22, 1999 (64 FR 51370).

In 10 CFR 50.55a, "Codes and Standards," paragraph (f), "Inservice Testing Requirements," requires, in part, that Class 1, 2, and 3 components and their supports meet the requirements of the "Code for Operation and Maintenance of Nuclear Power Plants," of the ASME OM Code or equivalent quality standards. The ASME publishes a new edition of the OM Code every three years, and new addendum every year. The latest editions and addenda of the OM Code that have been approved for use by the NRC are referenced in 10 CFR 50.55a(b). The ASME also publishes OM Code Cases yearly. Code Cases provide alternatives developed and approved by ASME or explain the intent of existing Code requirements. This regulatory guide identifies the Code Cases that have been determined by the NRC to be acceptable alternatives to applicable parts of the OM Code. In the past, the acceptability of Code Cases related to Section XI rules for IST of pumps and valves were addressed in Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1." With the endorsement of the OM Code, the NRC determined that a new guide for endorsement of Code Cases related to the OM Code should be developed. These Code Cases may be used by licensees. without request to the NRC, provided they are used with any identified limitations or modifications. OM Code Cases not yet endorsed by the NRC may be implemented through 10 CFR 50.55a(a)(3), which permits the use of alternatives to the Code requirements referenced in 10 CFR 50.55a provided the proposed alternatives result in an acceptable level of quality and safety and provided their use is authorized by the Director of the Office of Nuclear Reactor Regulation.

<sup>1</sup> Copies may be obtained from the American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990. Phone (212)591-8500; fax (212)591-8501.

The use of Code Cases contained in this guide is voluntary. The ASME Code is incorporated by reference into 10 CFR 50.55a. Code Cases approved by the NRC provide an acceptable voluntary alternative to the mandatory ASME Code provisions. Thus, generic approval of a Code Case through this guide of an alternative to compliance with these provisions must be accomplished through an amendment to 10 CFR 50.55a. The NRC plans to publish for public comment an amendment to 10 CFR 50.55a that would incorporate this guide by reference. The proposed amendment to 10 CFR 50.55a will state the requirements governing the use of Code Cases. Because of the continuing change in the status of Code Cases, periodic updates to 10 CFR 50.55a and this guide are planned to accommodate new Code Cases and any revisions of existing Code Cases.

Regulatory guides are issued to describe to the public methods acceptable to the NRC staff for implementing specific parts of the NRC's regulations, to explain techniques used by the staff in evaluating specific problems or postulated accidents, and to provide guidance to applicants. Regulatory guides are not substitutes for regulations, and compliance with regulatory guides is not required. Regulatory guides are issued in draft form for public comment to involve the public in developing the regulatory positions. Draft regulatory guides have not received complete staff review; they therefore do not represent official NRC staff positions.

This regulatory guide does not contain a new or amended information collection requirement subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing requirements were approved by the Office of Management and Budget, and the approval number is 3150-0011. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

#### **B. DISCUSSION**

The NRC is proposing to publish a regulatory guide that contains the OM Code Cases that are acceptable to the NRC for implementation in the IST of light-water-cooled nuclear power plants. The NRC staff reviewed Code Cases OMN-1 through OMN-13 for inclusion in this guide. Appendix A lists the OM Code edition or addenda for each Code Case, with the date of approval by the ASME Board on Nuclear Codes and Standards. Appendix B is a numerical listing of the OM Code Cases. In the Regulatory Position, Table 1, "Acceptable OM Code Cases," lists the Code Cases that are acceptable to the NRC for implementation in the IST of light-water cooled nuclear power plants. Table 2, "Conditionally Acceptable OM Code Cases," lists the Code Cases that are acceptable provided they are used with the identified limitations or modifications, i.e., the Code Case is generally acceptable but the NRC has determined that the alternative requirements must be supplemented in order to provide an acceptable level of quality and safety. Code Cases that the NRC has determined to be unacceptable will be listed in a new regulatory guide, which is being developed as DG-1112, "ASME Code Cases Not Approved for Use."

