

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

August 12, 1999

MEMORANDUM TO:

John W. Craig, NRC Standards Executive

Division of Engineering Technology Office of Nuclear Regulatory Research

THRU:

Gilbert C. Millman, Standards Coordinator

Materials Engineering Branch Division of Engineering Technology Office of Nuclear Regulatory Research

FROM:

Wallace E. Norris Vallace & Morning

Materials Engineering Branch Division of Engineering Technology Office of Nuclear Regulatory Research

SUBJECT:

MINUTES OF MAY 26, 1999, COORDINATION MEETING BETWEEN

NRC AND STANDARDS DEVELOPMENT ORGANIZATIONS

Attached are the minutes from the public meeting with the standards development organizations (SDOs) which the NRC hosted on May 26, 1999. The concept of coordination meetings to foster better communication between NRC and the SDOs was proposed by SDO representatives at an NRC public workshop on standards held in Chicago in September 1998. The purpose of this meeting was to: (1) foster better communication between SDOs and NRC regarding standards development and use; (2) provide SDOs with the opportunity to describe their on-going activities; and (3) alert the NRC to specific standards that are being developed or revised that may be utilized by the NRC to meet its regulatory needs.

Feedback from the meeting participants was very positive. The NRC committed that, at least initially, it would coordinate future meetings approximately twice a year. The next meeting is proposed for November 16, 1999, at NRC headquarters.

Attachments: 1. Minutes from public meeting with SDOs

2. List of meeting participants

A. Thadani

RES-5A

PORORG

MINUTES - MAY 26, 1999, COORDINATION MEETING NRC AND STANDARDS DEVELOPMENT ORGANIZATIONS

Background

On May 26, 1999, the NRC hosted the first coordination meeting with the standards development organizations (SDOs) that develop standards used by the nuclear industry. The purpose of the meeting was to foster better communication between SDOs and the NRC regarding the development and use of standards. The concept of coordination meetings to foster better communication between NRC and the SDOs was proposed by SDO representatives at an NRC public workshop on standards that was held in Chicago in September 1998. Subsequently, NRC SECY-99-029¹, "NRC Participation in the Development and Use of Consensus Standards," identified coordination meetings with SDOs as an important part of the NRC standards effort (see Attachment 1).

The Commission has directed the NRC staff to use consensus standards to increase the involvement of licensees and others in the NRC's regulatory development process, consistent with the provisions of Public Law (P.L.) 104-113, the National Technology and Transfer Act of 1995, and Office of Management and Budget (OMB) Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and Conformity Assessment." As part of this commitment, periodic coordination meetings with key SDOs and other stakeholders will be held to foster better communication regarding the SDOs' ongoing activities and the NRC's needs regarding standards development. NRC SECY-99-029 provides the NRC staff recommendations to the Commission on certain aspects of NRC interactions with standards bodies.

Organizations in Attendance

The organizations attending were the American Concrete Institute (ACI), American Nuclear

¹ SECY stands for the Office of the Secretary which provides executive management services to support the Commission and to implement Commission decisions.

Society (ANS), American Society of Civil Engineers (ASCE), American Society of Mechanical Engineers (ASME), American Society for Testing and Materials (ASTM), Health Physics Society (HPS), Institute of Electrical and Electronics Engineers (IEEE), International Society of Instrumentation (ISA) (formerly Instrument Society of America), National Fire Protection Association (NFPA), Nuclear Energy Institute (NEI), and the NRC. A list of participants is provided in Attachment 2.

NRC Presentations and Discussion

John Craig, NRC Standards Executive, opened the meeting by emphasizing the NRC's commitment to use standards as much as practicable and acknowledging that the SDOs have expressed a desire for the NRC to increase interactions with the SDOs. Five major topics were introduced for discussion by Mr. Craig. They were policy, risk-informed standards, timeliness, level of NRC participation, and P.L. 104-113. The NRC slide presentation is provided in Attachment 3. The discussions on these areas are summarized below.

