

Members Present

N. Prasad Kadambi, *Standards Board Chair, U.S. NRC*
Allen L. Camp, *RISC Chair, Sandia National Laboratories*
Dimitrios M. Cokinos, *Member at Large, BNL*
Calvin M. Hopper, *N16 Chair, ORNL*
Stanley H. Levinson, *ASME CNRM Liaison (AREVA NP, Inc.)*
Carl A. Mazzola, *NFSC Chair, Shaw Environmental and Infrastructure, Inc.*
Chuck H. Moseley, *Member at Large, Individual*
Tawfik M. Raby, *N17 Chair, NIST*
Jack W. Roe, *NEI Liaison*
R. Michael Ruby, *Member at Large, Constellation Energy-Ginna NPP*
Patricia A. Schroeder, *Standards Administrator, American Nuclear Society*
Stephen H. Shepherd, *Member at Large, Southern California Edison Company*
Steven L. Stamm, *Member at Large, Shaw, Stone and Webster*
R. Michael Westfall, *Member at Large, ORNL*
Michael J. Wright, *Member at Large, Entergy*

Members Absent

Peter S. Hastings, *Member at Large, Duke Energy*
Donald J. Spellman, *Standards Board Vice Chair, ORNL*

Guests

James K. August, *CORE, Inc.*
Robert J. Budnitz, *Lawrence Berkeley National Laboratory*
Timothy Dennis, *Individual*
Mary Beth Gardner, *ANS Staff*
Rick Grantom, *ASME CNRM Chair (STPJOC)*
Dennis W. Henneke, *General Electric*
Charles R. Martin, *Defense Nuclear Facilities Safety Board*
William B. Reuland, *Individual*
Andrew O. Smetana, *Savannah River National Laboratory*
Kent B. Welter, *Young Member Group Chair (U.S. NRC)*

1. Call to Order

Prasad Kadambi called the meeting to order and introductions were made.

2. Approve Agenda

The agenda was approved without change. Prasad Kadambi noted that Mrs. Alice Whittemore would be accepting the Standards Service Award posthumously for Dr. William Whittemore during the Honors and Awards Luncheon later that day.

3. ANS Corporate Structure to Better Support Standards (Kadambi/Gardner)

Prasad Kadambi stated that additional standards would be needed for the anticipated new nuclear power plants. In light of this need, Kadambi asked Mary Beth Gardner for help in researching the possibility of restructuring the ANS standards program to enable a more efficient response to the needs. An example of new ideas to be considered is an LLC similar to ASME's.

Gardner distributed a handout (Attachment A) with background information. She explained that in 1998, ANS looked at the current standards program and identified additional areas that grant money could enhance the program. The grant proposal was successful and funds had been utilized for the RISC PRA standards.

Gardner explained that she spoke with the ASME Codes & Standards Director, Kevin Ennis, and was informed that ASME pursued the LLC because it allowed ASME additional options not available as a non-profit organization. ASME hired a full-time technical person to generate funds for nuclear and non-nuclear related standards. Gardner stated that she and ANS Executive Director Harry Bradley discussed the pros and cons of establishing a subsidiary with the ANS lawyer. The discussion with the attorney resulted in a recommendation that a thorough policy paper/study be completed to determine the potential gain verses any possible losses.

Members asked Gardner whether other SDOs had created a LLC. Gardner stated that she'd have to do some research.

Action Item 11/07-01: Mary Beth Gardner to check if other SDOs have a LLC similar to ASME.

Some members speculated that ASME created the LLC to shield them from potential organizational or volunteer liability as they recalled that ASME lost a lawsuit filed several years ago.

The sense of the Standards Board was that more information was needed to determine if an LLC could be beneficial. Kadambi suggested that an ad hoc committee be formed to consider the creation of an LLC. Carl Mazzola and Steve Shepherd agreed to assist Kadambi on the committee.

The following **MOTION** was made, seconded, and passed without dissent:

To create an ad hoc committee to examine restructuring the standards effort through alternate ways. Ad hoc committee to report back to the Standards Board at the June 2008 meeting.

Action Item 11/07-02: Prasad Kadambi, Carl Mazzola, and Steve Shepherd to form an ad hoc committee to examine restructuring the standards effort through alternate ways and report back to the Standards Board at the June 2008 meeting.

As a member of the ASME CNRM, Robert Budnitz offered to find out if there was additional information on ASME's LLC and provide the information to Prasad Kadambi. An action item was not assigned as Budnitz was a guest of the Standards Board. It was suggested that details on the old ASME lawsuit be obtained and provided to the ad hoc committee.

Action Item 11/07-03: Mary Beth Gardner/Pat Schroeder to research details of the ASME lawsuit and provide to the ad hoc committee.

4. Standards Board Chair's Report

Report of SDO Meeting

Prasad Kadambi reported that he attended the SDO meeting at NIST on November 5, 2007, along with Tawfik Raby. Raby explained that NRC, NIST, and DOE took turns in sponsoring the SDO meetings although it had been some time since the previous one occurred. Presentations were made by Jennifer Uhle (NRC) and Richard Black (DOE). The SDO meeting seeks coordinated efforts of the SDOs to better identify the need for standards, determine the

appropriate developer, and look for gaps. Kadambi felt that re-establishing the SDO meetings was a significant development. The next meeting was anticipated in March 2008.