Code Cases provide alternatives that were developed and approved by ASME to existing Code requirements. The NRC plans to incorporate by reference the Code Cases listed as approved in Tables 1 and 2 of this guide into 10 CFR 50.55a. The Code Cases may be used voluntarily by licensees as an alternative to compliance with ASME Code provisions that have been incorporated by reference into 10 CFR 50.55a.

The proposed amendment to 10 CFR 50.55a being developed would require that when a licensee initially implements a Code Case, the most recent version of that Code Case as listed in Tables 1 and 2 be implemented. If a Code Case is implemented by a licensee and a later version of the Code Case is incorporated by reference into 10 CFR 50.55a and listed in Tables 1 and 2 during the licensee's present 120-month IST program interval, that licensee could use either the later version or the previous version (unless a specific limitation or condition is placed on the use of that Code Case, in which case the modification or limitation applies). Licensees who choose to continue use of the Code Case during the subsequent 120-month IST program interval will be required to implement the latest version incorporated by reference into 10 CFR 50.55a and listed in Tables 1 and 2.

Code Cases may be annulled because experience has shown that an examination or testing method is inadequate or the application for which it was specifically developed no longer exists. If a Code Case is incorporated by reference into 10 CFR 50.55a and later annulled by the ASME, the NRC will amend 10 CFR 50.55a and this guide to remove the approval of the annulled Code Case. Licensees should not begin to implement annulled Code Cases in advance of such rulemaking. After a Code Case is annulled and 10 CFR 50.55a and this guide are amended, licensees may not implement that Code Case for the first time. However, a licensee who implemented the Code Case prior to annulment may continue to use that Code Case through the end of the present 120-month IST program interval unless 10 CFR 50.55a specifically prohibits further use of the annulled Code Case. An annulled Code Case cannot be used in the subsequent 120-month IST program interval unless implemented as an approved alternative under 10 CFR 50.55a(a)(3).

With regard to the use of any Code Case, it is the responsibility of the user to make certain that no regulatory requirements are violated and that there are no conflicts with other limitations resulting from Code Case usage.

#### C. REGULATORY POSITION

#### 1. ACCEPTABLE CODE CASES

The Code Cases listed in the table below are acceptable to the NRC for application in licensee's OM IST programs. Note: the ASME issues OM Code Cases once each year when a new edition or addenda of the OM Code is published. To assist users of the OM Code, Column 3 of Table 1 lists the edition or addenda to which each Code Case was attached (E is for edition; A is for addenda), and whether the Code Case is new or reaffirmed.

**TABLE 1 - ACCEPTABLE OM CODE CASES** 

CODE CASE NUMBER	TABLE 1, ACCEPTABLE OM CODE CASES	EDITION/ ADDENDA
OMN-2, Rev. 0	Thermal Relief Valve Code Case	New 1998E
OMN-5, Rev. 0	Testing of Liquid Service Relief Valves Without Insulation	New 1999A
OMN-6, Rev. 0	Alternative Rules for Digital Instruments	New 1999A
OMN-7, Rev. 0	Alternative Requirements for Pump Testing	New 2000A
OMN-8, Rev. 0	Alternative Rules for Preservice and Inservice Testing of Power-Operated Valves That Are Used for System Control and Have a Safety Function per OM-10	New 2000A
OMN-13, Rev. 0	Requirements for Extending Snubber Inservice Visual Examination Interval at LWR Power Plants	New 2000A

#### 2. CONDITIONALLY ACCEPTABLE CODE CASES

The Code Cases listed in Table 2 are acceptable to the NRC for application in licensee's OM IST programs within the limitations imposed by the NRC. Unless otherwise stated, limitations imposed by the NRC are in addition to the conditions specified in the Code Case. Note that the ASME issues OM Code Cases once each year when a new edition or addenda of the OM Code is published. To assist users of the OM Code, Column 3 of Table 2 lists the edition or addenda to which each Code Case was attached (E is for edition; A is for addenda), and whether the Code Case is new or reaffirmed.

TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ ADDEND
	CONDITION	А
OMN-1, Rev. 0	Alternative Rules for Preservice and Inservice Testing of Certain Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants	Reaffirme d 1999A
	Licensees may use Code Case OMN-1, "Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants," Revision 0, in lieu of the provisions for stroke-time testing in Subsection ISTC of the 1995 Edition up to and including the 2000 Addenda of the ASME OM Code when applied in conjunction with the provisions for leakage rate	

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES		
	CONDITION		
OMN-1, Rev. 0 (Continued)	Alternative Rules for Preservice and Inservice Testing of Certain Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants	Reaffirme d 1999A	
	testing in, as applicable, ISTC 4.3 (1995 Edition with the 1996 and 1997 Addenda) and ISTC-3600 (1998 Edition with the 1999 and 2000 Addenda). In addition, licensees who continue to implement Section XI of the ASME BPV Code as their Code of Record may use OMN-1 in lieu of the provisions for stroke-time testing specified in Paragraph 4.2.1 of ASME/ANSI OM Part 10 as required by 10 CFR 50.55a(b)(2)(vii) subject to the conditions in this regulatory guide. Licensees who choose to apply OMN-1 must apply all its provisions.		
	(1) The adequacy of the diagnostic test interval for each motor-operated valve (MOV) must be evaluated and adjusted as necessary, but not later than 5 years or three refueling outages (whichever is longer) from initial implementation of OMN-1.		
	(2) When extending exercise test intervals for high risk MOVs beyond a quarterly frequency, licensees must ensure that the potential increase in Core Damage Frequency (CDF) and risk associated with the extension is small and consistent with the intent of the Commission's Safety Goal Policy Statement.		
	(3) When applying risk insights as part of the implementation of OMN-1, licensees must categorize MOVs according to their safety significance using the methodology described in Code Case OMN-3, "Requirements for Safety Significance Categorization of Components Using Risk Insights for Inservice Testing of LWR Power Plants," with the conditions discussed in this regulatory guide or use other MOV risk-ranking methodologies accepted by the NRC on a plant-specific or industry-wide basis with the conditions in the applicable safety evaluations.		
	NOTE: As indicated at 64 FR 51370-51386, licensees are cautioned that, when implementing OMN-1, the benefits of performing a particular test should be balanced against the potential adverse effects placed on the valves or systems caused by this testing.		
OMN-3, Rev. 0	Requirements for Safety Significance Categorization of Components Using Risk Insights for Inservice Testing of LWR Power Plants	New 1998E	

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ ADDEND A
	CONDITION	
	The following modifications apply when implementing Code Case OMN-3 of the OM Code, 1995 Edition with the 1996 Addenda:	
	(1) In addition to those components identified in the ASME IST Program Plan, implementation of Section 1, "Applicability," of the Code Case must include within the scope of a licensee's risk-informed IST program non-ASME Code components categorized <sup>2</sup> as high safety significant components (HSSCs) that might not currently be included in the IST Program Plan.	
	(2) The decision criteria discussed in Section 4.4.1, "Decision Criteria," of the Code Case for evaluating the acceptability of aggregate risk effects (i.e., for Core Damage Frequency [CDF] and Large Early Release Frequency [LERF]) must be consistent with the guidance provided in Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis."	
	(3) Section 4.4.4, "Defense in Depth," and Section 4.4.5, "Safety Margins," of the Code Case must be consistent with the guidance contained in Sections 2.2.1, "Defense-in-Depth Evaluation," and 2.2.2, "Safety Margin Evaluation," of Regulatory Guide 1.175, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Inservice Testing."	

<sup>&</sup>lt;sup>2</sup> The Code Case methodology for risk ranking uses two categories of safety significance. The NRC staff has determined that this is acceptable for ranking MOVs, air-operated valves (AOVs), and check valves. However, the NRC staff has accepted other methodologies for risk ranking MOVs, with certain conditions and limitations, that use three categories of safety significance.