- (1) Policy: Specific technical issues are routinely discussed at the SDO committee level. However, the dissolution of the ANSI Standards Nuclear Board (SNB) left a void with respect to an intersociety policy-setting group. It was noted that the organizations participating in this meeting could fill that void by addressing policy issues such as standards implementation problems, needs, and priorities.
- (2) <u>Risk-Informed Standards</u>: The NRC is using risk-informed and performance-based requirements where possible. A number of organizations stated that this is an industry trend, and they are presently developing such standards.
- (3) <u>Timeliness</u>: The length of time between identification of the need for a standard and endorsement by the NRC is excessive. Some SDOs are presently implementing trial standards development and approval programs in an attempt to speed up the process. The SDOs expressed a desire for the NRC to endorse standards in a more timely manner. The NRC has initiated efforts to examine its endorsement process with that

goal in mind. It was noted that the ASCE writes technical direction documents on occasion in lieu of developing a standard. It is faster and cheaper.

The mechanisms available to the NRC for endorsing industry standards were discussed (e.g., regulations, regulatory guides, NUREGs). Several SDOs expressed a desire to see more of their standards endorsed.

- (4) <u>Level of NRC Participation</u>: NRC staff participation on standards writing committees was discussed. Most SDOs believe that the NRC should increase its participation in the development of standards as this would ensure that a standard meets a regulatory need. In addition, some SDOs stated that the NRC staff's technical expertise improves the quality of their standards.
- (5) P.L. 104-113: During the discussion of the requirements of the public law and OMB Circular A-119, a question was raised regarding whether Federal agencies should request an SDO to develop a standard. The circular specifically states that an agency should approach an SDO rather than develop its own standard. Some SDOs pointed out that, since they were not obligated to any one entity, they did not see any problem with an agency approaching them. Alternatively, the SDOs do not write requirements; that is the agency's responsibility. The SDO is not driven by the regulatory process but is aware of it. The HPS stated that they meet twice a year with cognizant agencies, which prevents any one agency from driving an issue. The ASME pointed out that it has representatives from other societies on its committees, and that this may be something other SDOs should consider.

Several specific items were discussed by the NRC staff. Cyndi Jones, NMSS, discussed ANSI N13.30, "Performance Criteria for Bioassay." After two major incidents involving internal radioactive material contamination to over 25 individuals, the NRC requested assistance from ANSI to develop guidance on this issue. Guidance for industry was developed for bioassay sampling and emergency management of persons contaminated accidentally. This has been a successful collaboration in which both the industry's and the regulator's needs have been

served.

Another item discussed by Ms. Jones was ANSI N13.36, "Ionizing Radiation Safety Training for Workers." Because an NRC representative was not aware of P.L. 104-113, the positions given to the committee were the individual's and not the NRC's, and the resulting standard conflicted with part of the NRC's regulations. The differences have been resolved, but this pointed out the need for the NRC to better coordinate input to standards activities.

John Craig discussed the development of the PRA standard. The NRC initially contacted the ASME to develop a PRA standard because of prior ASME efforts in this area. It became apparent as the effort progressed, however, that the ANS also had valuable expertise. Had organizational capabilities and oversight authority been better characterized, initiation of this effort would have been smoother. The effort is now progressing well with ANS and ASME sharing development responsibility. To avoid problems in the future, it would be beneficial to develop more detailed scopes and capabilities for the SDOs, and to promote better communication between SDOs.

Mr. Craig also discussed the effort between NRC and ASTM. The loss of coatings in containment can result in safety-related problems. The NRC contacted ASTM regarding the need for industry standards in this area. This effort has resulted in a much better understanding of containment coating performance, areas for future revisions of ASTM standards were identified, and a draft NRC regulatory guide has been issued that proposes to endorse numerous ASTM standards related to protective coatings. This exemplifies how SDOs and Federal agencies can work together to resolve issues and provide solutions to industry problems.

