Title: Department of Energy (DOE) Fiscal Year 2013 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. Please include relevant Internet links and links to your agency's standards website.

The Department of Energy (DOE) relies heavily on voluntary consensus standards (VCSs) to fulfill its mission. DOE has a long history of working with the VCS community to develop standards that help DOE achieve its mission with regard to the safety, security, design, operations, and maintenance of its facilities. Where appropriate, VCSs are referenced or invoked in our directives or contracts as the means to meeting our specific requirements.

In accordance with the 2013 OMB Report data call, the DOE Technical Standards Program (TSP) asked for input from all DOE organizations. The request included documentation of new case studies involving the benefits of non-government voluntary consensus standards in DOE work.

We received two noteworthy case studies this calendar year.

1. The American National Standards Institute (ANSI)/American Nuclear Society (ANS)-8.XX standards have helped to normalize regulatory expectations in the area of nuclear criticality safety. In particular, expectations for what constitutes sound emergency procedures, training of workers and nuclear criticality safety engineers, and in the development of sound guidance in the use of non-destructive analysis results for safety determinations. These standards have supported ORNL consultation for the DOE Office of Health, Safety, and Security, and the US NRC Office of Nuclear Material Safety and Safeguards Division of Fuel Cycle Safety and Safeguards. Additionally, the work on the ANSI/ANS-8.XX standards and the ANSI/ANS Consensus Committee N16 has been beneficial in the US participation in IAEA and ISO standards development to the extent that most of the ANSI/ANS-8.XX standards have been transitioned for use in standardizing international safety.

2. American Society of Mechanical Engineers (ASME) Boiler Pressure Vessel Code BPV-I, BPV-V, BPV-VIII, BPV-IX, B31.1 and B31.3 are directly cited in 10 CFR 851 as consensus standards to be applied in the design and construction of pressure equipment to ensure pressure equipment safety at DOE laboratories. DOE's Oak Ridge National Laboratory (ORNL) has

successfully applied these standards in the development and implementation of the Pressure Safety Program required by 10 CFR 851, as cited as a requirement of the Management Contract. The insight and expertise gained from Codes and Standards Committee involvement in these Codes has made it possible for ORNL to establish a leadership position in Pressure Safety among the DOE laboratories.

2a. Codes and Standards Committee involvement in BPV-VIII, BPV-IX, and B31.3 has provided opportunities for championing pioneering Code rule revisions which impact research pressure equipment design and construction for applications at DOE's Oak Ridge National Laboratory. A prime example is the development of a LINAC Cryomodule for the Spallation Neutron Source (SNS) at ORNL, which is fully compliant with the design, construction, and certification requirements of the ASME BPV-VIII Code. This is the first cryomodule known to have this distinction, making it a landmark achievement for pressure equipment safety and ORNL due to its ability to comply with the requirements of 10 CFR 851. It is also notable that the physics performance of this cryomodule exceeded expectations during its initial testing, and is now operating successfully in the Linear Accelerator (LINAC) at SNS. This design has been cited as "the path forward" for LINAC Cryomodule design and construction for the future.

2b. Our well established Code expertise was a significant contributing factor in the successful achievement of the accreditation of UT-Battelle, LLC as the first Federal Inspection Agency (FIA) by the National Board of Boiler and Pressure Vessel Inspectors.

Relevant Internet Links: DOE Technical Standards Program (http://energy.gov/hss/information-center/department-energy-technical-standards-program)

2. Please list the government-unique standards your agency used in lieu of voluntary consensus standards during FY 2012: **0**

3. Please list the Voluntary Consensus Standards (VCS) your agency substituted for Government Unique Standards (GUS) in FY 2012 as a result of review under Section 15(b)(7) of OMB Circular A-119: **0**

4. Please provide the total number of Voluntary Consensus Standards your agency BEGAN to use during FY 2012: Optional: If possible, also please provide the total number of Non-consensus Standards that are developed in the private sector your agency began to use during

FY 2012. 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.

Voluntary Consensus Standards: **6**

Other Technical Standards: **0**

Rationale: Rationale: Throughout the year 2013, DOE had in place a total of 1,800 adopted Voluntary Consensus Standards (VCSs) documented. This was an increase of 6 VCSs from the previous year.

5. Please enter the Voluntary Consensus Standards Bodies (VCSB) in which your agency participated in during FY 2012: **100**

Voluntary Consensus Standards Body	**Acronym**
Air Movement and Control Association	AMCA
Air-Conditioning and Refrigeration Institute	ARI
American Academy of Underwater Sciences	AAUS
American Architectural Manufacturers Association	AAMA
American Association of State Highway and Transportation Officials	AASHTO
American Biological Safety Association	ABSA
American Chemical Society	ACS
American Chemistry Council	ACC
American Concrete Institute	ACI
American Conference of Governmental Industrial Hygienists	ACGIH
American Glovebox Society	AGS
American Industrial Hygiene Association	AIHA
American Institute of Architects	AIA
American Institute of Chemical Engineers	AIChE
American Institute of Steel Construction	AISC
American Iron and Steel Institute	AISI
American Medical Association	AMA
American National Standards Institute	ANSI

