

memorandum

DATE:

REPLY TO

ATTN OF: Office of Nuclear and Facility Safety Policy:R. Serbu:301-903-2856

SUBJECT: FY 2000 Annual Report to the Office of Management and Budget

TO: David Michaels, PhD, MPH
Assistant Secretary
Environment, Safety and Health

As Standards Executive for the Department of Energy, I am providing our input for the Fiscal Year 2000 Annual Report to the Office of Management and Budget (OMB) on the Status of Agency Interaction with Voluntary Standards Bodies as required by OMB Circular No. A-119. Included with our input is supplementary information regarding Department of Energy standards and conformity assessment activities related to the principles and objectives of Public Law 104-113 and OMB Circular A-119.

We are providing this information directly to the National Institute of Standards for compilation and integration with the Federal OMB Annual Report in accordance with guidance from the Interagency Committee on Standards Policy. If you have any questions, please contact Richard Serbu, the Department's Technical Standards Program Manager, at (301) 903-2856.

Richard L. Black, Director
Office of Nuclear and
Facility Safety Policy

Attachment

cc: B. Richardson, S-1

Distribution:

Subject – Annual Report to OMB

Serbu - rdr

EH-53 - rdr

J. Fitzgerald, EH-5

R. Serbu, EH-53

D. Williams, ORNL

J. Helfrich, GC-52

J. Feit, EH-53

EH-53

Serbu

/ /00

EH-53

Stark

/ /00

EH-53

Black

/ /00

EH-5

Fitzgerald

/ /00

EH-53:RJSerbu:daj:301-903-2856

Debbi's n:/Serbu/ombmem2000.doc

FISCAL YEAR 2000 ANNUAL REPORT TO THE OFFICE OF MANAGEMENT AND BUDGET

DEPARTMENT OF ENERGY

The Department of Energy (DOE) implements the Federal guidance and requirements of OMB Circular A-119 (OMB A-119) and the statutory requirements of Public Law (PL) 104-113 (15 USC 272) on the use of voluntary consensus standards through specific Departmental directives (policy, requirements, guides, and technical standards) and supporting management systems.

Foremost is DOE's Integrated Safety Management System (ISMS). ISMS is a system that integrates management of DOE's worker, public, and environmental health and safety with its business management, using standards as one of its primary tools.

DOE policies provide the top tier of requirements that implement standards-related Federal Law and Policy. DOE P 251.1, "Directives System," establishes a Directives System for managing DOE requirements and guidance documents. The Directives System focuses on DOE's environment, safety and health requirements and guidance. Technical standards (i.e., as defined in PL 104-113) are a key element of this system. The Directives System policy clearly states DOE's preference to "adopt National Consensus Standards and other commercial and industry standards..." in the conduct of DOE's activities. Directives System documents reference appropriate voluntary consensus standards that are acceptable for meeting requirements. This policy also limits the use of mandated government-unique standards in DOE rulemaking, Orders, and procurement processes.

Another policy, DOE P 410.1A, "Promulgating Nuclear Safety Requirements," requires notice and comment to promulgate new nuclear safety requirements. New nuclear safety requirements developed by DOE are "performance-based" rules and orders that promote the adoption of voluntary consensus standards as acceptable methods to implement requirements. DOE also specifies responsibilities for managers and organizations in managing and implementing PL 104-113 and OMB A-119 requirements in its "Functions and Responsibilities (FAR) Manual."

These DOE policies, requirements, and responsibilities on the use of voluntary consensus standards are implemented at the working level through a DOE-wide management system and infrastructure established through DOE Order 252.1, "Technical Standards Program," an accompanying program Guide, DOE-G-252.1-1, "Technical Standards Program Guide," and Technical Standards Program Procedures (TSPPs).

DOE Order 252.1 establishes the DOE Technical Standards Program (TSP), which implements most Federal and DOE technical standards requirements, and manages internal standards development activities across DOE. DOE O 252.1 incorporates references to PL 104-113 and the February 1998 revision to OMB Circular A-119. This

Order reinforces the Federal requirement for DOE elements to use voluntary consensus standards in preference to Federal and DOE (i.e., government-unique) standards, consistent with PL 104-113 and OMB A-119. The TSP further encourages and supports staff participation in the planning, development, and coordination activities of national and international Standards Development Organizations.

