

Standards Actions

Technical Standards Program Newsletter

August 2012



U.S. DEPARTMENT OF

ENERGY

OFFICE OF
NUCLEAR SAFETY



INSIDE THIS ISSUE

- **Featured DOE Technical Standards Activities**
 - *DOE Technical Handbook, Accident Investigation and Prevention, Volumes I and II is Released*
- **Workshops and Events**
 - *Nuclear Energy Standards Coordination Collaborative Meeting*
 - *2012 Chemical Safety and Life Cycle Management Workshop*
- **Nuclear Safety-Related Standards Activity**

FEATURED DOE TECHNICAL STANDARDS ACTIVITIES

Department of Energy Technical Handbook, Accident Investigation and Prevention, Volumes I and II, is Released

In September 2009, the Office of Health, Safety and Security (HSS) Office of Corporate Safety Programs, Accident Investigation Program, began working with the Energy Federal Contractors Group's Safety and Health Committee to update the 1999 version of the *Accident Investigation Manual* into a formal Department of Energy (DOE) Technical Standard.

The development and concurrence process is complete and the DOE Technical Handbook (HDBK), *Accident Investigation and Prevention, Volumes I and II* (DOE-HDBK-1208-2012), is now available on the Technical Standards Web site at: www.hss.doe.gov/nuclearsafety/techstds/standard.html and the HSS Web site at: www.hss.doe.gov/sesa/corporatesafety/AIP/index.html.

Volume I, *Accident Analysis Techniques*, provides techniques and guidance for the conduct of DOE accident investigations in accordance with DOE Order 225.1B, *Accident Investigations*. It also serves

as the student manual for the *Accident Investigation Training Course*, SAF-230, taught through the National Training Center. DOE/National Nuclear Security Administration Federal Staff and contractors are encouraged to participate in this training.

For more information on Accident Investigation Training, go to: www.hss.doe.gov/sesa/corporatesafety/aip/docs/SAF-230_AI_Courses_Information_and_Schedule.pdf.

What is new?

Volume I expands and updates the methods of accident analysis and accident prevention theory. It discusses fundamental concepts of accident dynamics, accident prevention, and accident analysis.

Its purpose is to emphasize that DOE accident investigators need to understand the theoretical bases of safety management, accident analysis, the practical application of the DOE Integrated Safety Management and Human Performance Improvement framework.

(Continued on next page)

www.hss.energy.gov/nuclearsafety/ns/techstds/

Volume I, *Accident Analysis Techniques*, provides investigators the skills to get at the relevant facts, surmise the appropriate causal factors, and understand those organizational and human factors that leave the organization vulnerable for future events with potentially more severe consequences.

Volume II, *Operational Safety Review Techniques*, provides fundamental accident investigation core analysis techniques as applied to a contractor-led Operational Safety Review (OSR). It offers an approach to go deeper within the contractor's organization and prevent accidents by revealing organizational human performance weaknesses before they result in an accident.

A fundamental difference in Volume II versus Volume I arises from the emphasis on an OSR team approach that systematically applies the tools to analyze minor events to extract recommended organizational changes that reduce the potential for major serious events from occurring.

In Volumes I and II respectively, the core accident investigation techniques for events, causal factors, barriers, and change analysis provided have been expanded to apply a practical approach to understand issues; such as latent organizational drift/weaknesses, error event precursors, context of worker decisions, work as imagined versus work as preformed, and organizational culture.

The key here is that one cannot fix problems one cannot see. Seeing the gaps between work-as-done and work-as-planned provides the required "eye-opening" moment to recognize a need for change. Misalignment of work as imagined and work as done is an indicator of a potential organizational problem that requires a look at underlying assumptions below the surface within an organization that needs to be addressed. See Figure 1 below.



Figure 1. Assessing Organizational Culture

A fundamental enhancement provided by this Handbook is an approach to detect subtle discrepancies in the detail of instructions employed by DOE organizations to perform work and to prove, rather than assume, a good safety culture alignment is present at the work activity level. This approach focuses on identifying where corrective actions are required to fix the safety management system and human performance issues.

