

STATEMENT FOR THE RECORD
BY THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

TO THE
SUBCOMMITTEE ON TECHNOLOGY
COMMITTEE ON SCIENCE
UNITED STATES HOUSE OF REPRESENTATIVES

CONCERNING
NRC IMPLEMENTATION OF NATIONAL TECHNOLOGY TRANSFER
AND ADVANCEMENT ACT (NTTAA) OF 1995

SUBMITTED BY
MR. ASHOK THADANI
DIRECTOR, OFFICE OF NUCLEAR REGULATORY RESEARCH

SUBMITTED: MARCH 15, 2000

U.S. NUCLEAR REGULATORY COMMISSION
IMPLEMENTATION OF NATIONAL TECHNOLOGY TRANSFER
AND ADVANCEMENT ACT OF 1995 TESTIMONY

Madam Chairwoman and members of the committee, my name is Ashok Thadani. I am Director of the Office of Nuclear Regulatory Research. The Office of Nuclear Regulatory Research has responsibility for coordinating the NRC agency-wide standards program. The NRC Standards Executive, Mr. Michael Mayfield, is the Acting Director for the Office of Nuclear Regulatory Research's Division of Engineering Technology. I thank you for the opportunity to submit information on NRC's implementation of the National Technology and Transfer Act of 1995. I will focus my testimony on questions posed by the committee on the NRC's progress toward compliance, difficulties encountered in compliance, and the level of resources devoted to complying with the Act.

Progress Toward Compliance with Section 12 of the Act

The Act has clearly increased the focus of NRC and its stakeholders, especially the standards-developing community, on the use of standards in the NRC regulatory process. Although the NRC and its predecessor, the AEC, have used consensus standards as part of the regulatory process since the early 70s, the Act has renewed the sensitivity of NRC and its stakeholders to benefits inherent in their use.

NRC's compliance with the Act was in three phases. The first was information gathering. In response to the government-wide effort to assess and rebaseline each agency's programs, the NRC published a series of papers in September 1996 as part of its Strategic Assessment and Rebaselining Initiative. One of the papers, "Role of Industry," identified options for placing

further emphasis on industry activities as an alternative to NRC regulatory actions. A major topic of that paper was the use of voluntary consensus standards as an option for improving the effectiveness and efficiency of the regulatory process. Stakeholders preferred this option and expressed their views at a series of public meetings on the full scope of strategic assessment issues. NRC subsequently held a public meeting to gain insights on issues related to its participation in the development and endorsement of consensus standards. The meeting highlighted the importance of timely endorsements and enhanced communications with the standards-developing organizations.

In the second phase, we developed a program for carrying out the Act. A new management directive on NRC's participation in the development and use of consensus standards details the program. The program merges the requirements of the Act, the provisions of Office of Management and Budget (OMB) Circular A-119, information gained from stakeholder meetings, and Commission direction on the use of consensus standards. The Commission directed the staff to involve stakeholders more in the NRC regulatory development process; to encourage more staff participation in developing consensus standards in support of its mission; and to encourage industry to develop codes, standards, and guides that the NRC can endorse and that industry can carry out.

The management directive defines the NRC's organizational responsibilities for standards activities and provides direction for NRC staff participation in the development and use of consensus standards. Specifically, the management directive requires NRC offices:

- To identify and prioritize technical standards that are needed, both new and revisions of existing standards;

- To coordinate the NRC's needs and priorities for standards with standards-developing organizations; and
- To select and nominate staff as authorized agency representatives on standards-developing committees.

Further, the directive emphasizes the need for timely endorsement of standards; addresses exceptions to using a consensus standard; provides procedures for requesting comments on the use of consensus standards in a regulation or procurement action; requires annual monitoring and assessment of the NRC standards program; and details requirements for submitting annual reports to the National Institute of Standards and Technology (NIST).

We are now in the third phase, which is implementing the directive. The NRC Standards Executive, a position that has been in place for over five years, is responsible for the overall implementation of this program. We have also designated a Program Manager for Codes and Standards to coordinate day-to-day staff implementation of the Act under the auspices of the Standards Executive. The directive requires that the Standards Executive coordinate periodic orientation sessions with staff engaged in standards activities. These sessions serve to update the staff on changes to the Act and Circular and to provide guidance from lessons learned.

One of the insights gained from the public meetings was that standards-developing organizations wanted to communicate more, as a group, with the NRC. To support this interest, NRC held public meetings at its headquarters in May and December of 1999. The purpose of these meetings was to discuss the NRC's needs and priorities for standards development and the interests of the standards-developing organizations. Because of the success of and interest in these meetings, we expect to hold more meetings in the future.

As part of the implementation phase, we have developed a website (<http://www.NRC.gov/NRC/REFERENCE/STANDARDS/index.html>) to inform stakeholders about our standards program. The website supports NRC's strategy to increase involvement by licensees and others in our regulatory development process. Our goals for the website are to broaden understanding of the NRC standards program and its implementation of the Act and to simplify access to other related information. The site provides access to important documents such as the Act, Circular, and the new management directive; the names of NRC contacts on standards-developing committees; standards referenced in our regulations and regulatory guides; and standards we are considering for endorsement. We do, of course, provide for public feedback on the site. While the site was developed mainly for external use, we are finding that it serves as a focus and valuable resource for the NRC staff who participate on the standards writing committees and those who endorse the standards.

Difficulties Encountered in Compliance

We have not encountered any significant difficulty in complying with the Act. The Interagency Committee on Standards Policy (ICSP), which is chaired and managed effectively by Dr. Belinda Collins and her staff from NIST, has been especially helpful in promoting uniform implementation of the Act by Federal agencies. The NRC was privileged to have hosted one meeting of the ICSP. The NRC takes part in the ICSP Working Group for Regulatory Agencies, which has provided an excellent continuing forum and source of contacts for discussion of the issues that arise relevant to regulatory agency implementation of the Act.

The most difficult aspect of carrying out the Act has been to convert the general provisions of the Act and the guidance of the Circular into an NRC procedure. We have completed that

process. We are currently developing procedures to determine when standards used by the NRC need to be updated.

Level of Resources Devoted to Complying with the Act

In the early 1970s, more than 250 NRC staff members participated on over 400 standards-writing committees. Currently, 132 NRC staff members are participating on 262 standards-writing committees. Most of the NRC resources expended on routine standards activities and now required to comply with the Act are part of the core NRC standards program. We estimate that the equivalent of three full time staff members per year above the core program are required to implement other provisions of the Act. These additional resources pertain to activities that include the Standards Executive function, the review of endorsed standards to determine the need for updating, the request for public comment on the use of standards in regulation and procurement actions, and annual reporting.

Conclusion

In an era of declining budgets and competing goals, the challenge is to continue to develop and use consensus standards in an effective and efficient manner. This requires increased coordination among stakeholders to identify those regulatory matters that can be addressed through the development of a consensus standard. The Act, which is directed to Federal agencies, has affected a broader audience by enhancing standards interaction between NRC, its stakeholders, and standards-developing organizations.