The TSP Guide and TSPPs provide information on the TSP functions and management, program resources and services, and the DOE processes and procedures for selecting, developing, and maintaining DOE Technical Standards and using voluntary consensus standards. The TSP Guide also provides basic information on reporting the use of government-unique standards in both regulation (DOE is nominally self-regulating in key areas such as nuclear safety) and procurement (where most reporting is category-based). The DOE TSP is developing additional reporting procedures to assist program officials conducting procurements. The DOE TSPPs incorporate working level processes that implement the technical standards provisions of PL 104-113 and OMB A-119. DOE currently manages its technical standards activities in conformance with Federal policy and requirements.

Another function serving DOE implementation of PL 104-113 and OMB A-119 was the Department Standards Program, established to institute "standards" (in this application, "standards" include policy, laws, rules, guides, and technical standards) as the basis for work throughout the Department. Under this program, a DOE-wide process (the "Work Smart Standards" process) that enables DOE contractors to select voluntary consensus standards as the basis for their work was developed and implemented. Under the process, voluntary consensus standards can be selected and used in-lieu-of DOE-developed or other government-unique standards, when such standards are appropriate for the work and work-related hazards. This "Work Smart Standards" process now enables DOE laboratory and management and operating or integrating contractors, with DOE approval, to identify and apply the set of standards (including voluntary consensus standards) that best fit their activities and adequately address related hazards. This approach focuses on outcomes and performance, rather than detailing "how" things are to be done within DOE. The process is part of the DOE ISMS and is supported by a major contract reform effort designed to more closely link performance expectations with contractual obligations based on standards.

Key DOE policy and requirements documents define the "Work Smart Standards" approach. These include DOE P 450.3, "Authorizing Use of the Necessary and Sufficient Process for Standards-Based Environment, Safety and Health Management," and DOE M 450.3-1, "The Department of Energy Closure Process for Necessary and Sufficient Sets of Standards." The "Work Smart Standards" approach is now applied across a broad range of DOE sites, facilities, and activities. During FY2000, DOE developed updates of guidance and standards to support the "Work Smart" process.

The DOE Standards Executive, Richard L. Black, Director, Office of Nuclear and

Facility Safety, is responsible for developing and implementing the DOE TSP through DOE's Technical Standards Program Manager and the TSP. Through Mr. Black's participation on the Interagency Committee on Standards Policy, DOE supports ICSP activities and policy implementation, and provides "lessons-learned" information to other Federal agencies on the DOE's approach to establishing a standards-based culture.

As noted above, DOE Order 252.1 emphasizes the use of voluntary consensus standards within the Department. DOE's Technical Standards Program Office (TSPO) operates under this order to implement program policy, support the conversion of Department standards to voluntary consensus standards, identify voluntary consensus standards that can suit Department needs, develop and maintain data bases to support the program and meet reporting requirements, and coordinate day-to-day Department technical standards activities. The TSPO has developed procedures, methods, and training approaches to implement the DOE TSP and communicate the policy to use voluntary consensus standards throughout DOE, and support participation in Standards Development Organization activities related to DOE missions and functions. The TSPPs establish a five-year standards review cycle to check for continued applicability. The procedures also provide guidance on the conversion of Department standards to voluntary consensus standards.

Information on the TSP and the TSPO can be accessed at the following Internet address (URL):

<http://tis.eh.doe.gov/techstds/>

To coordinate consistent implementation of Federal and DOE policy and requirements at the working level, DOE senior managers have designated Technical Standards Managers (approximately 70 individuals) representing the various Department headquarters, field, laboratory and contractor organizations. Established in 1992, the Technical Standards Managers' Committee (comprised of these Technical Standards Managers) operates under the DOE TSP, supports the DOE sites in technical standards activities, facilitates communications on program implementation issues, and participates in establishing program goals and procedures. Data bases documenting the voluntary consensus standards adopted by DOE and the personnel participating in the activities of Standards Development Organizations are maintained by the TSPO. The information in these data bases is compiled and provided to OMB annually.