YMG Participation in Standards

Kadambi introduced Kent Welter as the chair of the ANS Young Members Group (YMG). Welter outlined a proposal for the YMG to support standards as many current members are reaching retirement. The proposal identified a two-year “associate member” term that was not necessarily exclusive to the YMG. The purpose of the associate member position was to be a knowledge transfer relationship/learning environment. Carl Mazzola summarized an “observer” position that the NFSC currently used. Welter was concerned that the YMG would deem the “observer” position as less significant as the “associate member” term. The Standards Board was in agreement that YMG participation was important but was unsure of the mechanism to create a positive experience that would be mutually beneficial.

The following **MOTION** was made, seconded, and passed with a vote of 7 approved, 4 not approved, and 1 abstained:

To create a status of Standards Committee membership called the “Associate Member” category based on the YMG presentation with details to be determined later.

Calvin Hopper, Steve Stamm, and Jack Roe were appointed to develop details of the “Associate Member” category.

Action Item 11/07-04: Calvin Hopper, Steve Stamm, and Jack Roe to develop details of the “Associate Member” category.

Welter stated that he had individuals ready to participate as soon as details were worked out. Furthermore Welter stated that the YMG would not specify age nor exclude other groups.

5. Nuclear Risk Management Coordinating Committee (Moseley/Camp)

Progress Update

Prasad Kadambi introduced Chuck Moseley as the new NRMCC Co-chair. Moseley stated that he only recently accepted the position and had been involved in one teleconference along with Allen Camp. Moseley said that Camp represented ANS well. Camp explained that he also was a new addition to the NRMCC as of a few months ago when he took over the chairmanship of RISC. Camp reported that the Level 1 Combined Standard was currently at ballot and was expected to be released within a few months. The RISC Committee had been provided the opportunity to comment on each draft segment of the Combined Standard.

CNRM Chair Rick Grantom reported that the cross cutting team for the Combined Standard had issued two ballots to date and expected two additional ballots. Grantom stated that they anticipated issuing a three-week ballot for a final review of the Combined Standard. Completion of the Combined Standard was expected in early January and would then be submitted to the ANSI process.

Camp reported that ANS was the lead on the Level 2 and Level 3 standards currently in development. Both the Level 2 and Level 3 standards will follow the ANS consensus process just as the Level 1 Combined Standard was following the ASME process since they have the lead.

Due Process Document for Development of Joint Standards (See Attachment – B)

Camp stated that he felt the Due Process Document was a good start. It documents that each society would be represented on the other society’s consensus committee, that each society

would have the opportunity to comment, and that the Standards Board would be apprised of comment resolutions.

Kadambi confirmed that Robert Budnitz and Stanley Levinson were the two ANS Representatives on the ASME CNRM. It was stated that both were already on the CNRM and had recently assumed the additional role as ANS Representative. Grantom acknowledged that the responsibilities of the representatives needed to be documented and that he was working with Camp to complete this action. It was explained that the role of ANS Representative on the CNRM was not to carry the ANS vote, but to insure that ANS comments were carefully addressed. Camp added that it was his responsibility to communicate with the ANS Representatives and report back to the Standards Board. Since ASME had the lead on the Level 1 Combined Standard, ANS did not ballot on the draft but would be provided full opportunity to comment. Once the Combined Standard reached consensus under the CNRM procedures, the Standards Board would be informed of the comment process and what had been done to gain satisfaction of RISC commenters. Calvin Hopper stated that he would prefer the comments from RISC to be the influencing decision in the vote of the ANS Representatives to the CNRM.

The committee was in agreement that the process and responsibilities needed to be fully documented. Camp explained that some RISC members were concerned about the work that was occurring before the process and responsibilities were documented. Camp suggested having the vote on the Due Process Document deferred until Mary Beth Gardner and Kevin Ennis, her counterpart at ASME, could refine the Due Process Document. Kadambi stated that this joint effort could be used as a long-term template for future projects.

Action Item 11/07-5: Mary Beth Gardner work with Kevin Ennis (ASME) to refine the Due Process Document.

Kadambi questioned how ANS should deal with sales of the individual standards once the Combined Standard was published. Camp suggested that at least initially the individual standards could be sold as current standards until a revision of the Combined Standard was completed at which time the individual standards should be withdrawn. Schroeder stated that when the individual standards were withdrawn, they would remain available for purchase as historical document just like all of the other withdrawn ANS standards.

Maintenance of Individual Standards

Camp stated that maintenance of the individual standards was important as we needed to consider the limited resources of the working groups with a potential for requiring duplication of efforts. He explained that the majority of RISC sentiment was that we needed to work toward the Combined Standard. Kadambi questioned whether it would be possible to update the Fire PRA Standard from the changes in the Combined Standard if the standard was needed immediately. Stanley Levinson stated that he did not believe that it would be possible. As a member of the External-Events Standard, Robert Budnitz stated that the working group was happy with the External Events Standard on the street and happy with the way it had been integrated, but that they could not support maintenance of both project. Dennis Henneke, chair of the Fire PRA Standard, agreed and explained that it would be very difficult to track the changes in the Combined Standard and apply to the individual standards. Henneke noted that although satisfied with the incorporation of the Fire PRA Standard, he had several comments for the integration team.

The following **MOTION** on maintenance of the individual PRA standards that was distributed to the Standards Board for approval 10/1/07 failed with a vote of 3 approved, 8 not approved, and 1 abstained:

The ANS RISC will support the process of keeping current the Level 1 Integrated PRA Standard by providing to the ASME CNRM timely revisions of the fire-protection, external events, and low-power/shutdown standards as these revisions become necessary.