SDO Presentations and Discussion

Each SDO representative spent a few minutes discussing that organization's scope and any major efforts presently under way. Following are noteworthy items from these presentations (the name of the SDO representative precedes each item):

- Bill Plenge: ACI believes one of the challenges for the SDOs is to get away from the
 prescriptive nature of standards. However, it was noted that a standard must contain
 sufficient detail for all users.
- Les Ettlinger, Bill Hopkins: ANS initiates a dozen charters for new standards every meeting. Two of the more important areas are decommissioning and risk. Standards need to address safety, taking economics into account. The SDO should deliver a standard that is technically sound. The ANS presentation slides are in Attachment 4.
- Jim Rossberg: ASCE presently has a 30-day comment period for new standards. It was recognized that 30 days may not be sufficient for agencies to review a standard and arrive at an agency position.
- Felicia Quinzi: There are over 10,000 ASTM standards, and the ASTM believes that the NRC should endorse and reference more of them. NRC participation on ASTM committees and comments on draft standards provides significant benefits. The ASTM presentation is provided in Attachment 5.
- John Ferguson, Gerry Eisenberg: The ASME believes it is important to maintain continuity. They believe that the NRC and ASME have common goals, and they see the relationship as a partnership. It is clear that the industry will need to do more with less, and the SDOs need to better understand how standards are used. It is recognized that the ASME Code development redesign process may conflict with agency needs for review; i.e., not enough time for NRC review. A copy of the ASME publication *The NCS Communicator*, which is used to communicate standards news to its volunteers and users, is Attachment 6.
- Jack Fix, Joseph Ring: HPS is careful that the standards being developed are really needed. The HPS presentation is Attachment 7.
- Dennis Bodson, Wes Bowers: IEEE believes that the SDOs need to find a way to

develop standards faster, and the regulatory agencies need to find a way to endorse those standards in a more timely manner. The NRC should update its regulatory guides with the newer standards.

- Lois Ferson: ISA has active participation by utilities. Frequently, they develop two standards on the same subject, one for nuclear and one for non nuclear. They would like to see a list of the nuclear standards needed for the next five years. An item of note is that both ISA and ASME have standards on instrument air.
- Alex Merion: Utilities need to receive value from standards. One question that should be asked is "To what extent should standards be applied in a very heavily regulated industry?" NEI believes that standards are used for two purposes: to capture current practice and to enable new technology. In addition, Mr. Merion made the following points: (1) standards must be written in a timely manner with the right technical input, (2) the process should dictate the product, and (3) organization representatives are needed instead of individuals.
- Tony O'Neill: NFPA deals mainly at the State and local level. Tony noted that there has been a tremendous increase in interest from government agencies regarding fire protection standards as a result of the "National Transfer and Technology Act of 1995" and "OMB Circular A-119."

Conclusions

The NRC committed, at least initially, to coordinating future meetings approximately twice a year. Because the resources being devoted to standards activities are diminishing and standards activities are important to the industry, the meeting participants believe that regular interaction is critical. One proposal was that the next meeting should occur on November 16, 1999, at NRC headquarters.

John Craig, NRC Standards Executive, thanked everyone for attending and participating in a

successful meeting. It will be assumed that the participant for each organization at this meeting is the contact for the next meeting unless comments are received to the contrary. There was a suggestion to invite the Department of Energy and a question as to whether additional government agencies should be invited to the next meeting. In preparation for the next meeting, each SDO will define near-term and long-term needs for discussion.

ATTENDANCE LIST FOR SDO MEETING

Felicia Quinzi, Staff Manager
ASTM
Technical Committee Operations Division
Committee E10, Nuclear Technology and Applications
Committee C26, Nuclear Fuel Cycle
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Telephone: (610)832-9738

Fax: (610)832-9666 E-mail: fguinzi@astm.org

Jack Fix, Chair HPS Standards Committee 107 Jackson Court Richland, WA 99352 Telephone: (509)375-2512 Fax: (509)375-6936

E-mail: jackfix@pnl.gov

Lois Ferson Instrumentation Society of America (ISA) 67 Alexander Drive Research Triangle Park, NC 27709 Tel: (919)990-9227

