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# REGULATORY GUIDE

OFFICE OF NUCLEAR REGULATORY RESEARCH

## REGULATORY GUIDE 1.192

(Draft was issued as 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 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

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This guide was issued after consideration of comments received from the public. 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. Written comments may be submitted to the Rules and Directives Branch, ADM, U.S. Nuclear Regulatory Commission, DC 20555-0001.

Regulatory guides are issued in ten broad divisions: 1, Power Reactors; 2, Research and Test Reactors; 3, Fuels and Materials Facilities; 4, Environmental and Siting; 5, Materials and Plant Protection; 6, Products; 7, Transportation; 8, Occupational Health; 9, Antitrust and Financial Review; and 10, General.

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have played a significant role in the regulatory process, the NRC has through this guide endorsed 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).

Section 50.55a(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,"<sup>1</sup> 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 it was appropriate to develop this new guide for endorsement of Code Cases related to the OM Code. 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.

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. 10 CFR 50.55a has been amended to incorporate this guide by reference and states 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.

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.).

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<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; www.asme.org.

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**

This regulatory guide lists 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. OM Code Cases that the NRC has determined to be unacceptable are listed in Regulatory Guide 1.193 (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 Code Cases listed as approved in Tables 1 and 2 of this guide have been incorporated by reference 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.

Requirements related to implementation of Code Cases are provided in 10 CFR 50.55a(b). When a licensee initially applies a Code Case listed in Table 1 or 2, the licensee shall implement the most recent version of that Code Case incorporated by reference in 10 CFR 50.55a. If a licensee has previously implemented a Code Case and a later version of the Code Case is incorporated by reference in 10 CFR 50.55a, the licensee may continue to apply, to the end of the current 120-month interval, the previous version of the Code Case as authorized or may apply a later version including any specified condition placed on its use. A licensee choosing to continue to apply the Code Case during the subsequent 120-month interval shall implement the latest version of the Code Case incorporated by reference in 10 CFR 50.55a (listed in Table 1 or 2) that is in effect at the start of the interval. Notwithstanding these requirements, the Commission may impose new or revised Code requirements, including implementation schedules, that it determines are consistent with the backfit rule (i.e., 10 CFR 50.109).

Code Cases may expire or be annulled because the provisions have been incorporated into the Code, the application for which it was specifically developed no longer exists, or experience has shown that an examination or testing method is no longer inadequate. 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). If a Code Case is incorporated by reference into 10 CFR 50.55a and later annulled by the ASME because experience has shown that an examination or testing method is inadequate, 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 such annulled Code Cases in advance of the rulemaking.

With regard to the use of any Code Case, it is the responsibility of the user to make certain that the provisions of the Code Case do not conflict with regulatory requirements or licensee commitments.

### 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 denotes edition; A denotes 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	<i>Thermal Relief Valve Code Case</i>	New 1998E
OMN-5, Rev. 0	<i>Testing of Liquid Service Relief Valves Without Insulation</i>	New 1999A
OMN-6, Rev. 0	<i>Alternate Rules for Digital Instruments</i>	New 1999A
OMN-7, Rev. 0	<i>Alternative Requirements for Pump Testing</i>	New 2000A
OMN-8, Rev. 0	<i>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</i>	New 2000A
OMN-13, Rev. 0	<i>Requirements for Extending Snubber Inservice Visual Examination Interval at LWR Power Plants</i>	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 indicated by the NRC. Unless otherwise stated, limitations indicated 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 denotes edition; A denotes 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/ADDENDA
	CONDITION	
OMN-1, Rev. 0	<i>Alternative Rules for Preservice and Inservice Testing of Certain Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants</i>	Reaffirmed 1999A
	<p>Licenseses 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 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, licenseses 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. Licenseses who choose to apply OMN-1 must apply all its provisions.</p> <p>(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.</p>	

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ADDENDA
	CONDITION	
OMN-1, Rev. 0 (Continued)	<i>Alternative Rules for Preservice and Inservice Testing of Certain Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants</i>	Reaffirmed 1999A
	<p>(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.</p> <p>(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.</p> <p>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.</p>	
OMN-3, Rev. 0	<i>Requirements for Safety Significance Categorization of Components Using Risk Insights for Inservice Testing of LWR Power Plants</i>	New 1998E
	<p>(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.</p>	