Contact: David Pegram, MPA, CIH, Accident Investigation Program Manager

Email: dave.peggram@hq.doe.gov

Phone: 301-903-9840

Workshops and Events

Nuclear Energy Standards Coordination Collaborative Meeting

The Nuclear Energy Standards Coordination Collaborative (NESCC) is a cross-stakeholder forum to identify and respond to the current needs of the nuclear industry. NESCC works to facilitate and coordinate the timely identification, development, and revision of standards for the design, operation, development, licensing, and deployment of nuclear power plants. Standards for other nuclear technologies, including advanced reactor concepts, are also addressed.

The NESCC meeting held on March 12, 2012, took place at the National Institute of Standards and Technology Headquarters in Gaithersburg, MD.

Topics of the NESCC Meeting included:

- The Effect of the Recent Earthquake and Tsunami on Japanese Nuclear Power Plants
- Overview of NuScale Design and Licensing Progress
- Babcock & Wilcox Modular Nuclear Energy mPower Reactor Design Overview
- American Society of Civil Engineers Nuclear Related Standards Update
- NESCC Task Group Working Methods and Proposed Task Group Report Review Criteria
- Reports from the following Task Groups:
 - Report Electrical Cabling
 - Repair of Reinforced Concrete
 - Standards Database
 - High-Density Polyethylene Piping
 - National Standards Priority List

For more information on NESCC and to review the meeting reports, please visit the ANSI Web site at: www.ansi.org.

2012 Chemical Safety and Life Cycle Management Workshop

The Department of Energy (DOE) and the Energy Facility Contractors Group (EFCOG) held its 14th Annual Joint Chemical Safety and Lifecycle Management (CSLM) Workshop, March 13-15, in the DOE Forrestal building's main auditorium. This year's theme, "Cost-Effective Chemical Management," focused on sustainable

acquisition, chemical inventory management, legacy chemical reduction and proactive risk reduction. It also included the Globally Harmonized System for hazard communication and hazard analysis for chemical research laboratories. Over 200 participants registered for the workshop and other Environment, Safety and Health (ESH) EFCOG meetings. There were 140 participants that attended the CSLM workshop either in person or by telecast from 16 sites throughout the DOE complex. EFCOG Radiation Protection and Occupational Medicine subgroups held concurrent and subsequent meetings, respectively.

Four special guests opened the workshop: Dae Chung, Principal Deputy Chief for Nuclear Safety and Technical Matters (Office of Health, Safety and Security); Pat Padezanin of Savannah River Nuclear Solutions and EFCOG ESH Working Group Chairman; Mark Griffon of the Chemical Safety Board; and John Mansfield of the Defense Nuclear Facilities Safety Board (DNFSB). Mr. Chung provided the DOE Corporate welcome; and Ms. Padezanin provided the EFCOG Sponsor's corporate welcome. She discussed cost-effective methods for risk reduction and discussed the consequences of ineffective chemical cost management. Mr. Griffon reviewed the research laboratory accident at Texas Tech University. Dr. Mansfield spoke about chemical safety vulnerabilities in the DOE Complex.

During two days of presentations and training, 10 speakers from the Federal and private sectors offered insight into the management of chemical costs. They covered acquisition processes, legacy chemical reduction, radio-frequency identification, chemical inventory management, chemical reuse, and zero waste. The program on the final day of the events featured a 10 CFR 851 Workshop which included discussions about implementation by union, contractor, and DOE Headquarters representatives.

For general information about the chemical management initiative and the Workshop, go to the HSS Web site at: www.hss.doe.gov/healthsafety/wshp/chem_safety.