The following **MOTION** was made, seconded, and passed with a vote of 10 approved, 1 not approved, and 1 abstained:

ANS will support only the integrated ANS/ASME PRA Standards after they are issued. Stand alone standards will be withdrawn at an appropriate time following issuance of an integrated standard.

As the one negative vote, Tawfik Raby explained that he was not satisfied with the motion and had major reservations in having two current standards on the street at the same time.

6. Impact of NRC Licensing Directions on ANS Standards (Spellman)

Prasad Kadambi explained that Don Spellman requested that an agenda item be included on the impact of the NRC licensing directions on ANS standards. As Spellman was not able to attend the meeting, the item would be tabled.

7. Consensus Committee Reports (N16, N17, NFSC, RICS)

N16 – Calvin Hopper

Calvin Hopper reported that N16 was active in developing their rules and procedures. Hopper stated that he was interested to see how the ASME/ANS joint standard would work as N16 was considering a joint project with ISO/INMM.

Hopper explained that there were individuals who had been developing a white paper outside of the appropriate ANS-8.1 Working Group for the purpose of instructing the community of the “correct interpretation and application” of the “Double Contingency Principle” specified in ANS-8.1. Because of the developing rogue interpretation, Hopper submitted his own inquiry for interpretation through the proper Standards Committee channel to address this issue. Per policy, inquiries are reviewed by the SB Chair and sent to the respective working group chair if deemed a request for clarification. Tawfik Raby suggested that Kadambi bring the item to the Board of Directors. Kadambi explained that he had not had the opportunity to thoroughly review the inquiry and asked for a little time so that he could review and report back to the SB.

Action Item 11/07-6: Prasad Kadambi to review the inquiry on ANS-8.1 submitted by Calvin Hopper and report back to the Standards Board.

N17 – Tawfik Raby (N17 Report – Attachment C)

Tawfik Raby reported that the N17 committee would be meeting on Wednesday, November 15, during the ANS Meeting. He informed the SB that eight new members were added to the committee to bring N17 into compliance.

A report with an update on standards development for N17 was provided as a handout (See Attachment C).

NFSC – Carl Mazzola – (NFSC Report – Attachment D)

Carl Mazzola reported that the NFSC met the previous day for about eight hours during which about 30 action items were assigned. Of significance, the committee discussed a recirculation ballot on the reaffirmation of ANSI/ANS-58.3-1992; R1998, “Physical Protection for Nuclear Safety-Related Systems and Components,” and decided to move forward with the reaffirmation. A negative on ANS-2.27-200x, “Criteria for Investigations of Nuclear Facility Sites for Seismic

Hazard Assessments,” and ANS-2.29, “Probabilistic Seismic Hazard Analysis,” regarding the requirement of a peer review was discussed and resolved.

Mazzola informed the SB that NFSC had decided to change the meeting time to accommodate the ANS plenary. He explained that the committee made a decision to hold their meeting a little later so as not to conflict with the plenary as requested by Steve Shepherd. He stated that he felt the agenda could be accomplished within six hours. Dimitrios Cokinos explained that the ANS-19 Subcommittee received permission to meet during the plenary.

Mazzola informed the SB that four members were moved to Observer status due to lack of participation and that he would continue to monitor ballot participation. He reported that the NFSC scope was being revised and questioned where research reactor territory ended and NFSC territory began. Raby stated that it was defined by purpose.

Mazzola explained that the NFSC had a lengthy decision on the definition of should, shall, and may. The definition in the NFSC Policy and Procedures states that “should” required an equivalent action. As this definition is different than the other consensus committees, Mazzola suggested an action item for each consensus committee chair to work with Pat Schroeder within the ANS structure to identify disparity of definitions for “should.”

Action Item 11/07-7: Consensus committee chairs to work with Pat Schroeder within the ANS structure to identify disparity of definitions of “should.”

A report with an update on standards development for NFSC was provided as a handout (See Attachment D).

RISC – Allen Camp, Chair (RISC Report – Attachment E)

Allen Camp reported that ANS-58.23-200x, “Fire PRA Methodology,” was completed and awaiting final approval from ANSI. He stated that ANS-58.22-200x, “Low-Power Shutdown PRA Methodology,” should go out for a second ballot before the end of the year, but it might be 2009 before the Level 2 and Level 3 standards completed a draft for ballot. Prasad Kadambi mentioned that the 10 CFR 50.71 goes to Level 1 and Level 2 but does not stipulate LERF. The requirement anticipates that a Level 2 standard would be on the street.

Camp informed the SB that a few members were moved to the “Observer” category due to poor meeting attendance affecting RISC ability of achieving a quorum at meetings. Additionally he added that a member of the YMG was added as an “Observer” and Jon Young was added as a full voting member of RISC.

A report with an update on standards development for RISC was provided as a handout (See Attachment E).

8. Discuss and Resolve Action Items (Kadambi)

See list of action items at end of minutes. The following action items were discussed at length:

Carl Mazzola reported that he completed Action Item 06/07-08 to review RG 1.206 to determine if ANS standards were referenced. He found that no ANS standards were referenced, and that the NRC was very general on using approved codes and standards. Mazzola stated that ASME, ASTM, and IEEE were referenced in RG 1.206. Prasad Kadambi suggested that Carl Mazzola as NFSC Chair bring this to the attention of the NRC Standards Executive Jennifer Uhle.

Action Item 11/07-8: Pat Schroeder to provide Carl Mazzola the spread sheet provided to NRC from NFSC on applicable standards to reference in the RG to prepare a letter to Jennifer Uhle.