During FY 2000, the TSP continued the recognition of "topical" standards committees within DOE. Topical Committees provide a venue for DOE-wide coordination with national and international Standards Development Organizations and other Federal agencies in such diverse areas as laboratory accreditation, metrology, fire protection, environmental management systems, meteorology, biota dose assessment, chemical safety, emergency management, and nuclear safety training. These committees are

composed of subject matter experts from across the DOE community, and serve as a focal point for standards activities in specific technical areas. The topical committees provide a forum for all interested DOE parties to join and participate in reviewing technical standards produced by counterpart Standards Development Organizations, address standards application issues within their area of technical expertise, and work to develop DOE and Federal positions on standards issues. As of November 2000, the TSP has recognized 25 DOE topical committees. (These committees are listed at the Internet address provided above.)

DOE also has an Information Technology Standards Program (Internet address is <http://www-it.hr.doe.gov/Standards/index.html>) that is conducted in conjunction with the DOE TSP. The DOE Information Technology Standards Program is managed by staff from DOE's Office of the Chief Information Officer with assistance from over 70 designated DOE and contractor Information Technology Points-of-Contact representing key programs and sites. It coordinates information technology standards activities Department-wide, including the identification, adoption, implementation, and retirement of non-government and government information technology standards in support of the DOE Information Architecture. This program has stressed the use of international and voluntary consensus information technology standards over development of internal standards in its adoption processes.

The Department also implements a legislatively mandated, multi-year effort to improve the energy efficiency in the Nation's buildings through energy efficiency standards, codes and guidelines for buildings, building equipment, and appliances through its Office of Energy Efficiency and Renewable Energy (Internet address is <http://www.eren.doe.gov/>). The Department's codes and standards development efforts in these areas are closely coordinated with standards development organizations and include early involvement of industry and state stakeholders and relevant Federal agencies. During FY 2000, DOE developed and issued new energy efficiency standards as part of an open, negotiated process with the lighting industry and energy efficiency advocates. These included standards for improvements in the energy efficiency of fluorescent lamp ballasts in commercial and industrial applications (to go into effect on April 1, 2005), and energy efficiency standards for residential central air conditioners and heat pumps (proposed October 3, 2000.).

DOE continues to take a "pro-active" approach to standards and standards management even as its mission continues to evolve in response to the conclusion of the Cold War and shrinking Congressional appropriations. Within DOE, a number of programs and facilities have shifted their focus from production, research, and/or development to environmental remediation and restoration, where DOE will literally be breaking new ground and setting standards for others to follow. In addition, Department staffing levels are declining to meet Congressional budget constraints. Still, in the face of a changing mission and a reduced work force, DOE continues to actively use and support the development of voluntary consensus standards to meet its needs.

In FY 2000, the number of voluntary consensus standards adopted for use increased to 1,012 (in comparison to 916 in 1999, 840 in 1998, and 809 in 1997). The number of individuals participating in voluntary consensus standards activities also increased to 676 in FY2000 (in comparison to 668 in 1999, 681 in 1998, and 871 in 1997), and the number of documented participations by those individuals in standards developing groups increased to 1385 (in comparison to 1306 in 1999, 1321 in 1998, and 1540 in 1997). These increases occurred in spite of continued significant “downsizing” and budget cuts experienced by DOE, and reflects increased interest on the part of DOE organizations.

Also, DOE (through the TSPO) is continuing its initiative with Standards Development Organizations to convert DOE Technical Standards to voluntary consensus standards.

In accordance with the reporting requirements iterated in OMB A-119, the attached information has been developed for the OMB Annual Report and is being submitted to NIST to report use of voluntary consensus standards within DOE and DOE participation in standards development activities. The information includes both mandatory agency reporting requirements and voluntary conformity assessment reporting information.