DOE Technical Standards Updates

DOE Technical Standards Posted in RevCom for TSP Review

- SAFT-0141, Department of Energy (DOE)- Handbook (HDBK)-1092-YR, *Electrical Safety*
Contact: Pat Tran, Office of Health, Safety and Security (HSS), Office of Worker Safety and Health Assistance (HS-12)
Phone: 301-903-5638
- TRNG-0081, DOE Standard (STD)-1182-YR, *Civil/Structural Engineering, Functional Area Qualification Standard*
Contact: Raman Venkata, DOE, Office of River Protection
Phone: 509-376-2274
- SANS-0008, DOE-STD-XXXX-YR, *Protection Program Defensive Planning*
Contact: Richard Faiver, HSS, Office of Security Policy (HS-51)
Phone: 301-903-4613
- SANS-0011, DOE-STD-XXXX-YR, *Incidents of Security Concern Technical Standard*
Contact: Sabeena Khanna, HSS, Office of Security Policy (HS-51)
Phone: 301-903-4681

DOE Technical Standards Recently Approved

- DOE-STD-1063-2011, *Facility Representatives: Change Notice*
Contact: Earl Hughes, HSS, Office of Nuclear Safety Facility Safety Programs (HS-32)
Phone: 202-586-0065
- DOE-STD-1212-2012, *Explosives Safety*
Contact: Gerald Meyers, HSS, Office of Nuclear Safety Basis and Facility Design (HS-31)
Phone: 301-903-3190
- DOE-HDBK-1208-2012, *Accident Investigation and Prevention, Volumes I and II*
Contact: David Pegram, HSS, Office of Corporate Safety Programs (HS-23)
Phone: 301-903-9840

Nuclear Safety-Related Standards Activity

By Calvin M. Hopper for the U.S. Department of Energy

This report provides insights into domestic nuclear safety standards development activities with a graded focus on incidental information regarding international standards. Standards that could have current or immediate potential interests to the Department of Energy regarding nuclear facility safety are listed below. Public comment periods for proposed or new standards are typically 30 days.

Proposed Industry Standards

American Nuclear Society (ANS)

Developing Standards

- Board of Standards Review (BSR)/ANS 50.1-201x, *Nuclear Safety Criteria for the Design of Stationary Light Water Reactor Plants* (proposed new standard). Provides the criteria and bases for developing system, structure, and component design criteria, functional design requirements, and equipment safety classification for stationary light water reactors nuclear power plants through the application of both deterministic and risk-informed methods. This includes operation, maintenance, and testing requirements for the plant design to meet system functional requirements in accordance with industry regulations.
- BSR/ANS 2.21-201x, *Criteria for Assessing Atmospheric Effects on the Ultimate Heat Sink* (proposed new standard). Applies to new nuclear units or the re-design of the cooling systems at existing nuclear units and describes atmospheric effects for consideration when designing ultimate heat sinks for safety-related systems at nuclear power units and provides required analyses for a meteorological assessment of the ultimate heat sink, to ensure design temperatures and cooling capacity requirements for the facility are met.
- BSR/ANS 6.4.3-201x, *Gamma-Ray Attenuation Coefficients and Buildup Factors for Engineering Materials* (proposed revision of ANSI/ANS 6.4.3-1991). Provides evaluated gamma-ray elemental attenuation coefficients and single material buildup factors for selected engineering materials for use in shielding calculations.

ASTM International (formerly known as American Society for Testing and Materials (ASTM))

Developing Standards

- BSR/ASTM 51818-201x, *Practice for Dosimetry in an Electron Beam Facility for Radiation Processing at Energies Between 80 and 300 KeV* (proposed revision of ASTM 51818-09). Covers dosimetric procedures to be followed to determine the performance of low energy (300 KeV or less) single-gap electron beam radiation processing facilities. Other practices and procedures related to facility characterization, product qualification, and routine processing are also discussed.