Action Item 11/07-9: Carl Mazzola to draft letter to NRC Standards Executive Jennifer Uhle regarding omission on referencing ANS standards under signature of NFSC Chair.

Mike Wright reported that he completed Action Item 06/07-18 to prepare a white paper on ANS Strengths and Weaknesses (Attachment F). Wright stated that the SB needed to reinforce the expectation to take advantage of industry initiatives. Kadambi added that there needed to be more exchange of information and that the SDO meeting would help aid in communication between standards developers and the industry. The SB recognized that it was important to get more standards endorsed by the NRC.

Steve Stamm asked how this effort interfaced with the effort being headed by ANS President Donald Hintz to increase utility participation in standards. Stamm stated that John MaGaha, the CNO of Entergy, was involved in this project with Donald Hintz and suggested that Mike Wright provide the input on ANS Strength and Weakness to him.

Action Item 11/07-10: Mike Wright to provide ANS Strengths & Weaknesses White Paper and Standards Board input to John MaGaha.

9. Certification of Balance of Interest (Kadambi)

The Balance of Interest Reports for all four consensus committees were approved unanimously as presented.

10. Proposal of New Balance of Interest (Hopper) – (Attachment G)

Calvin Hopper provided a packet with historical information about the balance of interest categories and his proposal for new categories. Hopper explained that NIST would be considered a national laboratory, TVA would be an owner, Y-12 would be a vendor. Kadambi stated that the consensus committee chair would be responsible for determining members' classification and for remaining consistent.

Overall the proposal was well received. Pat Schroeder explained that the Standards Committee Rules and Procedures would have to be updated to incorporate new balance of interest categories and also be submitted to ANSI for reaccreditation. Kadambi stated that he'd take the proposal under review.

Action Item 11/07-11: Prasad Kadambi to review proposal for new balance of interest categories before formal Standards Board vote.

Tawfik Raby added that he would be proposing a policy on dual representation.

11. New Policy for Standards Committee Use of the ANS Logo (Stamm)

In light of a recent misuse of the ANS Logo, Steve Stamm questioned whether written guidance was needed. The SB discussed appropriate uses of the ANS logo for committee purposes. The general thought was that this was an isolated incident and that on the whole Standards Committee members were very responsible in their use of the ANS logo.

12. Volunteer Participation through Improved Electronic Means (Shepherd)

Steve Shepherd reported that he was looking at software to facilitate better video conferencing which he hoped would reduce the need for face-to-face working group meetings. This would reduce time and cost of travel to meetings and permit working group members without access to travel funds to participate. Shepherd informed the SB that he would pilot something through the NFSC as ANS-29 Working Group Chair.

13. Secretary's Reports (Attachments H, I, J, K, L) Staff Report, Sales Report, Standards Reports

Pat Schroeder provided the SB a written Staff Report as well as Sales Reports, Activity Report, Delinquent Standards Report, and Status Report – Attachments H, I, J, K, L to these minutes. Schroeder informed the SB that her assistant quit and would be replaced after the first of the year.

Committee Meeting Minutes on the Web

After a brief discussion, the Standards Board agreed that the SB minutes including all attachments should be publicly available on the ANS Web site.

New PINS Forms/Letter Ballots

The SB had no current open PINS or Letter Ballots.

14. Liaison Reports

President's Meeting (Kadambi)

Prasad Kadambi stated that he attended the President's Meeting as SB Chair. Relative to standards, the ANS President Donald Hintz announced the effort to increase utility participation in standards as previously discussed.

Operations & Power Division (Kadambi)

Kadambi reported that he would be presenting a standards workshop during the ANS meeting in Washington DC and that two sessions would be presented at the November 2008 meeting in Reno. The sessions would focus on the issue of harmonization of international standards and developments requiring the NRC to deal with consensus standards issued internationally.

Nuclear Energy Institute (Roe)

Jack Roe explained that NEI was not a self-focused group as they were given direction by an organization called Nuclear Strategic Issues Advisory Committee (NSIAC). NSIAC was an integral part of NEI comprised of membership to do with power reactors. Roe reported that NEI senior membership met with senior NRC staff members resulting in a suggestion for NEI to become more involved in consensus standards. Roe stated that NEI was very interested in the revision to ANSI/ANS-3.5-1998, "Nuclear Power Plant Simulators for Use in Operator Training and Examination," as the NRC would be considering endorsing this standard. Additionally NEI was interested in ANSI/ANS-3.1-1993; R1999, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants," as they needed to address the qualification and training requirements for new reactors. Roe informed the SB that NEI was putting together a working group of executives to determine how to better support the standards process. He added that they were interested in supporting not controlling. Roe stated that John MaGaha would probably be the NSIAC Subcommittee Chair.

Roe informed the SB that Randy Bramlett was appointed as his backup to serve as NEI Standards Board Liaison and that he would provide his contact information to Pat Schroeder.

Action Item 11/07-12: Jack Roe to provide Pat Schroeder Randy Bramlett's contact information.

Roe's report regarding NEI's participation in standards was very well received by the SB. A few members suggested that funding issues also be addressed. Kadambi stated that he was looking for tri-part source of funding from NEI, NRC, DOE with potential support through restructuring and creating an LLC.

ISO (Cokinos, Hopper, or Raby)

Dimitrios Cokinos reported that at the June 2007 SC6 meeting in Boston a motion was made to adopt the ANS-5.1 standard on "Decay Heat Power in Light Water Reactors. Unfortunately it failed as it did not meet the three-year deadline which they were unaware of. The standard was resubmitted and the clock was set for three more years. As we offered ANS standards for

international adoption, Kadambi questioned whether anyone looked at international standards that should be adopted as US standards.