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES CONDITION	EDITION/ ADDEND A	
OMN-3, Rev.	Requirements for Safety Significance Categorization of Components Using Risk Insights for Inservice Testing of LWR Power Plants	New 1998E	
(Cont'd)	(4) Implementation of Sections 4.5, "Inservice Testing Program," and 4.6, "Performance Monitoring," of the Code Case must be consistent with the guidance pertaining to inservice testing of pumps and valves provided in Section 3.2, "Program Implementation," and Section 3.3, "Performance Monitoring," of Regulatory Guide 1.175. Testing and performance monitoring of individual components must be performed as specified in the risk-informed components Code Cases (e.g., OMN-1, OMN-4, OMN-7, and OMN-12, as modified by the conditions discussed in this regulatory guide). [Note: Conditions are consistent with established regulatory position.]		
OMN-4, Rev. 0	Requirements for Risk Insights for Inservice Testing of Check Valves at LWR Power Plants	New 1999A	
	The following modifications apply when implementing Appendix II, "Check Valve Condition Monitoring Program," of the OM Code, 1995 Edition with the 1996 Addenda:  (1) Valve opening and closing functions must be demonstrated when flow testing or examination methods (popietrusive, or		
	when flow testing or examination methods (nonintrusive, or disassembly and inspection) are used.		
	(2) The initial interval for tests and associated examinations may not exceed two fuel cycles or 3 years, whichever is longer; any extension of this interval may not exceed one fuel cycle per extension with the maximum interval not to exceed 10 years. Trending and evaluation of existing data must be used to reduce or extend the time interval between tests.		
	(3) If the Appendix II condition monitoring program is discontinued, the requirements of ISTC 4.5.1, "Exercising Test Frequency," through ISTC 4.5.4, "Valve Obturator Movement," must be implemented. [Note: Conditions are contained in 10 CFR 50.55a.]		

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ ADDEND A
	CONDITION	
OMN-9, Rev. 0	Use of a Pump Curve for Testing	New
	Licensees may use Code Case OMN-9, Rev. 0, in lieu of the provisions of ISTB 4.3, 4.4, 4.5, 5.2, and 6.1 of the OM Code, 1990 Edition up to and including the 1992 Addenda provided that:	2000A
	(1) When a reference curve may have been affected by repair, replacement, or routine servicing of a pump, a new reference curve must be determined, or an existing reference curve must be reconfirmed, in accordance with Section 3 of this Code Case.	
	(2) If it is necessary or desirable, for some reason other than that stated in Section 4 of this Code Case, to establish an additional reference curve or set of curves, these new curves must be determined in accordance with Section 3.	
OMN-11,	Motor Operated Valve Risk-Based Inspection Code Case	New
Rev. 0	Where a licensee is implementing Code Case OMN-1 as a justified alternative to the requirements for stroke-time testing of motor-operated valves (MOVs) in Subsection ISTC of the ASME OM Code, the licensee may apply risk insights to its MOV program as indicated in Paragraph 3.7, "Risk Based Criteria for MOV Testing," of OMN-1 and as supplemented by Code Case OMN-11 with the following conditions:  (1) In addition to the Inservice Testing provisions of	2001E
	Paragraph 3 of OMN-11, MOVs within the scope of OMN-1 that are categorized as Low Safety Significant Components (LSSCs) must satisfy the other provisions of OMN-1, including determination of proper MOV test intervals as specified in Paragraph 6 of OMN-1.	
	(2) Paragraph 3.1 of OMN-11 must be interpreted as allowing the provisions of Paragraphs 3.5(a) and (d) of OMN-1 related to similarity and test sample, respectively, to be relaxed for the grouping of LSSC MOVs. The provisions of Paragraphs 3.5(b), (c), and (e) of OMN-1, related to evaluation of test results for MOVs in the group, sequential testing of a representative MOV, and analysis of test results per Paragraph 6 of OMN-1 for each MOV in the group, respectively, continue to be applicable to all MOVs within the scope of OMN-1.	
OMN-11, Rev 0	Motor Operated Valve Risk-Based Inspection Code Case	New 2000E