Work Items

- WK26056, *Standard Terminology Relating to Nuclear Materials* (proposed revision of ASTM C859-09). Provides terms, definitions, descriptions of terms, nomenclature, and explanations of acronyms and symbols specifically associated with standards under the jurisdiction of Committee C26 on Nuclear Fuel Cycle. This terminology may also be applicable to documents not under the jurisdiction of Committee C26, in which case this terminology may be referenced in those documents. The purpose of the revision is for the addition of terms and definitions from other C26 subcommittees.

(Continued on next page)

Part of the TSP mission is to promote the use of voluntary consensus standards, and to manage DOE efforts to develop and maintain necessary technical standards.

PROPOSED INDUSTRY STANDARDS

Health Physics Society (HPS)

HPS Accredited Standards Committee, N13, develops consensus standards dealing with or pertaining to radiation protection, including the protection of individuals or groups from occupational or environmental exposure to radiation or radioactive materials. Accredited Standards Committee, N43, is concerned with radiation protection aspects of radiation-producing equipment used in industrial and nonmedical research and development activities (excluding nuclear reactors).

Developing Standards

- BSR N43.4-201x, *Classification of Radioactive Self-Luminous Light Sources* (proposed revision of N43.4-2005). Establishes the classification of certain radioactive self-luminous light sources according to radionuclide, type of source, activity, and performance requirements. The standard does not attempt to establish design or safety standards, but leaves the design features to the judgment of the supplier and user, provided that the performance requirements are met.
- BSR N43.5-201x, *Radiation Safety for the Design of Radiographic and Fluoroscopic Industrial X-Ray Equipment* (proposed revision of N43.5-2005). Provides guidelines specific to the radiation safety aspects of the design of non-medical x-ray equipment operating at energies below 1 MeV for radiographic and radiosopic applications, wherein the x-rays are generated by electronic means. It does not apply to x-ray equipment used for industrial gauging applications. The objective is to achieve safe design of non-medical x-ray equipment by establishing requirements for some components that are critical for radiation safety. These include controls, panel displays, warning indicators, tube assembly, and shielding. Other considerations, which are generally the responsibility of the manufacturer, are also included. These include instructions, provisions for means of connecting interlocks, and labeling.
- BSR N13.25-201x, *Internal Dosimetry Programs for Plutonium Exposure -Minimum Requirements* (proposed new standard). Includes plutonium bioassay program design and setup including selection of participants, interpretation of bioassay measurement results, and guidelines for medical intervention.

Institute of Electrical and Electronics Engineers (IEEE)**Developing Standards**

- BSR/IEEE 62582-4-201x, *Standard for Nuclear Power Plants - Instrumentation and Control Important to Safety - Electrical Equipment Condition Monitoring Methods - Part 4: Oxidation Induction Techniques* (proposed revision of IEEE 62582-4-2011). Specifies methods for condition monitoring of organic and polymeric materials in instrumentation and control systems using oxidation induction techniques in the detail necessary to produce accurate and reproducible measurements, including the requirements for sample preparation, the measurement system and conditions, and the reporting of the measurement results.
- BSR/IEEE 62582-2-201x, *Standard for Nuclear Power Plants - Instrumentation and Control Important to Safety - Electrical Equipment Condition Monitoring Methods - Part 2: Indenter Modulus* (proposed revision of IEEE 62582-2-2011). Provides methods for condition monitoring of organic and polymeric materials in instrumentation and control systems using the indenter modulus technique in the detail necessary to produce accurate and reproducible measurements and includes the requirements for the selection of samples, the measurement system and measurement conditions, and the reporting of the measurement results.
- BSR/IEEE 62582-1-201x, *Standard for Nuclear Power Plants - Instrumentation and Control Important to Safety - Electrical Equipment Condition Monitoring Methods - Part 1: General* (proposed revision of IEEE 62582-1-2011). Provides requirements for application of the IEC/IEEE 62582- series of methods for condition monitoring in electrical equipment important to safety of nuclear power plants and includes requirements which are common to all methods that are applicable to electrical equipment containing organic or polymeric materials.
- BSR/IEEE 1786-201x, *Human Factors Guide for Applications of Computerized Operating Procedure Systems at Nuclear Power Generating Stations and other Nuclear Facilities* (proposed revision of IEEE1786-2011). Provides guidance for the

(Continued on next page)

PROPOSED INDUSTRY STANDARDS

application of Computerized Operating Procedure Systems (COPS) concerning the design (i.e., form and function) and use of COPS, but does not provide guidance for the technical content of the operating procedures being presented except as needed to address unique aspects of procedure implementation on COPS.