Hopper stated that SC5 was fairly mature in its process and ISO asked WG8 to collaborate with IAEA in a safety guide. Hopper reported that SC5 was restructuring to consolidate. Kadambi added that it would become increasingly important to coordinate standards efforts internationally.

Mike Westfall informed the SB that the US would be hosting the next TC85 at the Hilton Disneyworld in Orlando, Florida, from June 15, 2008, through June 20, 2008. The TC85 meeting was scheduled the week after the ANS June 2008 meeting to facilitate international attendance. Westfall stated that he had been working with industry representatives to help fund the meeting as there was no fee. He was also working on an electronic balloting system through ASTM. Kadambi questioned who on the SB was the appropriate representative for ANS in international standards. The SB quickly agreed that Westfall was the right one. Kadambi suggested that Westfall attend the next SDO meeting if possible.

Action Item 11/07-13: Prasad Kadambi to provide Mike Westfall information about the next SDO meeting.

15. Other Business

There was no other business.

16. Adjourn

The meeting was adjourned at 4:37 p.m.

**American Nuclear Society
Standards Board Action Items from ANS November 2007 Meeting**

Action Item	Description	Responsibility	Status
11/07-01	Mary Beth Gardner to check if other SDOs have a LLC similar to ASME.	Mary Beth Gardner	Open
11/07-02	Prasad Kadambi, Carl Mazzola, and Steve Shepherd to form an ad hoc committee to examine restructuring the standards effort through alternate ways and report back to the Standards Board at the June 2008 meeting.	Prasad Kadambi, Carl Mazzola, Steve Shepherd	Open
11/07-03	Mary Beth Gardner/Pat Schroeder to research details of the ASME lawsuit and provide to the ad hoc committee.	Mary Beth Gardner, Pat Schroeder	Open (done)
11/07-04	Calvin Hopper, Steve Stamm, and Jack Roe to develop details of the "Associate Member" category.	Calvin Hopper, Steve Stamm, and Jack Roe	Open
11/07-05	Mary Beth Gardner to work with Kevin Ennis (ASME) to refine the Due Process Document.	Mary Beth Gardner	Open
11/07-06	Prasad Kadambi to review the inquiry on ANS-8.1 submitted by Calvin Hopper and report back to the Standards Board.	Prasad Kadambi	Open
11/07-07	Consensus committee chairs to work with Pat Schroeder within the ANS structure to identify disparity of definitions of "should."	Consensus Committee Chairs and Pat Schroeder	Open
11/07-08	Pat Schroeder to provide Carl Mazzola the spread sheet provided to NRC from NFSC on applicable standards to reference in the RG to prepare a letter to Jennifer Uhle.	Pat Schroeder	Open (done)
11/07-09	Carl Mazzola to draft letter to NRC Standards Executive Jennifer Uhle regarding omission on referencing ANS standards under signature of NFSC Chair.	Carl Mazzola	Open (done)
11/07-10	Mike Wright to provide ANS Strengths & Weaknesses White Paper and Standards Board input to John MaGaha.	Mike Wright	(Open)
11/07-11	Prasad Kadambi to review proposal for new balance of interest categories before formal Standards Board vote.	Prasad Kadambi	Open
11/07-12	Jack Roe to provide Pat Schroeder Randy Bramlett's contact information.	Jack Roe	Open
11/07-13	Prasad Kadambi to provide Mike Westfall information about the next SDO meeting.	Prasad Kadambi	Open
06/07-06	Pat Schroeder to send action item reminders to the SB.	Pat Schroeder	On- going
06/07-08	Carl Mazzola review RG 1.206 to confirm that ANS standards were referenced as suggested.	Carl Mazzola	Closed
06/07-10	Consensus Committee Chairs to communicate to their committee members a sense of caution regarding use of the ANS logo with personal communication or correspondence.	Consensus Committee Chairs	Closed
06/07-16	Pat Schroeder to distribute Steve Shepherd's plan to utilize electronic technology to expedite the standards development process to the SB.	Steve Shepherd/ Pat Schroeder	Closed
06/07-19	Pat Schroeder to check with ANS lawyer on protection of copyrighted information provided to users on CD in a computer-readable format.	Pat Schroeder	Open
6/06-06	Don Spellman with Prasad Kadambi develop letter to N17 with recommendation to recruit members from operating research reactors and the two national research reactors.	Don Spellman and Prasad Kadambi	Closed

ANS Corporate Structure to Better Support Standards

Background Information

In 1998, then ANS President, Ted Quinn, led an effort in cooperation with the ANS Standards Board, to enhance the ANS Standards Program in order to respond to the new challenges faced in standards at that time, in order to be able to take advantage of the increased opportunities the Society had, based on the changes in the federal mandate on the use of consensus standards. It was believed at that time that the emphasis of the U.S. nuclear industry had changed from a focus on design and construction of new plants, to a focus on establishing more cost effective operations and maintenance of existing plants and to a focus on regulatory reform and simplification. It was believed that for ANS to maintain its position then as a leader in this industry, it must also change. At the time, the ANS Standards Program consisted of one headquarters component (the Standards Administrator), and several committees – the Standards Steering Committee (now the Standards Board), and three consensus committees (consisting of volunteers). It was also determined that in order for the ANS Standards Program to realize the market opportunity available to it then, it must satisfy three criteria: identify user needs; demonstrate the required technical management and marketing expertise to meet those needs; and develop standards to meet those needs in a timely manner.

