

NRC SUPPORT TO STANDARDS ORGS AND PREPARATIONS FOR FUTURE REACTORS

NEW & ADVANCED REACTORS: CODES & STANDARDS

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NRC's Standards Program



The NRC operates under a robust legal framework, guided by the NTTAA, OMB Circular A-119, and the Nuclear Energy Innovation and Modernization Act. This framework supports the NRC's commitment to:

- ✓ **Develop and use consensus standards**, as outlined in the NRC Policy on Codes and Standards.
- ✓ **Engage in standards development**, with guidance provided by NRC Management Directive 6.5.

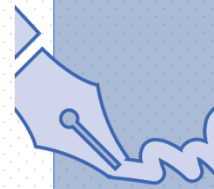
Key elements of the NRC's approach include:

-  **Oversight by the Standards Steering Committee** and the NRC Standards Executive.
-  **Active participation** of NRC staff in SDO committees.
-  **Coordination and collaboration** with other federal agencies through SDO Coordinators.
-  **Prioritization and tracking** of standards activities and staff involvement.
-  **Annual reporting** to OMB on consensus standards usage.

The Standards Program is designed to align with the NRC's mission through the following key objectives:



Stakeholder Engagement: Actively involve stakeholders in the regulatory development processes to ensure a broad perspective and inclusivity.



Consensus Standards Development: Participate in crafting consensus standards that bolster the NRC's mission, ensuring regulatory frameworks are up-to-date and effective.



Adherence to NTTAA: Utilize consensus standards in compliance with the National Technology Transfer and Advancement Act of 1995, reinforcing the commitment to national and international best practices.



International Consideration: Evaluate and incorporate standards from global organizations, such as the International Atomic Energy Agency, to align with worldwide safety and regulatory standards.

This approach underscores the NRC's dedication to safety, innovation, and regulatory excellence through collaborative and informed standardization.

NRC's Standards Executive



The Standards Executive plays a crucial role in steering the NRC's standards-related activities, both domestically and internationally. Their main responsibilities include:

Coordination

Spearheads NRC's engagement in international and national standards activities, including nominating staff to standards committees.

Policy Development

Works with NRC leadership to formulate policies, standards, and guides for the publication and disclosure of materials by NRC staff and contractors.

Funding Provision

Allocates funds for the publication of NRC staff papers and articles in journals.

Security and Rights Protection

Ensures that national security, patent rights, and commercial proprietary interests are safeguarded, and that nonpublic NRC information is not disclosed unauthorizedly.

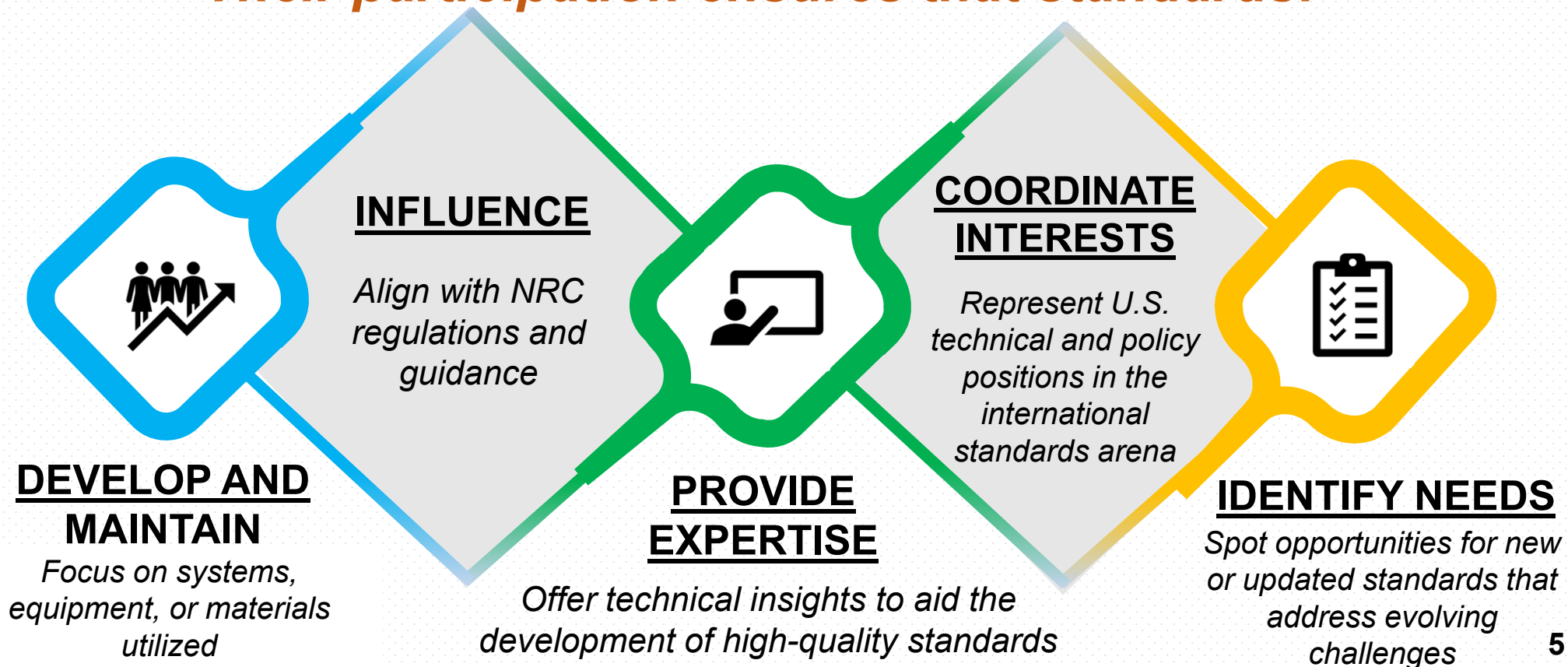
Authorities and Delegation Powers

The Standards Executive has the discretion to delegate these responsibilities and authorities to other NRC staff, ensuring efficient and effective management of standards-related activities.