- BSR/IEEE 690-20XX, *Standard for the Design and Installation of Cable Systems for Class 1E Circuits in Nuclear Power Generating Stations* (proposed revision of ANSI/IEEE 690-2004), provides (1) direction for the design and installation of safety-related electrical cable systems, including associated circuits, in nuclear power generating stations, (2) guidance for the design, installation and performance requirements of those non-safety related cable systems that may affect the function of safety-related systems, and (3) guidance on applications of cable-penetration, fire stops, cable fire breaks, and cable-system enclosures for cable systems for Class 1E circuits.
- BSR/IEEE 1844-201x, *Standard Test Procedure for Determining Circuit Integrity Performance of Fire Resistive Cables in Nuclear Facilities* (proposed new standard). Provides a method for subjecting energized cables to a standard fire exposure to obtain a time rating including power, control, instrumentation and communication cables, and acceptance criteria based on the cable maintaining functionality throughout the prescribed test.

International Organization for Standardization (ISO)

Developing Standards

- ISO/Draft International Standard (DIS) 15690, *Radiological Protection - Recommendations for dealing with discrepancies between personal dosimeter systems used in parallel* (proposed new standard). Voting period ends 9/21/12.

International Electrotechnical Commission (IEC)

Developing Standards

- 112/208/Final Draft international Standard (FDIS), IEC 60544-2 Ed.3: *Electrical insulating materials - Determination of the effects of ionizing radiation on insulating materials - Part 2: Procedures for Irradiation and Test* (proposed revision of IEC

60544-2 Ed.2.0b:1991). Voting period ended 6/22/12. Specifies the controls which shall be maintained over the exposure conditions during and following the irradiation of insulating materials with ionizing radiation prior to the determination of radiation-induced changes in physical or chemical properties. A number of potentially significant irradiation conditions are discussed and various parameters which can influence the radiation-induced reactions under these conditions are specified. Example test reports for a number of materials are also included in appendix A.

International Atomic Energy Agency (IAEA)

Draft standards currently posted for official comment by Member States

- Draft Standard (DS) 441, *Construction of Nuclear Installations* (proposed safety guide). Comment period ended 6/30/12. Applicable to the construction stage of a new nuclear installation and the modification of an existing nuclear installation, including the process of manufacturing and assembling the components, carrying out of civil and architectural work, installation and maintenance of components and equipment, and performing the associated tests. Neither the design nor commissioning stage is included in this Safety Guide, although these stages may overlap with the construction stage. The specific definition of each stage may vary for each organization or country.
- DS433, *Safety Aspects in Siting for Nuclear Installations* (proposed revision of Safety Guide No. SG-S9). Comment period ended 8/3/12. Provides guidance on the siting of a nuclear installation meeting the safety objectives of safety fundamentals and in compliance with safety requirements. Recommendations on criteria and approaches are provided in order to identify suitable sites for nuclear installations complying with established safety requirements. The Safety Guide also has the objective of providing guidance on establishing a logical process for siting and establishing a suite of preferred sites any of which could be selected for the construction and operation of a nuclear installation.

(Continued on next page)

PROPOSED INDUSTRY STANDARDS

- DS421, *Protection of the Public against Exposure Indoors due to Natural Sources of Radiation* (new safety guide). Comment period ended 8/13/12. Provides recommendations on meeting the requirements of IAEA Safety Standards Series No. GSR Part 3, *Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards*, for exposure indoors due to natural sources of radiation in existing exposure situations, with account taken of the recommendations of the International Commission on Radiological Protection. Guidance is provided on the application of the principles of justification and optimization of protection by national authorities when considering control of natural sources of radiation such as radon indoors and radionuclides of natural origin in building materials.