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ ADDEND
	CONDITION	А
	(3) When extending exercise test intervals for high risk MOVs beyond a quarterly frequency, the licensee must ensure that the potential increase in CDF and risk associated with the extension is small and consistent with the intent of the Commission's Safety Goal Policy Statement.  [Note 1: conditions consistent with established regulatory position.] [Note 2: condition regarding allowable methodologies for MOV risk ranking specified for the use of OMN-1 also applies to OMN-11.]	
OMN-12, Rev. 0	Alternative Requirements for Inservice Testing Using Risk Insights for Pneumatically- and Hydraulically-Operated Valve Assemblies in Light-Water Reactor Power Plants, OM Code 1998, Subsection ISTC	New 2001E
	(1) Paragraph 4200, "Inservice Test Requirements," of OMN-12 specifies inservice test requirements for pneumatically and hydraulically operated valve assemblies categorized as high safety significant within the scope of the Code Case. The inservice testing program must include a mix of static and dynamic valve assembly performance testing. The mix of valve assembly performance testing may be altered when justified by an engineering evaluation of test data.	
	(2) Paragraph 4223 of OMN-12 specifies the periodic test requirements for pneumatically and hydraulically operated valve assemblies categorized as high safety significant within the scope of the code case. The adequacy of the diagnostic test interval for each high safety significant valve assembly must be evaluated and adjusted as necessary, but not later than 5 years or three refueling outages (whichever is longer) from initial implementation of OMN-12.	

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ ADDEND A	
	CONDITION		
OMN-12, Rev. 0 (cont'd)	Alternative Requirements for Inservice Testing Using Risk Insights for Pneumatically- and Hydraulically-Operated Valve Assemblies in Light-Water Reactor Power Plants, OM Code 1998, Subsection ISTC	New 2001E	
	(3) Paragraph 4230, "Periodic Valve Assembly Exercising," of OMN-12 specifies periodic exercising for pneumatically and hydraulically operated valve assemblies categorized as high safety significant within the scope of the code case. Consistent with the requirement in OMN-3 to evaluate the aggregate change in risk associated with changes in test strategies, when extending exercise test intervals for high safety significant valve assemblies beyond a quarterly frequency, the potential increase in Core Damage Frequency (CDF) and risk associated with the extension must be evaluated and determined to be small and consistent with the intent of the Commission's Safety Goal Policy Statement.  (4) Paragraph 4410, "Acceptance Criteria," of OMN-12 specifies that acceptance criteria must be established for the analysis of test data for pneumatically and hydraulically operated valve assemblies categorized as high safety significant within the scope of the code case. When establishing these acceptance criteria, the potential degradation rate and available capability margin for each valve assembly must be evaluated and determined to provide assurance that the valve assemblies are capable of performing their design-basis functions until the next scheduled test.  (5) Paragraph 5000, "Low Safety Significant Valve Assemblies," of OMN-12 specifies that the purpose of its provisions is to provide a high degree of confidence that pneumatically and hydraulically operated valve assemblies categorized as low safety significant within the scope of the code case will perform their intended safety function if called upon. Low safety significant valve assemblies must be determined to be capable of performing their intended design-basis safety functions until the next scheduled test. The test and evaluation methods may be less rigorous than those applied to high safety significant valve assemblies.		

