

ASTM COMMITTEE E10 NUCLEAR TECHNOLOGY AND APPLICATIONS STRATEGIC PLAN: 2006-2011

Approved by E10.90 Executive Subcommittee, 24 June 2005

ASTM Committee E10 on Nuclear Technology and Applications is responsible for the development and maintenance of standards relevant to the use of nuclear technology. In this context, it also organizes and conducts technical symposia and workshops intended to promote the advancement of nuclear science and technology and the safe application of nuclear energy in all forms. Committee E10 has created and maintains published standards covering a large range of nuclear procedures, with over 100 standards currently maintained by the following seven E10 Subcommittees:

E10.01 on Dosimetry for Radiation Processing

E10.02 on Behavior and Use of Nuclear Structural Materials

E10.03 on Decontamination, Decommissioning, and Extended Life Operation of Nuclear Facilities

E10.05 on Nuclear Radiation Metrology

E10.06 on Food Irradiation Processing and Packaging

E10.07 on Radiation Dosimetry for Radiation Effects on Materials and Devices

E10.08 on Procedures for Neutron Radiation Damage Simulation

Committee E10 activities encompass nearly all civilian applications of nuclear technology except those related to the nuclear fuel cycle which are the responsibility of ASTM Committee C26. Committees E10 and C26 maintain a close working relationship, with many members serving on both committees.

The primary objectives of the Committee and a list of specific strategies intended to enable the Committee to meet these objectives are summarized below.

COMMITTEE SCOPE

OBJECTIVE: To promote the advancement of nuclear science and technology and the safe application of nuclear energy.

Strategy 1: Standardize measurement techniques and specifications for radiation effects and dosimetry including the response of materials and relevant equipment and instrumentation.

Strategy 2: Standardize the nomenclature and definitions used in, or relating to, testing methods or instruments in support of the nuclear and radiation processing industries.

Strategy 3: Maintain a broad expertise in application of nuclear science and technology, especially the measurement of radiation effects from environments of nuclear

reactors, particle accelerators, and radioisotopes.

Strategy 4: Maintain a broad expertise in the applications of radioisotopes.

Strategy 5: Provide guidelines and best practices for all aspects of dosimetry for radiation processing.

MEMBERSHIP

OBJECTIVE: To maintain an adequate membership of scientists, engineers, regulators and business people who actively represent producer, user, and general interest groups. Membership is our only asset.

Strategy 1: Continued emphasis will be placed on obtaining representation from primary interest groups in the production, review, and acceptance of standards, and quality assurance provisions.

Strategy 2: Emphasis will be placed on increasing electric utility representation on E10 subcommittees and in E10 activities since they represent a significant segment of user interests.

Strategy 3: With the wide use of ASTM standards in international commerce, increased international participation in standards production is essential. International participation in symposia, conferences, and workshops is also important and members from all countries are encouraged to be part of the planning and programming committees.

ASSIGNMENTS

OBJECTIVE: To promote the efficient use of members' time in developing standards under the ASTM consensus process.

Strategy 1: Ensure that each task group includes at least one E10 member who is well versed in ASTM procedures

Strategy 2: Continue to encourage the practice of teamwork in accomplishing E10 objectives so that the consensus process will be fully realized. Establish clearly defined roles and responsibilities for subcommittee and task group members.

Strategy 3: Provide enhanced communications capability and administrative support to E10 membership. The intent is to make full use of the evolving technology in electronic communication to minimize time spent by members in simple administrative activities.

Strategy 4: Encourage member participation through educational activities. Workshops, symposia, and continuing education programs such as the Standards Technology Training courses will be conducted to support standards development while encouraging current and potential E10 members to recognize their responsibilities

in the development and application of nuclear technology.

Strategy 5: Evaluate usage of E10 and ASTM resources to ensure that adequate support is provided at the task group level. Determine which support needs are best handled by ASTM staff or by E10 members.

NATIONAL AND INTERNATIONAL STANDARDIZATION

OBJECTIVE: To increase the use of ASTM standards worldwide and to provide a means for ASTM members to influence national and international standards development.

Strategy 1: Maintain close liaison with the International Organization for Standardization's Technical Committee-85 (ISO/TC85) on *Nuclear Energy* to coordinate the development of international standards on nuclear energy, to reference each other's standards, and to avoid duplication of effort.