New and Revised Standards

American Nuclear Society (ANS)

Newly Approved Standards

- ANSI/ANS 53.1-2011, *Nuclear Safety Design Process for Modular Helium-Cooled Reactor Plants* (new standard): 12/21/11. Defines the nuclear safety criteria and the design process for a liquid-sodium-cooled reactor plant that is required to support the development of the next generation of nuclear power plants using this technology.
- ANSI/ANS 41.5-2012, *Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation* (new standard): 2/15/12. Establishes criteria and processes for determining the validity of radioanalytical data for waste management and environmental remediation. These applications include site characterization, waste acceptance, waste certification, waste treatment design, process control, risk communication, litigation, and other applications as deemed necessary.
- ANSI/ANS-3.2-2012, *Managerial, Administrative, Phase of Nuclear Power Plants* (supersedes ANSI/ANS 3.2-2006; W2012): 3/20/12. Provides requirements and recommendations for managerial and administrative controls to ensure that activities associated with operating a nuclear power plant are carried out without undue risk to the health

and safety of the public. Provides requirements for implementing managerial and administrative controls consistent with requirements of 10 CFR 50, Appendix B.

International Organization for Standardization (ISO)

Newly Approved Standard

- ISO 2919:2012, *Radiological Protection - Sealed Radioactive Sources - General Requirements and Classification* (revision of ISO 2919:1999): 02/14/12. Establishes a classification system for sealed radioactive sources that is based on test performance and specifies general requirements, performance tests, production tests, marking and certification. It provides a set of tests by which manufacturers of sealed radioactive sources can evaluate the safety of their products in use and users of such sources can select types which are suitable for the required application, especially where protection against the release of radioactive material, with consequent exposure to ionizing radiation, is concerned.

International Electrotechnical Commission (IEC) Technical Committee 45, Nuclear Instrumentation

Recently Published Standards

- BSR/IEEE 338-2012, *Standard for Criteria for the Periodic Surveillance Testing of Nuclear Power Generating Station Safety* (revision of IEEE 338-2006): 3/23/12. Provides criteria for the performance of periodic testing of nuclear power generating station safety systems including the periodic testing of functional tests and checks, calibration verification, and time response measurements, as required, to verify that the safety system performs its defined safety function, but does not include post-maintenance and post-modification testing are not covered by this document. This standard amplifies the periodic testing requirements of other nuclear safety related IEEE standards.
- BSR/IEEE 628-2012, *Standard Criteria for the Design, Installation, and Qualification of Raceway Systems for Class 1E Circuits for Nuclear Power Generating Stations* (new standard): 2/24/12. Contains the

(Continued on next page)

requirements for the design, installation, and qualification of raceway systems for Class 1E circuits external to electric equipment and components for nuclear-power-generating stations.

- BSR/IEEE 1792-2012, *Recommended Practice for Nuclear Power Generating Station Preferred Power Supply Reliability* (revision of IEEE 1792-2011): 1/30/12. Addresses activities related to Preferred Power Supply reliability, including design considerations, analytical studies, operational and maintenance considerations, and interface agreements between a Nuclear Power Generating Station and its associated Transmission Entities.

International Atomic Energy Agency (IAEA)

Recently Published Standards

- IAEA Safety Standards Series No. SSG-15: *Storage of Spent Nuclear Fuel*: 03/27/12. Supersedes the Standard Safety Series publication numbers 116, 117 and 118, which were published in 1994 and covered the design, operation, and safety assessment of spent fuel storage facilities, respectively. It additionally incorporates recommendations addressing the impact of the new developments and complements the Safety Guide on storage of radioactive waste.