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES ADD		
	CONDITION		
OMN-12, Rev. 0 (cont'd)	Alternative Requirements for Inservice Testing Using Risk Insights for Pneumatically- and Hydraulically-Operated Valve Assemblies in Light-Water Reactor Power Plants, OM Code 1998, Subsection ISTC	New 2001E	
	(6) Paragraph 5100, "Set Points and/or Critical Parameters," of OMN-12 specifies requirements and guidance for establishing set points and critical parameters of pneumatically and hydraulically operated valve assemblies categorized as low safety significant within the scope of the code case. Setpoints for these valve assemblies must be based on direct dynamic test information, a test-based methodology, or grouping with dynamically tested valves, and documented according to Paragraph 5140. The setpoint justification methods may be less rigorous than provided for high risk significant valve assemblies.		
	(7) Paragraph 5400, "Evaluations," of OMN-12 specifies evaluations to be performed of pneumatically and hydraulically operated valve assemblies categorized as low safety significant within the scope of the code case. Initial and periodic diagnostic testing must be performed to establish and verify the setpoints of these valve assemblies to ensure that they are capable of performing their design-basis safety functions. Methods for testing and establishing test frequencies may be less rigorous than applied to high risk significant valve assemblies.		
	(8) Paragraph 5600, "Corrective Action," of OMN-12 specifies that corrective action must be initiated if the parameters monitored and evaluated for pneumatically and hydraulically operated valve assemblies categorized as low safety significant within the scope of the code case do not meet the established criteria. Further, if the valve assembly does not satisfy its acceptance criteria, the operability of the valve assembly must be evaluated.		
	[Note 1: Conditions are consistent with established regulatory position.] [Note: Licensees are cautioned that, when implementing OMN-12, the benefits of performing a particular test should be balanced against the potential adverse effects placed on the valves or systems caused by this testing.]		

Appendix A

Operation and Maintenance Code Cases Publication Information

CODE CASE NUMBER	EDITION/ADDENDA	DATE
OMN-1	1999 Addenda	July 1, 1999
OMN-2	1998 Edition	July 1, 1998
OMN-3	1998 Edition	July 1, 1998
OMN-4	1999 Addenda	July 1, 1999
OMN-5	1999 Addenda	July 1, 1999
OMN-6	1999 Addenda	July 1, 1999
OMN-7	2000 Addenda	July 1, 2000
OMN-8	2000 Addenda	July 1, 2000
OMN-9	2000 Addenda	July 1, 2000
OMN-10	2000 Addenda	July 1, 2000
OMN-11	2001 Edition	July 1, 2001
OMN-12	2001 Edition	July 1, 2001
OMN-13	2001 Edition	July 1, 2001

### Appendix B

## **Numerical Listing of Operation and Maintenance Code Cases**

OMN-1

OMN-2

OMN-3

OMN-4

OMN-5

OMN-6

OMN-7

OMN-8

OMN-9

OMN-10<sup>1</sup>

OMN-11

OMN-12

**OMN-13** 

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<sup>&</sup>lt;sup>1</sup> Code Case is unacceptable for use; See Draft Regulatory Guide DG-1112.

#### **DRAFT IMPACT STATEMENT**

A draft impact statement has been prepared for the publication for public comment for proposed revisions to Regulatory Guides 1.84, "Design and Fabrication Code Case Acceptability, ASME Section III" (DG-1090), and 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1," and one proposed regulatory guide. The proposed Revision 32 of Regulatory Guide 1.84 will combine Regulatory Guides 1.84 and 1.85. The new proposed guide is DG-1089, "Operation and Maintenance Code Case Acceptability, ASME OM Code."

ASME Code Cases provide alternatives to existing requirements contained in the ASME BPV and OM Codes, which have already been incorporated by reference into 10 CFR 50.55a. Hence, the inservice examinations and inservice testing provisions incorporated into 10 CFR 50.55a are currently being performed by licensees. Use of these alternatives, therefore, does not result in associated installation or continuing costs. In addition, since many Code Cases provide more efficient and effective examinations and tests or were developed for the purpose of reducing occupational exposure, the implementation of Code Cases reduces the burden on industry.

A copy of the Draft Impact Statement is available for inspection or copying for a fee in the NRC's Public Document Room at 11555 Rockville Pike, Rockville, MD. The PDR's mailing address is USNRC PDR, Washington, DC 20555; telephone (301)415-4737 or 1-(800)397-4209; fax (301)415-3548; e-mail < PDR@NRC.GOV>. The Draft Impact Statement is also available through the NRC's Electronic Reading Room under accession number ML012690636.