



# American Nuclear Society (ANS)

## What's New . . .

### **Approval of Proposed Standards Projects (new or revised)**

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Before work on a draft standard can begin, a **Project Initiation Notification System (PINS)** form must be approved and submitted to the American National Standards Institute (ANSI). The following projects have completed a PINS form to approve the initiation of a new or revised draft standard:

ANS-2.8-201x, "Guidelines for Design Basis and Beyond Design Basis External Flood Evaluation at Nuclear Facilities" (revision of withdrawn standard ANSI/ANS-2.8-1992)

ANS-2.32-201x, "Guidance on the Selection and Evaluation of Remediation Methods for Subsurface Contamination" (new standard)

ANS-6.4.3-201x, "Gamma-Ray Attenuation Coefficients & Buildup Factors for Engineering Materials" (revision of withdrawn standard ANSI/ANS-6.4.3-1991)

ANS-8.22-201x, "Nuclear Criticality Safety Based on Limiting and Controlling Moderators" (revision of ANSI/ANS-8.22-1997; R2006)

ANS-8.29-201x, "Nuclear Criticality Safety in Fuel Reprocessing Facilities" (new standard)

ANS-40.21-201x, "Siting, Construction, and Operation of Commercial Low Level Radioactive Waste Burial Grounds" (new standard)

### **Drafts in Development**

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The following projects have approved PINS forms and are in development:

ANS-2.2-201x, "Earthquake Instrumentation Criteria for Nuclear Power Plants" (revision of ANSI/ANS-2.2-2002)

ANS-2.9-201x, "Evaluation of Ground Water Supply for Nuclear Facilities" (revision of withdrawn standard ANSI/ANS-2.9-1980; R1989)

ANS-2.15-201x, "Criteria for Modeling and Calculating Atmospheric Transport of Routine Releases from Nuclear Facilities" (new standard)

ANS-2.16-201x, "Criteria for Modeling Design-Basis Accidental Releases from Nuclear Facilities" (new standard)

ANS-2.25-201x, "Surveys of Ecology Needed to License Nuclear Facilities" (revision of withdrawn standard ANSI/ANS-2.25-1982; R1989)

ANS-2.30-201x, "Assessing Capability for Surface Faulting at Nuclear Facilities" (new standard)

ANS-2.31-201x, "Standard for Estimating Extreme Precipitation at Nuclear Facility Sites" (new standard)

ANS-3.1-201x, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants" (revision of withdrawn standard ANSI/ANS-3.1-1993; R1999)

ANS-3.4-201x, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants" (revision of ANSI/ANS-3.4-1996; R2002)

ANS-3.5-201x, "Nuclear Power Plant Simulators for Use in Operator Training and Examination" (revision of ANSI/ANS-3.5-2009)

ANS-3.8.1-201x, "Properties of Radiological Emergency Response Functions and Organizations for Nuclear Facilities" (revision of withdrawn standard ANSI/ANS-3.8.1-1995)

ANS-3.8.2-201x, "Properties of Functional and Physical Characteristics of Radiological Emergency Response Facilities at Nuclear Facilities" (revision of withdrawn standard ANSI/ANS-3.8.2-1995)

ANS-3.8.3-201x, "Properties of Radiological Emergency Response Plans and Implementing Procedures and Maintaining Emergency Response Capability for Nuclear Facilities" (revision and consolidation of withdrawn standards ANSI/ANS-3.8.3-1995 and ANSI/ANS-3.8.4-1995)

ANS-3.8.6-201x, "Properties of the Conduct of Offsite Radiological Assessment for Emergency Response and Emergency Radiological Field Monitoring, Sampling and Analysis for Nuclear Facilities" (revision and consolidation of withdrawn standards ANSI/ANS-3.8.5-1992 and ANSI/ANS-3.8.6-1995)