Standards Development Organizations Points of Contact Information

American Concrete Institute

Shannon Banchero

Phone: 248-848-3700

E-mail: shannon.banchero@concrete.org

American Institute of Steel Construction

Cynthia Duncan

Phone: 312-670-2400

E-mail: duncan@aisc.org

American Nuclear Society

Patricia Schroeder

Phone: 708-579-8269

E-mail: pschroeder@ans.org

American Society of Mechanical Engineers

Mayra Santiago

Phone: 212-591-8520

E-mail: ansibox@asme.org

ASTM International

Jeff Richardson

Phone: 610-832-9727

E-mail: jrichard@astm.org

Health Physics Society

Nancy Johnson

Phone: 703-790-1745

E-mail: njohnson@burkinc.com

International Electrotechnical Commission

IEC Central Office

Phone: +41 22 919 02 11

E-mail: info@iec.ch

Institute of Electrical and Electronics Engineers

William (Bill) Ash

Phone: 732-562-3806

E-mail: wash@ieee.org

International Organization for Standardization,

Technical Committee 85, Nuclear Energy

Eric Balcaen

Phone: +33 1 41 62 80 00

E-mail: eric.balcaen@afnor.org

International Society of Automation

Charles Robinson

Phone: 919-549-8411

E-mail: crobinson@ISA.org

National Fire Protection Association

Christian Dubay

Phone: 617-770-3000

E-mail: cdubay@nfp.org

PROGRAM INFORMATION

Upcoming Meetings and Workshops

**American National Standards Institute (ANSI)-
Homeland Security Standards Panel (HSSP)
Workshop on Chemical, Biological, Radiological,
Nuclear and Explosives Standards****When:** September 11, 2012**Where:** Arlington, VA**ANSI-HSSP Global Supply Chain Security
Standards Workshop & Annual Plenary Meeting****When:** September 12-13, 2012**Where:** Washington, DC**American Nuclear Society/
Institute of Nuclear Materials Management
Topical Conference: 9th International Conference
on Facility Operations - Safeguards Interface****When:** September 23-28, 2012**Where:** Savannah, GA**International Society of Automation
Automation Week - Technology & Solutions Event****When:** September 24-27, 2012**Where:** Orlando, FL**World Standards Week 2012****When:** October 9-12, 2012**Where:** Washington, DC**American Concrete Institute Convention
Fall 2012 - Forming Our Future****When:** October 21-25, 2012**Where:** Toronto, ON, Canada**American Nuclear Society
2012 Winter Meeting & Nuclear Technology Expo****When:** November 11-15, 2012**Where:** San Diego, CA

TECHNICAL STANDARDS PROGRAM

- **Promotes** the use of voluntary consensus standards at DOE.
- **Manages** and facilitates DOE efforts to develop and maintain necessary technical standards when voluntary consensus standards do not meet DOE needs.
- **Communicates** information on national consensus and departmental technical standards activities to developers and users of technical standards in DOE.

TECHNICAL STANDARDS PROGRAM MISSION

Mission

To enhance DOE's transition to a standards-based culture by providing information, coordinating activities, and promoting the use of consensus standards, and when needed, the development of DOE technical standards.

FOR MORE INFORMATION

To learn more about the DOE Technical Standards Program or to view the *Standards Actions* Newsletters, go to:

www.hss.energy.gov/nuclearsafety/ns/techstds.

Standards Actions is published by the Office of Nuclear Safety, Office of Health, Safety and Security, Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585

Publishing Organization:

Office of Nuclear Safety

Office of Health, Safety and Security

Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585-1290

Editor-in-Chief:

Jeff Feit: 301-903-0471
jeffrey.feit@hq.doe.gov

General/Compiling Editor:

Kathy Knight: 301-903-4439
kathy.knight@hq.doe.govQuestions or
Comments?

Please contact Jeff Feit,
HS-30, Manager,
DOE Technical Standards
Program Office:
301-903-0471 or
jeffrey.feit@hq.doe.gov.