Fax: (919)549-8288 E-mail: <u>|ferson@isa.org</u>

Antony R. O'Neill NFPA 1110 N. Glebe Road Arlington, VA 22307 Tel: (703)516-4346 Fax: (703)516-4350 E-mail:wdc@nfpa.org

Gerry M. Eisenberg, Director Codes and Standards ASME 3 Park Avenue New York, NY 10016 Tel: (212)591-8510 Fax: (212)591-8501 E-mail:eisenberg@asme.org John H. Ferguson ASME 143 Rope Ferry Road Niantic, CT 06385 Tel: (860)444-4347 E-mail:fergie147@aol.com

Bill Hopkins ANS Bechtel Power Corporation 9801 Washington Blvd. Gaithersburg, MD 20878 Tel: (301)417-3341

Tel: (301)417-3341 Fax: (301)869-7084

E-mail:whopkins@bechtel.com

Dennis Bodson IEEE 233 N. Columbus Street Arlington, VA 22203 Tel: (703)243-3743 Fax: (703)522-4342

E-mail:d.bodson@ieee.org

Jim Rossberg ASCE 1801 Alexander Bell Drive Reston, VA 20191 Tel: (703)295-6196 Fax: (703)295-6361

E-mail: irossberg@asce.org

Lester Ettlinger ANS 1987 Greenberg Road Baltimore, MD 21209 Tel: (410)664-0955 E-mail: lettling@erols.com

Daniel W. Falconer, Managing Director Engineering American Concrete Institute P.O. Box 9094 Farmington Hills, MI 48333-9094 Tel: (248)848-3726

Fax: (248)848-3720

E-mail: dfalcone@aci-int.org

Bill Plenge (Attended Meeting for)

(410)255-0344

Plengejr@aol.com

Wes Bowers

IEEE

Tel: (717)456-3581

E-mail: wbower@peco-energy.com

Joseph Ring

HPS

Tel: (617)495-8795 Fax: (617)495-0593

E-mail: josephring@harvard.edu

Tawfik M. Raby
Deputy Director, NCNR
National Institute of Standards & Technology
100 Bureau Drive, Stop 8561
Gaithersburg, MD 20899-8561
Phone: 301-975-6257

Fax: 301-975-9427 E-mail: <u>raby@nist.gov</u>

Alex Merion Nuclear Energy Institute 1776 I Street N.W. Suite 300 Washington, DC 20006-3708

Phone: 202-739-8080 Fax: 202-785-1898 E-mail: <u>am@nei.org</u>

Frank Cherny

Division of Engineering Technology
Office of Nuclear Regulatory Research, NRC

Phone: 301-415-6786

Paul Gill

Division of Engineering
Office of Nuclear Reactor Regulation, NRC

Phone: 301-415-3316

David Terao
Division of Engineering
Office of Nuclear Reactor Regulation, NRC
Phone: 301-415-3317

Joel Page

Division of Engineering Technology Office of Nuclear Regulatory Research, NRC

Phone: 301-415-6784

Ronald Zelac

Division of Industrial and Medical Nuclear Safety
Office of Nuclear Material Safety and Safeguards, NRC

Phone: 301-415-6316

Keith Wichman

Division of Engineering

Office of Nuclear Reactor Regulation, NRC

Phone: 301-415-2757 Fax: 301-415-2444 E-mail: kew@nrc.gov

N. Prasad Kadambi

Division of Regulatory Applications

Office of Nuclear Regulatory Research, NRC

Phone: 301-415-5896 Fax: 301-415-5385 E-mail: npk@nrc.gov

Alexander Adams

Division of Reactor Program Management Office of Nuclear Reactor Regulation, NRC

Phone: 301-415-1127 Fax: 301-415-3313 E-mail: <u>axa@nrc.gov</u>

Gene Imbro

Division of Engineering

Office of Nuclear Reactor Regulation, NRC

Phone: 301-415-23288 E-mail: exi@nrc.gov

Owen Gormley

Division of Engineering Technology

Office of Nuclear Regulatory Research, NRC

Phone: 301-415-6793

Geary Mizuno

Office of the General Counsel

Phone: 301-415-1639 E-mail: gsm@nrc.gov