NRC staff play a pivotal role in shaping and maintaining standards crucial to the nuclear industry.



Their participation ensures that standards:

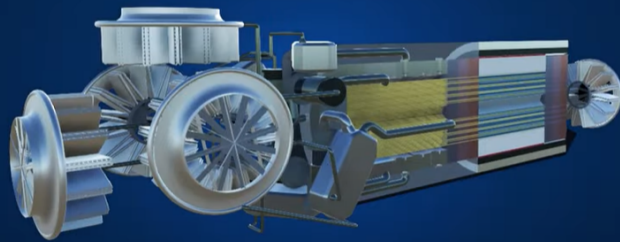


NRC Involvement in Adv. Reactor Initiatives



The NRC is a key participant in various working groups and collaborations aimed at advancing reactor codes, standards, licensing, and regulation.

MICROREACTORS



SMALL REACTORS, BIG POTENTIAL



Collaborations and Working groups:

Advanced Reactors
Codes and Standards
Collaborative
(ARCSC)

International
Atomic Energy
Agency (IAEA)
Involvement

Nuclear Energy Agency (NEA) Committee
On Nuclear Regulatory Activities (CNRA)
Involvement - Working Group on New
Technologies (WGNT)

Participation in and Endorsement of Impactful Code and Standard Actions

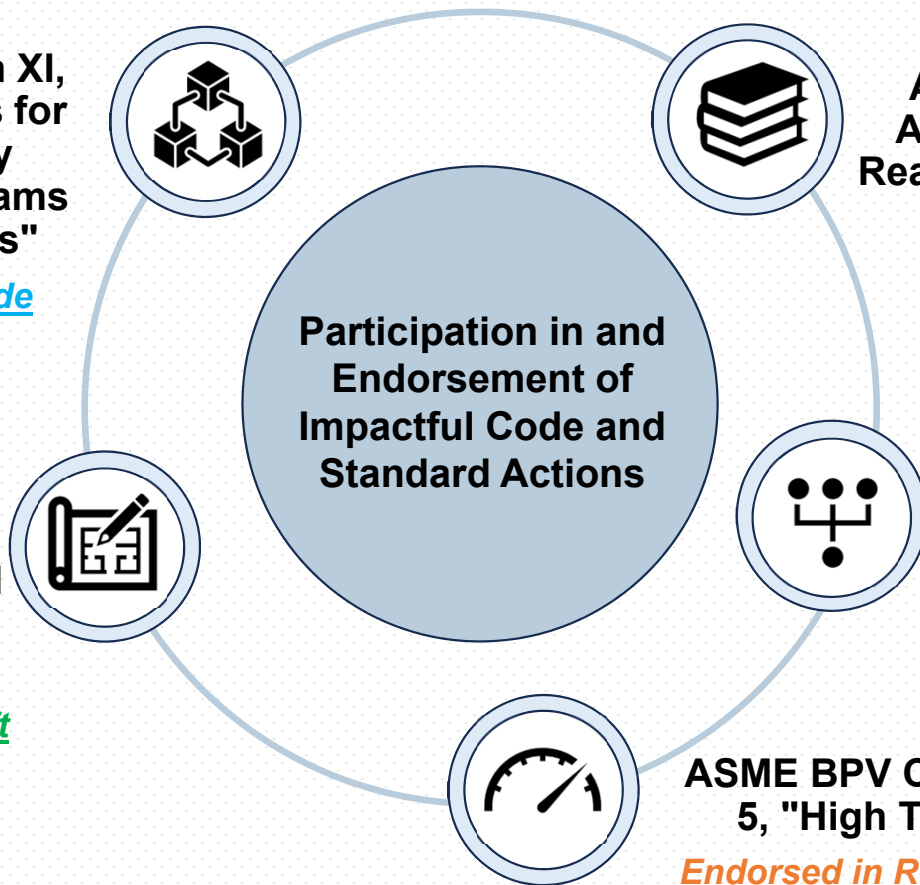


ASME BPV Code, Section XI, Division 2, "Requirements for Reliability and Integrity Management (RIM) Programs for Nuclear Power Plants"

[Endorsed in Regulatory Guide 1.246](#)

ASME OM-2, "Code on Component Testing Requirements at Nuclear Facilities" - to be published in 2024 to include non-water-cooled reactors

[Will be endorsed through draft regulatory guide DG-1424](#)



ASME/ANS RA-S-1.4-2021, "Probabilistic Risk Assessment Standard for Advanced Non-Light Water Reactor Nuclear Power Plants"
[Endorsed in Regulatory Guide 1.247 for trial use](#)

Reformatted ASME QME-1 Standard, "Qualification of Mechanical Equipment Used in Nuclear Facilities" - to be published in 2024 to include non-water-cooled reactors

[Will be endorsed through planned Revision 5 to RG 1.100](#)

ASME BPV Code, Section III, Division 5, "High Temperature Reactors"
[Endorsed in Regulatory Guide 1.87 Rev 2](#)