ANS-3.8.7-201x, "Properties of Planning, Development, Conduct, and Evaluation of Drills and Exercises for Emergency Preparedness at Nuclear Facilities" (revision of withdrawn standard ANSI/ANS-3.8.7-1998)

ANS-3.8.10-201x, "Criteria for Modeling Real-Time Accidental Releases at Nuclear Facilities" (new standard)

ANS-5.1-201x, "Decay Heat Power in Light Water Reactors" (revision of ANSI/ANS-5.1-2005)

ANS-6.1.2-201x, "Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants" (revision of ANSI/ANS-6.1.2-1999; R2009)

ANS-8.1-201x, "Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors" (revision of ANSI/ANS-8.1-1998; R2007)

ANS-8.3-201x, "Criticality Accident Alarm System" (revision of ANSI/ANS-8.3-1997; R2003)

ANS-8.10-201x, "Criteria for Nuclear Criticality Safety Controls in Operations with Shielding and Confinement" (revision of ANSI/ANS-8.10-1983; R2005)

ANS-8.12-201x, "Nuclear Criticality Control and Safety of Plutonium-Uranium Fuel Mixtures Outside Reactors" (revision of ANSI/ANS-8.12-1987; R1993; R2002)

ANS-8.15-201x, "Nuclear Criticality Control of Special Actinide Elements" (revision of ANSI/ANS-8.15-1981; R2005)

ANS-8.19-201x, "Administrative Practices for Nuclear Criticality Safety" (revision of ANSI/ANS-8.19-2005)

ANS-8.20-201x, "Nuclear Criticality Safety Training for Fissionable Materials Operations Outside Reactors" (revision of ANSI/ANS-8.20-1991; R1999; R2005)

ANS-8.21-201x, "Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors" (revision and consolidation of ANSI/ANS-8.21-1995; R2001 and ANSI/ANS-8.5-1996; R2002; R2007)

ANS-8.28-201x, "Administrative Practices for the Use of Non-Destructive Assay Measurements for Nuclear Criticality Safety" (new standard)

ANS-10.7-201x, "Non-Real Time, High Integrity Software for the Nuclear Industry" (new standard)

ANS-15.2-201x, "Quality Control for Plate-Type Uranium-Aluminum Fuel Elements" (revision of ANSI/ANS-15.2-1999; R2009)

ANS-15.8-201x, "Quality Assurance Program Requirements for Research Reactors" (revision of ANSI/ANS-15.8-1995; R2005)

ANS-15.17-201x, "Fire Protection Program Criteria for Research Reactors" (revision of ANSI/ANS-15.17-1981; R2000)

ANS-15.19-201x, "Shipment and Receipt of Special Nuclear Material (SNM) by Research Reactors" (revision of withdrawn standard ANSI/ANS-15.19-1991)

ANS-15.21-201x, "Format and Content for Safety Analysis Reports for Research Reactors" (revision of ANSI/ANS-15.21-1996; R2006)

ANS-18.1-201x, "Radioactive Source Term for Normal Operation of Light Water Reactors" (revision of withdrawn standard ANSI/ANS-18.1-1999)

ANS-19.1-201x, "Nuclear Data Sets for Reactor Design Calculations" (revision of ANSI/ANS-19.1-2002)

ANS-19.9-201x, "Delayed Neutron Parameters for Light Water Reactors" (new standard)

ANS-19.11-201x, "Calculation and Measurement of the Moderator Temperature Coefficient of Reactivity for Water Moderated Power Reactors" (revision of ANSI/ANS-19.11-1997; R2002)

ANS-19.12-201x, "Nuclear Data for Isotope Production Calculations for Medical and Other Applications" (new standard)

ANS-51.10-201x, "Auxiliary Feedwater System for Pressurized Water Reactors" (revision of ANSI/ANS-51.10-1991; R2008)

ANS-54.1-201x, "Nuclear Safety Criteria and Design Process for Liquid-Metal-Cooled Nuclear Power Plants" (revision of withdrawn standard ANSI/ANS-54.1-1989)

