

**ASME OM-2022**  
(Revision of ASME OM-2020)

# **Operation and Maintenance of Nuclear Power Plants**

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**AN AMERICAN NATIONAL STANDARD**



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Mechanical Engineers**

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# FOREWORD

This document was developed and is maintained by The American Society of Mechanical Engineers (ASME) Committee on Operation and Maintenance (OM Committee) of Nuclear Power Plants. The OM Committee develops, revises, and maintains codes, standards, and guides applicable to the safe and reliable operation and maintenance of nuclear power plants. The Committee operates under procedures accredited by the American National Standards Institute as meeting the criteria of consensus procedures for American National Standards.

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**Revisions and Errata.** The committee processes revisions to this Code on a continuous basis to incorporate changes that appear necessary or desirable as demonstrated by the experience gained from the application of the Code. Approved revisions will be published in the next edition of the Code.

In addition, the committee may post errata on the committee web page. Errata become effective on the date posted. Users can register on the committee web page to receive e-mail notifications of posted errata.

This Code is always open for comment, and the committee welcomes proposals for revisions. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent background information and supporting documentation.

## Cases

(a) The most common applications for cases are

(1) to permit early implementation of a revision based on an urgent need

(2) to provide alternative requirements

(3) to allow users to gain experience with alternative or potential additional requirements prior to incorporation directly into the Code

(4) to permit the use of a new material or process

(b) Users are cautioned that not all jurisdictions or owners automatically accept cases. Cases are not to be considered as approving, recommending, certifying, or endorsing any proprietary or specific design, or as limiting in any way the freedom of manufacturers, constructors, or owners to choose any method of design or any form of construction that conforms to the Code.

(c) A proposed case shall be written as a question and reply in the same format as existing cases. The proposal shall also include the following information:

(1) a statement of need and background information

(2) the urgency of the case (e.g., the case concerns a project that is underway or imminent)

(3) the Code and the paragraph, figure, or table number(s)

(4) the edition(s) of the Code to which the proposed case applies

(d) A case is effective for use when the public review process has been completed and it is approved by the cognizant supervisory board. Approved cases are posted on the committee web page.

**Interpretations.** Upon request, the committee will issue an interpretation of any requirement of this Code. An interpretation can be issued only in response to a request submitted through the online Interpretation Submittal Form at <https://go.asme.org/InterpretationRequest>. Upon submitting the form, the inquirer will receive an automatic e-mail confirming receipt.

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# PREFACE

## GENERAL

In 2008, the ASME OM Committee directed that the two separately published OM Code and the OM Standards and Guides (OM-S/G) publications be combined into one document. This was done to ensure all of our standards and guides documents were readily available to users of the OM Code products. Some of the standards and guides were originally developed as part of the current operating nuclear power plants preoperational testing program conducted during the 1970s and 1980s. These standards and guides will be useful for power uprate projects and for new reactor design plant construction. Combining the OM Code and OM-S/G into one document makes the publication schedules for the Committee more efficient and easier to track.

## ORGANIZATION

The consolidated code, standards, and guides for nuclear power plants, titled Operation and Maintenance of Nuclear Power Plants, are arranged into three distinct divisions. The titles of some of the sections were shortened to simplify the presentation purely for the user's ease of review and use. Reference to the individual published code, standard, or guide should be made for the specific title and the application requirements. Subsequent changes made to the Division contents will be detailed in future publications in separately listed summary of changes sections.

### Division 1: OM Code: Section IST

Subsection ISTA	General Requirements
Subsection ISTB	Inservice Testing of Pumps — Pre-2000 Plants <sup>1</sup>
Subsection ISTC	Inservice Testing of Valves
Subsection ISTD	Preservice and Inservice Requirements for Dynamic Restraints (Snubbers)
Subsection ISTE	Risk-Informed Inservice Testing of Components
Subsection ISTF	Inservice Testing of Pumps — Post-2000 Plants <sup>2</sup>

### *Mandatory Appendices*

I	Inservice Testing of Pressure Relief Devices
II	Check Valve Condition-Monitoring Program
III	Preservice and Inservice Testing of Active Electric Motor-Operated Valve Assemblies
IV	Pneumatically and Hydraulically Operated Valves

### *Nonmandatory Appendices*

A	Preparation of Test Plans
B	Dynamic Restraint Examination Checklist Items
C	Dynamic Restraint Design and Operating Information
D	Comparison of Sampling Plans for Inservice Testing of Dynamic Restraints
E	Flowcharts for 10% and 37 Snubber Testing Plans
F	Dynamic Restraints (Snubbers) Service Life Monitoring Methods
G	Application of <a href="#">Table ISTD-4252-1</a> , Snubber Visual Examination

<sup>1</sup> *Pre-2000 plant*: a nuclear power plant that was issued its construction permit by the applicable regulatory authority prior to January 1, 2000.

<sup>2</sup> *Post-2000 plant*: a nuclear power plant that was issued (or will be issued) its construction permit, or combined license for construction and operation, by the applicable regulatory authority on or following January 1, 2000.