

SMR and ADVANCED REACTORS at ASME

Portfolio Update, April 2023



UPCOMING CONFERENCES

International Conference on Nuclear

Engineering (ICONE 30) May 21-26, 2023

Kyoto, Japan

<https://event.asme.org/ICONE>

A global event for professionals who want to stay current on new technology and industry trends and developments in nuclear technology. ASME's Nuclear Engineering division, the Japanese Society of Mechanical Engineers (JSME), and the Chinese Nuclear Society (CNS) will host the conference.

Pressure Vessels & Piping Conference® (PVP)

July 16-21, Atlanta, GA

<https://event.asme.org/PVP>

An event for pressure vessels & piping community professionals to keep up with new technologies, network and interact with experts, practitioners, and peers. topics will include:

- Codes & Standards
- Computer Technology & Bolted Joints
- Design & Analysis
- Fluid-Structure Interaction
- High-Pressure Technology
- Materials & Fabrication, including **Graphite**
- Operations, Applications & Components
- Seismic Engineering
- Non-Destructive Examination

International Conference on Environmental Remediation and Radioactive Waste

Management (ICEM) October 3–6, 2023, Stuttgart,

Germany

<https://event.asme.org/ICEM>

For other ASME events see [Conference & Event Overview](#)

NUCLEAR STANDARDS

[ASME Nuclear Codes and Standards](#) exist to ensure public safety, support global trade, develop technology and foster knowledge transfer while easing government's regulatory burden. By uniting technical and quality requirements – enhanced by a time-proven consensus approach to decision making – ASME develops standards which can be adopted, applied, and accepted universally.

- Boiler Pressure Vessel Code Sections
 - BPV III - Rules for Construction of Nuclear Facility Components

- BPV XI - Rules for Inservice Inspection of Nuclear Power Plant Components
- BPV II, V, IX & XIII Service Sections
- OM - Operation and Maintenance
- QME-1 - Qualification of Mechanical Equipment
- CONAGT AG-1 Code on Nuclear Air and Gas Treatment
- NQA-1 Nuclear Quality Assurance
- JCNRM Nuclear Risk Management
 - RA-S-1.1 Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment
 - RA-S-1.2 Severe Accident Progression and Radiological Release (Level 2) PRA Standard for Light Water Reactors (LWRs)
 - RA-S-1.3 Standard for Radiological Accident Offsite Consequence Analysis (Level 3 PRA) to Support Nuclear Installation Applications
 - RA-S-1.4 Probabilistic Risk Assessment Standard for Advanced Non Light Water Reactors
 - 58.22 Requirements for Low Power and Shutdown Probabilistic Risk Assessment
- CNF Cranes for Nuclear Facilities
 - HRT-1 - Rules for Hoisting, Rigging, and Transporting Equipment for Nuclear Facilities
 - NOG-1 - Rules for Overhead and Gantry Cranes
 - NUM-1 - Rules for Cranes, Monorails, and Hoists

UPCOMING COMMITTEE MEETINGS

April 18-20, 2023 - [Nuclear Quality Assurance](#) – Charlotte, NC

May 13-14, 2023 Plant Systems Design Meetings, See [Boiler Code Week](#) schedule

May 14-19, 2023 - [Boiler Code Week](#) - BPV III & XI – Las Vegas, NV

August 6-11, 2023 - Boiler Code Week_- BPV III & XI – Virtual Meetings

November 12-17, 2023 - Boiler Code Week_- BPV III & XI – Houston, TX

Participate in Standards Development

Committees meet on a regular basis to update these standards. All committee meetings are open to the public and you are welcome to join the process. No cost to be a committee member, and you do not need to be an ASME member to be on a committee. [Contact the Staff Secretary](#) for more information.

To learn more, visit: go.asme.org/joinCS

CERTIFICATION

[Nuclear Component Certification Program \(N, NA, NPT, NS, NV, N3, OWN, G, GC\)](#) This allows Certificate Holders to certify and stamp newly constructed components, parts, and appurtenances used at a nuclear facility with the Certification Mark in accordance with Section III of the ASME BPVC.

NEW Certificate Marks Offered

G - Design of Graphite or Composite Core Components and Assemblies

GC- Graphite or Composite Core Components and Assemblies

[Nuclear Material Organization Certification Program \(QSC\)](#) Quality System Certificates (QSC) issued by ASME verify the adequacy of a Material Organization's quality system program and certifies organizations that provide materials and services to the nuclear industry in accordance with the requirements of the ASME BPVC, Section III, NCA-3800 and NCA-3900.

[Nuclear Quality Assurance Certification Program \(NQA-1\)](#) certification for quality assurance programs in conformance with the ASME NQA-1 standard, "Quality Assurance Requirements for Nuclear Facility Applications".

Go to [Certification and Accreditation](#) to learn more

LEARNING & DEVELOPMENT

Courses in Nuclear Facility Construction, Nuclear Quality Assurance, Balance of Plant, and Inservice

NEW Video Based On Demand Courses

- **[EL549](#)** - ASME BPV Code, Section XI: Inservice Inspection of Nuclear Power Plant Components (Video Based Course)
- **[EL551](#)** - Nuclear Piping Systems ASME BPV Code, Section III and B31.1: Design, Integrity-Operability Assessment, and Repairs (Video Based Course)
- **[LP108](#)** - Design and Analysis of Piping Systems and Operability Assessment of Nuclear Power Plant Components

UPDATED – SELF STUDY

- **[ZABC5](#)** - NQA-1 Part 1 – 18 QA Requirements
- **[ZABC29](#)** - NQA-1 Practical Application

UPCOMING VIRTUAL CLASSES

- **[VCPD184](#)** - ASME BPV Code Section III, Division 1: Rules for Construction of Nuclear Facility Components and USNRC Regulations, **Mar 16-21, & Jun 8-13**
- **[VCPD192](#)** ASME BPV Code, Section XI: Inservice Inspection of Nuclear Power Plant Components, **Apr 3-6 & 10-16**
- **[VCPD606](#)** - ASME NQA-1 Requirements for Computer Software used in Nuclear Facilities, **May 8-9**
- **[VCPD615](#)** - Nuclear Piping Systems ASME BPV Code, Section III and B31.1: Design, Integrity-Operability Assessment, and Repairs, **May 22-26**
- **[VCPD632](#)** - Design-by-Stress Analysis per ASME BPV Code, Section III, Division 1: Class 1, 2 and 3 Components, **Apr 17-20**
- **[VCPD675](#)** - ASME NQA-1 Lead Auditor Training, **Jun 5-8, & Jun 26-29**

For more ASME courses see [Find Courses](#)

For information, contact: LearningExperience@asme.org

PUBLICATIONS [ASME Digital Collection](#)

Journals

- Journal of Nuclear and Radiation Science
- Journal of Pressure Vessel Technology
- Journal of Engineering for Gas Turbines and Power
- Journal of Pressure Vessel Technology
- Journal of Energy Resources Technology
- Journal of Heat Transfer
- Journal of Fluids Engineering

Conference Proceedings

- ICONE – International Conference on Nuclear Energy
- Pressure Vessels and Piping Conference (PVP)
- International Conference on Radioactive Waste Management and Environmental Remediation (ICEM)

Books

- Companion Guide to the ASME Boiler and Pressure Vessel and Piping Codes, Fourth Edition
- Containment Structures of U.S. Nuclear Power Plants
- Design of Hazardous Mechanical Structures, Systems and Components for Extreme Loads
- Spent Nuclear Fuel Canister Qualification Support
- Spent Nuclear Fuel Canister Welding Concepts

For info contact: journals@asme.org