The ANS Board then approved the recommendation to invest funds to support technical expertise (technical consultants) to identify user needs and locate funding opportunities available to the ANS for the development of “fast-track” standards. ANS funded two part-time ANS members (Jordan and Ross) to provide this service for ANS. Areas identified for standards development included: risk management and risk reduction; D&D, low level waste management, TRU waste management, and high level waste management. In addition, the ANS Risk Informed Standards Committee (RISC) was established. Jordan and Ross were on contract for ~2 years and helped formalize grants with the NRC in support of PRA standards development. In addition, the ANS established electronic and internet methods for communicating standards information and for increasing the visibility of the ANS Standards Program to users. In addition, it was recommended that the ANS Standards Program should make marketing an integral part of its activities and should develop an annual marketing plan. To date, ANS has yielded over \$250k in grant funds from the U.S. Nuclear Regulatory Commission to support the development of PRA standards.

ANS Standards Program Today

The ANS Standards Board is currently evaluating its position in the marketing mix of nuclear standards development organizations and attempting to find ways to enhance the viability of the Standards Program. The Standards Board has recently created a white paper for discussion on the Program’s strengths and weaknesses.

This report is provided in response to the ANS Standards Board's request for information on the option of undertaking standards development as an activity through a subsidiary, similar to the American Society of Mechanical Engineers' (ASME) model.

I. Telecon with ASME Staff

Contact was made with the ASME Director of Codes and Standards in October to discuss the formation of the ASME LLC. The following information was learned.

- A. ASME pursued the limited liability arrangement because it was felt it allowed the ASME to do things its "traditionally" doesn't do as a not-for-profit society. It can pursue research projects, hire technical personnel to do the work, and have someone "manage" their projects.
- B. The ASME LLC has a separate Board and has a separate staff (current three (3) staff assigned to the LLC. But the ASME really directs the LLC. On paper, the LLC is an independent company. June Ling (ASME) is the link between the national organization and the LLC and provides information/direction back and forth between the two organizations. The LLC is required to regularly report to the ASME Board of Directors.
- C. The ASME LLC was established in Delaware.
- D. ASME began the process of formation by hiring a technical person as a Project Manager on the ASME staff. It was his total responsibility to identify contracts and find potential funding sources. This effort was in place for 2+ years prior to the actual formation of the LLC. Currently, the Project Manager is staff on the LLC.
- E. The LLC allows projects/activities to get done much faster. The LLC currently has contracts with the PWR Owners Group involving new plants as well as other contracts. Some of the contracts are totally unrelated to nuclear. The LLC does work for areas of the ASME other than nuclear.
- F. A member of the ASME Standards Board sits on the LLC's Steering Committee.
- G. The LLC generates revenues from contracts. A portion of each contract covers the MG&A of the LLC.
- H. The ASME still maintains its voluntary member standards committees and they still do their standards development work the same way they always did. The ASME still does the publishing of the ASME standards, not the LLC.

II. Pros and Cons of a Subsidiary (LLC)

The Pros

- A. An LLC could provide a more focused approach to conduct standards development. This might move research and standards development along more quickly as opposed to the traditionally slower approach when using volunteers who are only able to give the time they can afford, often on an irregular basis or simply to meet the society's committee deadlines.
- B. An LLC would allow research and development activities of a specific standards area which may or may not be within the normal of traditional Society research.
- C. It could reduce potential legal liability for actions or omissions in standards development work by creating a "legal person," the subsidiary, to bear the legal responsibility for all aspects of the standards development process and work output. This element assumes maintaining a real distinction between the Society and its subsidiary, including corporate formalities and filings to ensure they are treated as separate legal entities.
- D. It would allow the Society to do standards development work as a commercial activity, or one with commercial prospects. These could conceivably generate income for the Society, but one would have to really assess research opportunities for standards development very carefully to determine if it had a realistic chance of generating net revenues. There are also potential tax consequences for the Society if the subsidiary generates income.

The Cons

- E. The Society would have to establish and operate the proposed subsidiary. This would require executive time and oversight, initial financial investment, and perhaps the addition of full- or part-time personnel to manage and actually perform the activities of the standards development subsidiary.
- F. The proposed subsidiary could divert staff or volunteer attention or resources from current standards development activities of the Society.
- G. The subsidiary could be perceived as a competitor of the Society. This not an uncommon perception and could lead to tense relations, even litigation, and definitely for competing commitments of money from members and third parties.

III. Business Form of a Proposed Subsidiary

There are a number of options available: a for-profit corporation, a not-for-profit corporation, an unincorporated entity, or a limited liability company.

- A. The advantage of the for-profit and not-for-profit corporation form and the LLC is that a legal “person” is created, thus making the entity responsible for its activities and any liabilities which might develop out of the actions or omissions of the subsidiary. The legal person stands between potential liability and the Society. An unincorporated subsidiary faces individual liability of its owners and even its managers or employees, if it has any.
- B. With a not-for-profit subsidiary corporation, the objectives would have to be within the scope of a nonprofit orientation, particularly if the entity were to apply for tax-exempt status, possibly under the 501(c)(3) as a research organization, but that may simply be duplicating what ANS already does.
- C. The principle advantages of the LLC would be the ease of establishing the LLC, a more informal approach with less paperwork. The operating agreement replaces the Article of Incorporation and bylaws, and other corporate formalities such as minutes can be avoided. LLC statutes are less onerous. LLCs are more flexible and adaptable. They can also be for-profit or not-for-profit, and depending on that could have tax options more flexible than corporations.