ANS-56.8-201x, "Containment System Leakage Testing Requirements" (revision of ANSI/ANS-56.8-2002)

ANS-58.8-201x, "Time Response Design Criteria for Safety-Related Operator Actions" (revision of ANSI/ANS-58.8-1994; R2008)

ANS-58.16-201x, "Safety Classification and Design Criteria for Non-Reactor Nuclear Facilities" (new standard)

ANS/ASME-58.24-201x, "Severe Accident Progression and Radiological Release (Level 2) PRA Methodology to Support Nuclear Installation Applications" (new standard)

ANS/ASME-58.25-201x, "Standard for Radiological Accident Offsite Consequence Analysis (Level 3 PRA) to Support Nuclear Installation Applications" (new standard)

## **Projects at Ballot (or resolving ballot comments)**

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Projects at ballot have completed drafts that have been issued for formal consensus committee ballot with concurrent public review. Before proceeding, all comments must be considered. Multiple ballots may be needed before a draft is approved. The following draft standards are in the process of approval/comment resolution:

ANS-2.21-201x, "Criteria for Assessing Atmospheric Effects on the Ultimate Heat Sink" (new standard)

ANS-3.2-201x, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants" (revision of ANSI/ANS-3.2-2006)

ANS-41.5-201x, "Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation" (new standard)

## **ANS Recently Approved Standards**

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The following new or revised standards have recently received ANSI approval:

ANSI/ANS-2.3-2011, "Estimating Tornado, Hurricane, and Extreme Straight Line Wind Characteristics at Nuclear Facility Sites" (revision of withdrawn standard ANSI/ANS-2.3-1983 approved 4/22/11 – available for purchase)

ANSI/ANS-2.17-2010, "Evaluation of Subsurface Radionuclide Transport at Commercial Nuclear Power Plants" (revision of withdrawn standard ANSI/ANS-2.17-1980; R1989 approved 12/23/10 – available for purchase)

ANSI/ANS-3.5-2009, "Nuclear Power Plant Simulators for Use in Operator Training and Examination" (revision of withdrawn standard ANSI/ANS-3.5-1998 approved 9/4/09 – available for purchase)

ANSI/ANS-5.4-2011, "Method for Calculating the Fractional Release of Volatile Fission Products from Oxide Fuel" (revision of withdrawn standard ANSI/ANS-5.4-1982 approved 5/19/11 – available soon)

ANSI/ANS-15.11-2009, "Radiation Protection at Research Reactors" (revision of ANSI/ANS-15.11-1993; R2004 approved 10/8/09 – available for purchase)

ANSI/ANS-19.3-2011, "Steady-State Neutronics Methods for Power Reactor Analysis" (revision of ANSI/ANS-19.3-2005 approved 8/26/2011 – available for purchase)

ANSI/ANS-19.6.1-2011, "Reload Startup Physics Tests for Pressurized Water Reactors" (revision of ANSI/ANS-19.6.1-2005 approved 1/13/11 – available for purchase)

ANSI/ANS-19.10-2009, "Methods for Determining Neutron Fluence in BWR and PWR Pressure Vessel and Reactor Internals" (new standard approved 2/24/09 – available for purchase)

ANSI/ANS-40.37-2009, "Mobile Radioactive Waste Processing Systems" (revision of withdrawn standard ANSI/ANS-40.37-1993 approved 11/20/09 – available for purchase)

ANSI/ANS-53.1-2011, "Nuclear Safety Design Process for Modular Helium-Cooled Reactor Plants" (new standard approved 12/21/11 – available soon)

ANSI/ANS-58.14-2011, "Safety and Pressure Integrity Classification Criteria for Light Water Reactors" (revision of withdrawn standard ANSI/ANS-58.14-1993 approved 4/22/11 – available for purchase)

Contact [standards@ans.org](mailto:standards@ans.org) for more details on any of the above standards.