American Nuclear Society	ANS
American Petroleum Institute	API
American Public Health Association	APHA
American Railway Engineering & Maintenance-of-Way Association	AREMA
American Society for Nondestructive Testing	ASNT
American Society for Quality	ASQ
American Society of Civil Engineers	ASCE
American Society of Heating, Refrigerating and Air-Conditioning Engineers	ASHRAE
American Society of Mechanical Engineers	ASME
American Trucking Association	ATA
American Water Works Association	AWWA
American Welding Society	AWS
Asphalt Roofing Manufacturers Association	ARMA
Associated Air Balance Council	AABC
Association for Information and Image Management	AIIM
Association for the Advancement of Cost Engineering	AACEI
ASTM International	ASTM
Building Officials and Code Administrators International, Inc	BOCA
Ceilings and Interior Systems Construction Association	CISCA
Compressed Gas Association	CGA
Construction Safety Association of Ontario	CSAO
Cooling Technology Institute	CTI
Crane Manufacturing Association of America	CMAA
Electronic Industries Alliance	EIA
Factory Mutual Research Corporation	FMRC
Glass Association of North America	GANA
Gypsum Association	GA
Health Physics Society	HPS
Illuminating Engineering Society of North America	IESNA
Institute for Interconnecting and Packaging Electronic Circuits	IPC

Institute of Electrical and Electronic Engineers	IEEE
Institute of Makers of Explosives	IME
Institute of Transportation Engineers	ITE
Insulated Steel Door Systems Institute	ISDSI
International Air Transport Association	IATA
International Association of Plumbing and Mechanical Officials	IAPMO
International Atomic Energy Agency	IAEA
International Civil Aviation Organization	ICAO
International Code Council	ICC
International Commission of Non-ionizing Radiation Protection and Measurements	ICNIRP
International Commission on Radiation Protection	ICRP
International Commission on Radiation Units and Measurements, Inc.	ICRU
International Conference of Building Officials	ICBO
International Green Construction Code	IGCC
International Metallographic Society	IMS
International Organization for Standardization	ISO
International Organization for Standardization/International Electrotechnical Commission	ISO/IEC
International Society of Automation	ISA
Metal Building Manufacturers Association	MBMA
Metal Lath/Steel Framing Association, A Division of NAAMM	MLSFA
National Association of Architectural Metal Manufacturers	NAAMM
National Concrete Masonry Association	NCMA
National Council on Radiation Protection and Measurements	NCRP
National Electrical Manufacturers Association	NEMA
National Energy Codes for Buildings	NECB
National Fire Protection Association	NFPA
National Ground Water Association	NGWA
National Information Standards Organization	NISO

National Roofing Contractors Association	NRCA
National Safety Council	NSC
National Window and Door Association	NWDA
NCSL International	NCSLI
Painting and Decorating Contractors of America	PDCA
Plumbing-Heating-Cooling Contractors Association	PHCCA
Portland Cement Association	PCA
Post-Tensioning Institute	PTI
Precast/Prestressed Concrete Institute	PCI
Resilient Floor Covering Institute	RFCI
Scaffolding, Shoring, and Forming Institute, Inc.	SSFI
Screen Manufacturers Association	SMA
Sheet Metal & Air Conditioning Contractors National Association	SMACNA
Single Ply Roofing Institute	SPRI
Society for Environmental Toxicology and Chemistry	SETAC
Society of American Value Engineers	SAVE
Society of Automotive Engineers	SAE
Society of Fire Protection Engineers	SFPE
Steel Deck Institute	SDI
Steel Door Institute	SDI
Steel Joist Institute	SJI
Steel Window Institute	SWI
Underwriters Laboratories	UL
Water Environment Federation	WEF

6. Please provide the total number of your agency's representatives who participated in voluntary consensus standards activities during FY 2012 and the total number of activities these agency representatives participated in:

Agency Representatives: **420**

Activities: **1269**

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 2012.

The Department of Energy does not track conformity assessment activities; however we are considering the value and feasibility of developing such a program in the future.

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

OMB A-119 continues to effectively provide a framework of requirements for DOE's involvement in national VCS standards-setting initiatives and requirements for consideration of VCSs applicable to DOE needs prior to our development of agency specific standards.

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

The Department of Energy and its Standards Executive recognize the valuable role that VCSs play in facilitating the implementation of DOE requirements, and in supporting the Department's mission, strategic themes, and diverse program areas. DOE will continue to participate in and sponsor, as appropriate, VCS initiatives to ensure that the Department's needs and interests are represented in national and international VCS initiatives important to the success of DOE's mission, programs and operations.

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

The Department of Energy uses its Technical Standards Information Systems (TSIS) database to compile data from its field offices and to generate reports in response to many of the OMB report questions. The OMB report questions are addressed based on discussions with DOE elements.

10-1. Removed **[This question ws 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 to compliance purposes)? (a) Yes; (b) No; (c) Not applicable; **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; **C**

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; **Yes**

10-7. How often does your agency review its standards for purposes of updating such use? [enter the number of years]: **5**