

ANS Standards Development Process Overview

The mission of the American Nuclear Society (ANS) Standards Committee is to develop voluntary consensus standards to be certified by the American National Standards Institute (ANSI) as American National Standards. The ANSI has served as administrator and coordinator of the United States private sector voluntary standardization system for more than 90 years. The ANS Standards Committee Rules and Procedures (<http://www.ans.org/standards/resources/downloads/docs/rulesproc.pdf>) are certified by ANSI and closely follow their requirements as set forth in ANSI Essential Requirements (<http://publicaa.ansi.org/sites/apdl/Documents/Standards%20Activities/American%20National%20Standards/Procedures,%20Guides,%20and%20Forms/2010%20ANSI%20Essential%20Requirements%20and%20Related/2010%20ANSI%20Essential%20Requirements.pdf>).

The process to produce an American National Standard requires time, patience, most of all dedication of many professionals. The birth of a standard begins with recognizing a need for a particular standard. Any individual or committee within the ANS Standards Committee may identify this need by completing a Project Initiation Notification System (PINS) form, which declares the purpose and need of the proposed standard. The document is reviewed, discussed, and most often approved by a select subcommittee (SC) and a consensus committee (CC) that will oversee the standard. Last, the Standards Board (SB) will review the PINS form before it is submitted to ANSI.

Once the PINS form is approved and submitted to ANSI, a working group (WG) is assembled to commence the standard development process. Working group members comprise a small number of individuals recognized for their expertise in the subject. Although there is no requirement for a balance of representation on a WG, as required for the CC, WG membership should include those organizations having a significant interest in the project. All Standards Committee members (WG, SC, CC) are required to have on file at ANS a completed volunteer form and resume. A copy of the volunteer form is available at <http://www.ans.org/standards/involved/volform/docs/volunteerform.pdf>/. Initial membership on working groups is determined by the SC Chair. Subsequent WG membership is determined by the WG Chair with support of the SC Chair if necessary to fulfill the needs of the standards project.

Subcommittees (SC) consist of members who have been appointed as working group chairs and may also include at-large members that have an interest and expertise within the scope of the subcommittee to manage the development of several standards in closely related disciplines. So if you are a working group chair, you are automatically considered a member of the subcommittee that manages your standards project. Each SC member is expected to lend his/her expertise when called upon to perform a preliminary review of a draft. SC members may also be requested to approve a response to an inquiry of a standard within the scope of the subcommittee. Generally, the amount of time spent on subcommittee responsibilities is minimal. *(It should be noted that a few working groups report directly to a consensus committee.)*

The SB has established four consensus committees, Nuclear Criticality Safety (N16), Research Reactors, Reactor Physics, Radiation Shielding and Computational Methods (N17), Nuclear Facilities Standards Committee (NFSC), and Risk Informed Standards Committee (RISC). Consensus committees (CC) comprise a diverse balance of interest. Each CC supervises the development of proposed standards within their assigned scopes, and they achieve consensus approval of these projects. A formal ballot must be employed to ascertain each member's position on the standards brought before the committee.

The WG chair must respond to all "approved with comments" and "negative" comments received from the formal ballot period; the SC may assist in resolving comments. Balloters who ballot negative, must review the attempted resolution of his/her negative ballot vote. If the negative balloter finds the response unacceptable, then the balloter may maintain that decision by formally stating his/her reasons for doing so. Any outstanding negative positions must be circulated to all members of the CC for review. A member holding an affirmative position may change his/her vote if he/she wishes to support negative balloters.

Simultaneous to the CC ballot, public review (PR) is conducted through the auspices of ANSI. ANSI announces a 60-day public review period for the proposed standard in its publication, *Standards Action*. As with CC comments, all comments from PR must be considered and resolved promptly.

Upon completion of the consensus process, a Letter Ballot is created for the SB to review and certify that all ANS procedures have been implemented to finalize the standard. The SB Letter Ballot summarizes the CC ballot tallies and other details during the ballot period.

The final step in the development of a proposed standard is to gain approval by the ANSI Board of Standards Review (BSR). Once certification by the SB has been granted, a request for approval is sent to the BSR with documentation of the ballot results to carefully scrutinize the case. Once the standard receives ANSI approval, the manuscript is sent for editing and publication.

ANSI's approval is granted for a five-year period with an additional five years granted upon request for extension. ANSI dictates that current standards be reviewed at least every five years to determine if the standard should be reaffirmed (reapproved), revised, or withdrawn. Standards that are found to be current and are not in need of any changes can be reaffirmed. A reaffirmation requires a consensus ballot, public review, and recertification by ANSI. Absolutely no changes can be made to a standard through the reaffirmation process. If any changes are deemed necessary, a revision should be initiated. If the evaluation of technical content reveals that strict application of one or more criteria could result in equipment inoperability or a violation of a safety or technical specification, withdrawal shall be recommended.