The following are mandatory agency reporting requirements:

1. Number of voluntary consensus standards bodies in which the agency participates;

Response: 59

2. Number of agency employees participating in voluntary consensus standards activities

Response: 676 (These individuals were involved in 1384 activities due to multiple participations.)

3. Number of voluntary consensus standards that the agency has used during FY 2000

Response: 1,012 - This is based on the number of voluntary consensus standards actively used by DOE Federal and DOE contractor organizations directly in support of DOE missions and functions, as stated in DOE Directives, contracts, safety analysis reports, standards/requirements identification documents, work smart standards sets, and other operating basis documents for DOE facilities.

4. Identification of voluntary consensus standards that have been substituted for government-unique standards

Response: 1 - ANSI/ISO/ASQ Z1.13-1998 (replacing DOE-ER-STD-6001-92)

5. As required by P.L. 104-113, identification of all instances when the agency used government-unique standards in lieu of voluntary consensus standards (for each instance, include agency rationale for such use, as well as the specific government-unique standard used and the voluntary consensus standard that was not selected);

Response: NONE - DOE did not mandate the use of any government-unique standards in lieu of suitable voluntary consensus standards during FY 2000.

6. Evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

Response: The guidance in OMB Circular A-119 appears to be sufficient in terms of outlining the basic functions and responsibilities of Federal agency standards management and standards participation activities. It allows sufficient latitude for each Federal agency to develop its own approach tailored to specific agency needs, and places the emphasis on outcomes rather than processes. Some simplification and clarification of transactional and categorical reporting may be necessary.

The following provide voluntary agency reporting guidance:

7. Conformity assessment activities in which the agency has been involved in the reporting period as described in the Federal Register, Vol. 65, No. 155, Thursday, August 10, 2000, Guidance on Federal Conformity Assessment Activities;

Response: National Voluntary Laboratory Accreditation Program (NVLAP); Department of Energy Laboratory Accreditation Program (DOELAP); National Cooperation for Laboratory Accreditation (NACLA); DOE Voluntary Protection Program (VPP); and assessment, certification, and testing done under DOE Topical Committees (TCs), including the Metrology TC, Accreditation TC, Environmental Management Systems TC (EMS TC), Quality Assurance Special Interest Group/Topical Committee (QA SIG TC), High Efficiency Particulate Air (HEPA) Filter Qualification Testing /HEPA TC, Biota Dose Assessment Topical Committee (BDATC), and Meteorology TC.

8. Agency examples or case studies of standards successes:

Response: Information on Voluntary Reporting on Federal Conformity Assessment Activities for the Department of Energy (DOE) Annual Report - The Department of Energy (DOE) is involved in several conformity assessment activities, including:

National Voluntary Laboratory Accreditation Program (NVLAP) - DOE facilities, including Sandia National Laboratories, Pacific Northwest National Laboratory, Honeywell Federal Manufacturing and Technologies, Bechtel BWXT Idaho, and Oak Ridge Metrology Center, are accredited under National Institute of Standards and Technology (NIST) NVLAP to perform calibrations in a variety of metrology parameters, including dimensional, radiation, physical, and electrical metrology. The scope of accreditation of each laboratory can be obtained from the NVLAP web site located at <http://ts.nist.gov/ts/htdocs/210/214/214.htm>.

Department of Energy Laboratory Accreditation Program (DOELAP) - Through DOELAP, DOE establishes specific performance testing requirements and site assessment criteria for accreditation of DOE personnel dosimetry systems and radiobioassay. DOELAP incorporates standards (including ISO/IEC Guide 25, *General Requirements for the Competence of*

Calibration and Testing Laboratories, Health Physics Society (HPS) Standards, and DOE Technical Standards), establishes DOE organizational responsibilities and accreditation processes, and establishes procedures for administering DOELAP and for acquiring accreditation. DOELAP evaluates the respective DOE personnel dosimetry or radiobioassay program's laboratory performance, based on performance testing criteria, and their operational competence, based on established "quality system" criteria regarding good laboratory practice. DOELAP is used for worker monitoring and protection at DOE and DOE contractor sites and facilities, as required in Title 10, Code of Federal Regulations, Part 835, "Occupational Radiation Protection."