What’s Next?

A formal policy paper that explores the pros and cons of forming an LLC in greater detail would need to be prepared, and reviews the sort of standards development work the entity might want to undertake. It would need to be determined whether such a subsidiary would have any adverse impact on the ANS itself, e.g., competing for scarce resources of volunteer and staff time, complementing or competing with ANS, and determining what sorts of standards development work that the entity or subsidiary might undertake that ANS is not presently doing or could do in a better.

Note: This document prepared for internal use only. Not to be distributed outside the Standards Board.

DRAFT - 2

ANS DUE PROCESS FOR RELEASING A JOINT PRA STANDARD
(Level 1 Integrated Standard – ASME Lead)

1. ANS identifies 2-4 individuals who would be the RISC champions on ASME CNRM.
2. The RISC Secretary will coordinate the development and communication of RISC comments.
3. The RISC champions will be the point persons for the ANS comments on CNRM.
4. After resolution of comments, the comments and CNRM responses will be submitted to the ANS SB for review and approval.
5. If ANS Standards Board agrees that there was sufficient and effective effort to resolve the ANS RISC comments/objections, then ANS SB would vote to approve moving forward with publication. Without such approval, the standard is not published.
6. With ANS SB approval, a letter would be issued to ASME granting permission for ASME to use the ANS logo on the Level 1 integrated standard.

DRAFT - 2

ANS DUE PROCESS FOR RELEASING A JOINT PRA STANDARD (PRA Level 2 & 3 – ANS Lead)

When the working group determines that a draft standard is ready for balloting, the following steps are taken:

1. ANS staff issues the draft standard to the RISC Committee for ballot with concurrent public review. (RISC Committee would now include 2-4 members from ASME CNRM as full members.)
2. ANS also provides draft to CNRM for distribution.
3. Ballot votes and comments are coordinated by the RISC Secretary.
4. The responsible working group responds to all comments and attempts to resolve all negative ballots.
5. After all comments have been responded to, the RISC Chair determines whether a re-ballot (or possibly recirculation ballot in the case of standing negatives) is necessary.
6. Responses developed for the CNRM comments are provided to ASME BNCS. With satisfaction of comment responses, BNCS to provide letter of permission for use of their logo on the joint standard. Without such permission, the standard is not published.
7. With determination of consensus and no substantive changes, the RISC Chair issues a release to the secretary permitting a letter ballot to be issued to the Standards Board for certification.
8. The consensus process is reviewed by ANSI's Board of Standards Review, and if satisfied, certifies that due process has been completed, permitting the standard to be issued as ANSI-certified.
9. Upon ANSI certification, the standard is published*.

*With the exception of the timing of public review, a near identical procedure would be required for the joint standard produced by ASME.

N17 Progress Report November 2007

Published

ANSI/ANS-15.1-2007, "The Development of Technical Specifications for Research Reactors," (revision of ANSI/ANS-15.1-1990; R1999)

Approved by ANSI

ANSI/ANS-1-2000; R2007, "Conduct of Critical Experiments," (reaffirmation of ANSI/ANS-1-2000)

ANSI/ANS-15.4-2007, "Selection and Training of Personnel for Research Reactors" (revision of ANSI/ANS-15.4-1988; R1999)

N17 Action Completed

ANSI/ANS-1-2000; R2007, "Conduct of Critical Experiments," (reaffirmation of ANSI/ANS-1-2000)

In N17 Ballot/Vote (or resolving comments)

ANS-15.11, "Radiation Protection at Research Reactors," (revision of ANSI/ANS-15.11-1993; R2004)

ANS-15.19, "Shipment and Receipt of Special Nuclear Material (SNM) by Research Reactors," (historical revision of ANSI/ANS-15.19-1991; W2001)

PINS Approved

ANS-19.12, "Nuclear Data for Isotope Production Calculations for Medical and Other Applications," (new standard)

N17 Membership Changes

The following members were added to N17 to bring the committee into compliance:

Edward Ehrlich, GE (Owner/operator)

Stephen Shepherd, Southern CA Edison (Owner/operator)

Charles Rombough, CTR Technical Services, Inc. (Provider)

Chris Heysel, McMaster University (University/research organization)

Andrew Kadak, Massachusetts Institute of Technology (University/research organization)

Ronald Pevey, University of Tennessee, Knoxville (University/research organization)

David Anderson, Electric Boat (Vendor)

**NFSC Chairman's Report
ANS November 2007 Meeting
Washington DC**

Attachment D

I. Standards approved for reaffirmation (2)

Standard	Status	SC
ANSI/ANS-59.51-1997; R2007 , Fuel Oil Systems for Safety-Related Emergency Diesel Generators	reaffirmed through 2012	ANS-22
ANSI/ANS-59.52-1998; R2007 , Lubricating Oil Systems for Safety-Related Emergency Diesel Generators	reaffirmed through 2012	ANS-22

II. Standards and draft standards at ballot or comment resolution (6)

Standard	Status	SC
ANSI/ANS-58.3-1992; R1998 , Physical Protection for Nuclear Safety-Related Systems and Components (for reaffirmation)	recirculation ballot in progress	ANS-22
ANSI/ANS-58.8-1994; R2001 , Time Response Design Criteria for Safety-Related Operator Actions	reaffirmation @ ballot	ANS-22
ANS-2.29 , Probabilistic Seismic Hazard Analysis	new standard – resolving ballot comments	ANS-24
ANS-41.5 , Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation	new standard – resolving comments/revising draft	ANS-24
ANS-2.27 , Criteria for Investigations of Nuclear Facility Sites for Seismic Hazard Assessments	new standard – resolving comments from 2 nd ballot	ANS-25
ANS-40.37 , Mobile Low-Level Radioactive Waste Processing Systems	historical revision – resolving comments	ANS-27

