SMR and ADVANCED REACTORS at ASME

Portfolio Update, February 2025

UPCOMING CONFERENCES & EVENTS

International Conference on Nuclear Engineering (ICONE)

June 22-27, 2025, Weihai, China
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 20–25, 2025, Montreal, Quebec, Canada
https://event.asme.org/PVP
The event is the ideal platform to keep up with new technologies, network and interact with experts, practitioners, and peers in the Pressure Vessels & Piping area.

ASME/NRC OM Code Symposium

July 28-29, 2025, Rockville, MD
https://event.asme.org/NRC-Symposium
The event (formerly the ASME/NRC Pump & Valve Symposium) will cover the latest issues, technology, developments and research in the pre-service and in-service testing of nuclear power plants and components

For more 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

NEW Code: OM-2 – Component Testing Requirements at Nuclear Facilities

- 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

ASME BPVC Boiler and Pressure Vessel Code Week - BPV III & XI

- **May 11-16, 2025**, Salt Lake City, UT
- **August 3-8, 2025:** Virtual
- **November 2-7, 2025**: Dallas, TX

Nuclear Air and Gas Treatment
contact Shaimaa Khalifa

- *Location and Date to be determined*

Joint Committee on Nuclear Risk Management (JCNRM) contact Oliver Martinez

- **February 24-27, 2025**: College Park, MD

Nuclear Quality Assurance NQA-1
contact Abena Dinizulu

- **April 14-17, 2025**: Kansas City, MO

PARTICIPATE IN STANDARDS DEVELOPMENT

Committees meet on a regular basis to update these standards. All committee meetings are open to the public and all industry stakeholders are welcome to join the process. No cost to be a committee member, and one does not need to be an ASME member to be on a committee.

Contact the Staff Secretary for more information.

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

CERTIFICATIONS

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.

N - Vessels, pumps, valves, piping systems, storage tanks, core support structures, concrete containments, and transport packaging
NA - Field installation and shop assembly of all items
NPT - Parts, appurtenances, welded tubular products, and piping subassemblies
NS - Supports
NV - Pressure relief valves
N3 - Transportation containments and storage containments
OWN - Nuclear power plant owner
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".

To learn more, visit Certification and Accreditation

LEARNING & DEVELOPMENT

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

Video Based On-Demand Courses

- EL549 - ASME BPV Code, Section XI: Inservice Inspection of Nuclear Power Plant Components
- EL551 - Nuclear Piping Systems ASME BPV Code, Section III and B31.1: Design, Integrity-Operability Assessment, and Repairs
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- 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, **Feb. 13-8 & May 8-13**
- VCPD192 ASME BPV Code, Section XI: Inservice Inspection of Nuclear Power Plant Components**, Feb. 17-21**
- • VCPD606 - ASME NQA-1 Requirements for Computer Software used in Nuclear Facilities, **May 19-20**
- VCPD615 - Nuclear Piping Systems ASME BPV Code, Section III and B31.1: Design, Integrity-Operability Assessment, and Repairs, **May 5-9**
- VCPD632 - Design-by-Stress Analysis per ASME BPV Code, Section III, Division 1: Class 1, 2 and 3 Components, **Mar. 27-Apr. 1**
- VCPD675 - ASME NQA-1 Lead Auditor Training **Mar. 10-13 & May 19-22**
- VCPD583 – Pressure Relief Devices: Design, Sizing, Construction, Inspection and Maintenance, **Mar. 10-12, Apr. 2-9, & May 5-7**

See ASME's Nuclear Power Online Course Collection for related courses. See Find Courses for all courses.

ASME'S COURSE BUILDER

ASME wants your ideas and is accepting applications to develop new On Demand Courses.

We are currently accepting applications for self-study courses. These courses are 100% online where students can learn independently at their own pace.

For more 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

For info contact: journals@asme.org