Strategy 2: Encourage US members of Committee E10 to participate actively with the US Nuclear Technical Advisory Group (NTAG) to provide technical input for ISO standards, and to ensure ASTM standards are referenced, as appropriate.

Strategy 3: Continue to maintain an expanded set of ISO/ASTM dosimetry standards with input from ISO.

Strategy 4: Continue our long-standing relationships with the European Working Group on Reactor Dosimetry and the Atomic Energy Society of Japan.

ORGANIZATIONAL STRUCTURE AND QUALITY of SERVICE

OBJECTIVE: To be flexible and responsive to the needs of both E10 participants and the users of E10 standards as the Committee responds to changing standardization needs.

Strategy 1: When potential opportunities arise, conduct special workshops to explore new areas for E10 standards development. Respond promptly to work requests from ASTM members and other organizations, and provide a framework for resolution of any issues that may arise.

Strategy 2: Emphasize collegial participation among E10 members, other ASTM committees, and other standards development organizations.

Strategy 3: Continuously evaluate E10 capabilities for planning and forecasting and develop liaison with other organizations.

Strategy 4: Ensure that procedures for Committee operations and services are responsive to the needs of international commerce.

COMMUNICATIONS

OBJECTIVE: To increase awareness of Committee E10 activities and the applications of E10 standards both within ASTM and in the broader technical community.

- Strategy 1: The Committee's mode of operation is characteristic of ASTM; voluntary standards are developed based on the principle of obtaining a sound technical consensus of all interested and affected parties.
- Strategy 2: Conduct two meetings of 3 to 5 days in duration per year to produce, review, and process standards. One of these meetings will be held in conjunction with Committee C26 on the Nuclear Fuel Cycle.
- Strategy 3: Sponsor scientific and technical symposia, conferences, workshops and publications in the appropriate fields of specialization. The International Symposia on the Effects of Radiation on Materials and Reactor Dosimetry, and the workshops on Dosimetry for Radiation Processing will go forward as major E10 efforts.
- Strategy 4: Maintain liaison with related ASTM committees and other technical societies and organizations, both national and international. Liaison activities shall ensure that E10's efforts do not duplicate and are not duplicated by other standards groups.
- Strategy 5: Advise other ASTM technical committees in our area of expertise.

HONORS AND AWARDS

OBJECTIVE: To reward outstanding performance of E10 participants and to implement the required actions necessary for these persons to receive appropriate recognition from E10, ASTM, and their employer.

- Strategy 1: Identify candidates for ASTM Society honors and awards to reward outstanding performance by E10 members in order to provide personal recognition and make the membership and activities of E10 well known to the Society.
- Strategy 2: Seek candidates for E10's Peter D. Hedgecock award by solicitation of input from all E10 officers and subcommittee chairmen. These awards not only recognize outstanding contributions but also represent honor and appreciation by peers to the recipients. These awards will stimulate pride and technical excellence in all aspects of E10 activities.
- Strategy 3: Present E10 Awards of Appreciation for specific action or contribution to the Committee. The recipient does not have to be a member of E10. These awards are intended to recognize contributions by members, spouses, staff persons, or participants, including international participants of E10-sponsored symposia and workshops. There are no limits or restrictions to these awards, and they will be granted whenever special recognition is merited. These awards enable E10 to make immediate response of recognition and to maintain a high degree of personal rapport within the Committee's diverse membership.

Strategy 4: Encourage support of E10 members for their activities by widely publicizing E10 awards. Targets of such publicity should include the recipient's employer and other professional organizations in which they participate.

FINANCIAL MANAGEMENT

OBJECTIVE: To continually strengthen the financial basis required for the support of E10 operations and planned growth.

Strategy 1: E10 fund derives its proceeds from conducting symposia and workshops. This fund may be used to provide required up-front financial support for committee meetings, symposia and workshops.

Strategy 2: Provide funding for E10 honors and awards recognition of outstanding performance by participants. The only avenue for E10 to recognize individual contributors is through an effective and financially supported awards program.

Strategy 3: When areas of potential growth or new opportunities for standards development are identified, carry out the required planning in a timely way and determine if financial support is required. An ad hoc task group may be formed by the Executive Committee to direct the planning process for any significantly new scope of work.

Strategy 4: To ensure accountability, obtain regular reporting from the ASTM staff on relevant financial matters, including the status of the E10 fund.