<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	EDITION/ADDENDA
	CONDITION	
OMN-3, Rev. 0 (continued)	<i>Requirements for Safety Significance Categorization of Components Using Risk Insights for Inservice Testing of LWR Power Plants</i>	New 1998E
	<p>(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."</p> <p>(3) Section 4.4.4, "Defense in Depth," 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."</p> <p>(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).</p>	
OMN-4, Rev. 0	<i>Requirements for Risk Insights for Inservice Testing of Check Valves at LWR Power Plants</i>	New 1999A
	<p>(1) Valve opening and closing functions must be demonstrated when flow testing or examination methods (nonintrusive, or disassembly and inspection) are used.</p> <p>(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.</p>	

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ADDENDA
	CONDITION	
OMN-4, Rev. 0 (continued)	<i>Requirements for Risk Insights for Inservice Testing of Check Valves at LWR Power Plants</i>	New 1999A
	(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," (1996 and 1997 Addenda) or ISTC 3510, 3520, 3540, and 5221 (1998 Edition with the 1999 and 2000 Addenda), as applicable, must be implemented.	
OMN-9, Rev. 0	<i>Use of a Pump Curve for Testing</i>	New 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, Rev. 0	<i>Motor Operated Valve Risk-Based Inspection Code Case</i>	New 2001E
	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 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.	



CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ADDENDA
	CONDITION	
OMN-11, Rev. 0 (continued)	<i>Motor Operated Valve Risk-Based Inspection Code Case</i>	New 2001E
	<p>(2) Paragraph 3(a) 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.</p> <p>(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.</p> <p>[Note: Condition regarding allowable methodologies for MOV risk ranking specified for the use of OMN-1 also applies to OMN-11.]</p>	
OMN-12, Rev. 0	<i>Alternative Requirements for Inservice Testing Using Risk Insights for Pneumatically- and Hydraulically-Operated Valve Assemblies in Light-Water Reactor Power Plants</i>	New 2001E
	<p>(1) Paragraph 4.2, "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.</p> <p>(2) Paragraph 4.2.2.3 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.</p>	

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ADDENDA
	CONDITION	
OMN-12, Rev. 0 (continued)	<p data-bbox="430 346 1295 451"><i>Alternative Requirements for Inservice Testing Using Risk Insights for Pneumatically- and Hydraulically-Operated Valve Assemblies in Light-Water Reactor Power Plants</i></p> <p data-bbox="430 472 1230 871">(3) Paragraph 4.2.3, "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.</p> <p data-bbox="430 913 1230 1270">(4) Paragraph 4.4.1, "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.</p> <p data-bbox="430 1312 1230 1711">(5) Paragraph 5, "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. The licensee must have reasonable confidence that low safety significant valve assemblies remain 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.</p>	New 2001E

CODE CASE NUMBER	TABLE 2, CONDITIONALLY ACCEPTABLE OM CODE CASES	EDITION/ADDENDA
	CONDITION	
OMN-12, Rev. 0 (continued)	<p><i>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</i></p>	New 2001E
	<p>(6) Paragraph 5.1, "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 5.1.4. The setpoint justification methods may be less rigorous than provided for high risk significant valve assemblies.</p> <p>(7) Paragraph 5.4, "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.</p> <p>(8) Paragraph 5.6, "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.</p> <p>[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.]</p>	

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>1</sup> Code Case is unacceptable for use; See Regulatory Guide 1.193.

## REGULATORY ANALYSIS

A separate regulatory analysis was not prepared for this regulatory guide. The regulatory basis for this guide is the regulatory analysis prepared for the amendment to 10 CFR 50.55a, "Codes and Standards," that incorporates this regulatory guide by reference.

A copy of the Regulatory Analysis is available for inspection and/or copying for a fee at the NRC's Public Document Room at 11555 Rockville Pike, Public File Area (O-1F21), Rockville, MD. The PDR's mailing address is USNRC PDR, Washington, DC 20555-0001; telephone (301)415-4737 or toll-free 1-(800)397-4209; fax (301)415-3548; e-mail <[PDR@NRC.GOV](mailto:PDR@NRC.GOV)> . Electronic copies of the Regulatory Analysis are available in NRC's Public Electronic Reading Room, which can be accessed through the NRC's website, ML031490533.