

Title: Nuclear Regulatory Commission (NRC) Fiscal Year 2008 Agency Report

1. Please describe the importance of standards in the achievement of your agency's mission, how your agency uses standards to deliver its primary services in support of its mission, and provide any examples or case studies of standards success:

Under the Atomic Energy Act of 1954, as amended, the NRC has authority to promulgate regulations governing both nuclear materials and production and utilization facilities. In many cases, the NRC has developed and promulgated such regulations. However, in other areas, the NRC has incorporated by reference into NRC regulations several voluntary consensus standards. The NRC's reasons for incorporation by reference include (but are not limited to) providing the level of regulatory certainty and predictability desired by stakeholders, recognizing and considering the broad range of technical expertise and experience of the individuals who are represented on many consensus standards organizations, and minimizing the expenditure of NRC resources that would otherwise be necessary to develop regulations which provide the level of detail comparable to that provided by consensus standards. NRC staff members participate on many standards development committees to provide staff input and to help assure that published standards can be endorsed in the regulatory process. The NRC staff also issues documents providing guidance on acceptable methods for complying with NRC regulations, such as regulatory guides. These guidance documents frequently reference consensus standards as acceptable methods for compliance with NRC regulations. More information is available in SECY-08-0140, "Development and Regulatory Application of Consensus Standards by U.S. Nuclear Regulatory Commission Staff." The NRC website on standards development, which is currently being revised, is at: <http://www.nrc.gov/about-nrc/regulatory/standards-dev.html>.

An example of successful implementation of a consensus standard is the endorsement of the National Fire Protection Association (NFPA) standard, NFPA 805, "Performance-Based Standard for Fire Protection for Light-Water Reactor Electric Generating Plants." Title 10, Section 50.48(c), of the Code of Federal Regulations (10 CFR 50.48(c)), which the Commission adopted in 2004, incorporates the 2001 edition of NFPA 805 by reference, with certain exceptions, and allows licensees voluntarily to adopt and maintain a fire protection program that meets the requirements of NFPA 805 as an alternative to meeting the requirements

of 10 CFR 50.48(b) or the plant-specific fire protection license conditions. The standard is applied to demonstrate that a proposed licensing basis change, “would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.” Additional guidance is provided in NRC Regulatory Guide 1.205, “Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants.”

The prescriptive NRC regulations governing fire protection programs have been subject to different interpretations and have been difficult to enforce in a clear, consistent way. The revised rule allows plants to establish well-defined fire protection licensing bases and to manage their fire protection programs with minimal regulatory intervention. More than 40 power plants in the U.S. are actively transitioning their current fire protection programs to ones based on NFPA 805. The NRC staff has conducted visits to pilot plants, as well as numerous public meetings to assist plants in the transition. As a result of the need for fire-related probabilistic risk assessment (PRA), there is increased interest in a joint PRA standard published by the American Nuclear Society (ANS) and the American Society of Mechanical Engineers (ASME).

2. Please list the government-unique standards your agency used in lieu of voluntary consensus standards during FY 2007.

Ans.: 0

3. Please list the Voluntary Consensus Standards (VCS) your agency substituted for Government Unique Standards (GUS) in FY 2007 as a result of review under Section 15(b)(7) of OMB Circular A-119.

Ans.: 0

4. Please provide the total number of Voluntary Consensus Standards your agency used during FY 2007: Optional: If possible, also please provide the total number of Non-consensus Standards that are developed in the private sector your agency used during FY 2007. In addition, please provide your agency's rationale for using the Non-consensus Standards that are developed in the private sector counted in this question.

Ans.:

Voluntary Consensus Standards: 6

VCSs Used in Regulation:

A final rule was published in the *Federal Register* [73 FR 52730] on September 8, 2008, incorporating Section III and Section XI of the 2004 Edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code into Title 10, Part 50.55a, of the Code of Federal Regulations (10 CFR 50.55a).

VCSs Used in Regulatory Guidance:

IEEE Standard 650-2006, "IEEE Standard for Qualification of Class 1E Static Battery Chargers and Inverters for Nuclear Power Generating Stations," endorsed in RG 1.210, "Qualification of Safety-Related Battery Chargers and Inverters for Nuclear Power Plants," in July, 2008.

American National Standards Institute (ANSI) standards cited in NUREG-1556, Volume 21, "Consolidated Guidance About Material Licenses: Program-Specific Guidance About Possession Licenses for Production of Radioactive Material Using an Accelerator," October, 2007:

ANSI N13.30-1996, "Performance Criteria for Radiobioassay"

ANSI N323a-1997, "Radiation Protection Instrumentation Test and Calibration"

ANSI N13.1-1999, "Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities"

ANSI N42.18-2004, "Specification and Performance of On-Site Instrumentation for Continuously Monitoring Radioactivity in Effluents"

Other Technical Standards: 0

Rationale: N/A

5. Please enter the Voluntary Consensus Standards Bodies (VCSB) in which your agency participated in during FY 2007.

Ans.: 15

Voluntary Consensus Standards Body

Acronym

American Concrete Institute

ACI

American Institute of Steel Construction

AISC

American National Standards Institute	ANSI
American Nuclear Society	ANS
American Society for Testing and Materials	ASTM
American Society of Civil Engineers	ASCE
American Society of Mechanical Engineers	ASME
American Welding Society	AWS
Health Physics Society	HPS
Institute of Electrical and Electronic Engineers	IEEE
Institute of Nuclear Materials Management	INMM
International Society of Automation	ISA
International Electrotechnical Commission	IEC
National Council of Radiation Protection and Measurements	NCRPM
National Fire Protection Association	NFPA

6. Please provide the total number of your agency's representatives who participated in voluntary consensus standards activities during FY 2007 and the total number of activities these agency representatives participated in.

Ans.:

Agency Representatives: **172**

Activities: **312**

7. Please provide any conformity assessment activities (as described in "Guidance on Federal Conformity Assessment Activities" found in the Federal Register, Volume 65, Number 155, dated August 10, 2000) in which your agency was involved in FY 2007.

Ans.: None

8. Please provide an evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

Ans.:

The NRC believes that the Circular provides appropriate direction and encouragement for federal agencies to develop internal agency-wide guidelines. The circular also provides sufficient and reasonable flexibility for each agency to make an independent determination relative to participation on voluntary consensus bodies and use of developed standards.

9. Please provide any other comments you would like to share on behalf of your agency.

Ans.: No Comment

10. Please use this box to provide any additional comments on how your agency currently reports its use of voluntary consensus standards:

Ans.: 10.6, 10.7 - Our agency reviews and updates its use of standards on a continuing basis.

10-1. Removed **[This question was deprecated in 2005]**

10-2. Removed **[This question was deprecated in 2005]**

10-3. Removed **[This question was deprecated in 2005]**

10-4. Does your agency report standards that it uses for guidance purposes (as opposed compliance purposes)? (a) Yes; (b) No; (c) Not applicable.

Ans.: **Yes**

10-5. Does your agency report use of standards from non-ANSI accredited standards developers, industry consortia groups, or both? (a) non-ANSI Accredited; (b) Consortia; (c) Both; (d) Neither; or (e) Not applicable.

Ans.: **D**

10-6. Does your agency have a schedule for periodically reviewing its use of standards for purposes of updating such use? (a) Yes; (b) No

Ans.: **No**

10-7. How often does your agency review its standards for purposes of updating such use? [Enter the number of years]

Ans.: **0 (continuous)**