National Cooperation for Laboratory Accreditation (NACLA) - DOE representatives have been active in founding and supporting NACLA, and are currently member organizations of NACLA and participate in managing NACLA activities. NACLA recently recognized its first three competent accreditation bodies and has signed an important Memorandum of Understanding with NIST.

DOE Voluntary Protection Program (VPP) - DOE has established VPP criteria for its facilities' occupational safety and health programs, based on the Occupational Safety and Health Administration's (OSHA) VPP. These criteria establish a baseline that denotes compliance with all occupational safety and health standards, rules, and regulations. DOE conducts on-site evaluations to establish how successful DOE applicants for VPP have exceeded the baseline criteria.

DOE Topical Committees (TCs) - The Department of Energy Technical Standards Program (TSP), within DOE's Office of Environment, Safety and Health, has chartered a number of DOE Topical Committees that directly and indirectly advocate and support conformity assessment activities across DOE. These topical committees are composed of DOE and DOE contractor subject matter experts, and generally include members and observers from other federal agencies, industry, and standards development organizations. The TCs are chartered to coordinate with these groups on standards activities, including conformity assessment. DOE Topical Committees involved in conformity assessment activities include the following:

Metrology TC - Comprised of representatives from laboratories across the DOE complex, the Metrology TC coordinates the efforts of many DOE organizations involved in metrology and actively interacts with NIST, NASA, DOD and other Federal agencies in its activities. The group has developed a web site (<http://www.sandia.gov/metrology/mchome.html>) that contains information on metrology capabilities at the various DOE laboratories, past meeting minutes, committee members and contacts, white papers on metrology issues, and future meeting announcements. The group is in the process of developing information on calibration uncertainty analysis procedures and supplier certification programs used in the various DOE laboratories.

Accreditation TC - Comprised of representatives from laboratories across the DOE complex, the Accreditation TC promotes unified laboratory accreditation activities across DOE and actively interacts with NACLA, ASCI, ISO and other organizations to promote nationally and internationally recognized accreditation standards. The group has also developed a web site (<http://www.sandia.gov/accreditation/>) that contains information on past committee meetings, committee membership and contacts, and white papers on accreditation issues.

Environmental Management Systems TC (EMS TC) - The EMS TC provides information

and assistance to DOE organizations interested in establishing ISO 14000 certified environmental management programs.

Quality and Safety Management Special Interest Group/Quality Assurance Topical Committee (QSM SIG/QA TC) - The QA TC develops, improves, and provides management information related to quality and safety issues involving the U.S. Department of Energy (DOE) community, including information and assistance to DOE organizations interested in ISO9000 criteria or a move from DOE specific standards to industry consensus standards.

High Efficiency Particulate Air (HEPA) Filter Qualification Testing/HEPA TC - The DOE conducts functional and quality testing of HEPA filters, used in critical applications at DOE facilities, at a designated facility for HEPA filters to ensure conformance with ASTM standards and to help ensure adequate performance in safety applications.

Biota Dose Assessment Topical Committee (BDATC) - The BDATC has broad representation from DOE Offices, national laboratories, universities, and the private sector. The BDATC brings together the expertise in health physics, radioecology, environmental monitoring, and risk assessment as a resource base for DOE on biota dose assessment. It coordinates these interests to establish common standards and processes for biota dose assessment across DOE, the US, and internationally. Through its standard, the BDATC provides radiation dose evaluation methods that can be used to meet DOE requirements. The international community, including the IAEA and the Atomic Energy Control Board (AECB) of Canada, are interested in broader application of the DOE BDATC standard.

Meteorology TC - The DOE Meteorology TC (MTC) works across DOE, with other Federal agencies, and with ANS to help promote the use of ANS 3.11 as a replacement for various agency standards. The MTC can also provide on-site evaluations of on-site meteorology programs to support implementation of the new ANS 3.11 standard.