III. PINS forms in approval process (3)

Standard	Status	SC
ANS-2.6 , Guidelines for Estimating Present & Forecasting Future Population Distributions Surrounding Nuclear Facility Sites (new standard)	new standard – resolving comments	ANS-25
ANS-40.21 , Siting, Construction, and Operation of Commercial Low Level Radioactive Waste Burial Grounds	new standard – resolving comments	ANS-25
ANS-29.1 , Operational Reactivity Management and Oversight at Light Water, Pressurized Water Power Reactors	new standard @ NFSC vote	ANS-29

IV. PINS in preparation

Standard	Status	SC
ANS-56.8 , Containment System Leakage Testing Requirements	revision of current standard	ANS-21
ANS-58.2 , Design Basis for Protection of Light Water Nuclear Power Plants Against the Effects of Postulated Pipe Rupture	reinvigoration of historic standard	ANS-24
ANS-2.8 , Determining Design Basis Flooding at Power Reactor Sites	reinvigoration of historic standard	ANS-25
ANS-2.25 , Surveys of Terrestrial Ecology Needed to License Thermal Power Plants	reinvigoration of historic standard	ANS-25

RISC Progress Report November 2007

Published

ANSI/ANS-58.21-2007, "External-Events PRA Methodology"

RISC Action Completed

ANS-58.23, "Fire PRA Methodology"

In RISC Ballot/Vote (or resolving comments)

ANS-58.22-200x, "Low Power Shutdown PRA Methodology," Next ballot expected before the end of 2007.

Standards in Progress

ANS-58.24-200x, "Severe Accident Progression and Radiological Release (Level 2) PRA Methodology to Support Nuclear Installation Applications

- Writing group proceeding led by Mark Leonard
- PINS approved
- Ballot date being determined

ANS-58.25-200x Standard for Radiological Accident Offsite Consequence Analysis (Level 3 PRA) to Support Nuclear Installation Applications

- Writing group proceeding led by Keith Woodard
- PINS approved
- Ballot date being determined

RISC Membership Changes

Moved from member to observer status: Wayne Holmes and Yehia Khalil

New Member: Jon Young, PNNL

Young Member Observer: Fatma Yilmaz, Entergy Nuclear

Other Issues

- Coordination with NRMCC and CNRM
- Combined Standard and revisions out for ASME ballot
- Due process document
- Separate standards

ANS Standards Strengths, Weaknesses, and Initiatives

This document will compare the Strengths and Weaknesses of ANS Standards and will identify several initiatives to enhance the viability of the Standards Program.

Strengths:

- ANS Standards are developed through the consensus process and thus represent Industry accepted technical and administrative requirements. The consensus process ensures a wide representation of Industry interests in the development of the standards.
- ANS Standards are appropriate for endorsement through the NRC Regulatory Guides.
- Many ANS Standards are applicable to Nuclear Facilities including power reactors, fuel fabrication and storage facilities, and defense related facilities.
- ANS Standards are endorsed by ANSI and are recognized as providing appropriate licensing bases.
- ANS Standards are recognized as presenting very good technical positions for a wide range of issues.

Weaknesses:

- ANS Standards generally take a long time to develop, and the benefits of the consensus process are not recognized to be more important than developing an Industry position on a fast track. Other Industry groups such as the Nuclear Energy Institute develop Industry positions on key issues where a more timely non consensus based process is used. At least in part, the long period required to develop a consensus standard is a result of the voluntary nature of the standards committees members.
- Adoption of a particular revision of a Standard is at the discretion of the user. In the case of NEI, each effort to develop an Industry position begins with the expectation that each utility will adopt the Industry position at the completion of the effort.
- ANS Standards are usually written with the idea that will adopted through NRC Regulatory guides as an appropriate way of meeting a regulatory requirement. The participation of NRC committee members does not ensure the ultimate adoption of the standards. Other Industry groups take a more active role in engaging the NRC management in a dialogue which leads to the identification of acceptable approaches during development the Industry position. This approach is very effective when the Industry position involves non technical issues.
- The clarification process for standards is lengthy and sometimes ends in an inability to provide a position on the question that has been asked.

Discussion: Future initiatives to improve the standards process should include the following elements:

- Improve the ANS interface with other Industry groups to reinforce recognition of the technical relevance of ANS Standards. ANS and NEI should discuss areas

where ANS should be responsible for develop of specific standards. NEI takes an active role in some ANS Standards development efforts. Who from ANS participates as an ANS representative on any NEI effort?

- ANS should develop focus areas where standards could be developed on a fast track approach to support Industry initiatives such as new generation plants, different reactor technologies, decommissioning, upcoming defense industry needs, etc. The sector that benefits from these standards development effort should be approached for project funding,
- Encourage standards committees to engage the technical and management personnel at NRC during the standards development phase to better guarantee adoption of the standard through the regulatory guide process.
- Establish performance expectations for answering all requests for clarification and interpretation within 3 months. If original committee members are not available to render a technical opinion, the management committee should identify an appropriate position.

**REPORT ON
PROPOSED BALANCE OF INTEREST (BOI)
FOR AMERICAN NUCLEAR SOCIETY STANDARDS BOARD
CONSENSUS COMMITTEES**

13 November 2007

**Calvin M. Hopper
Tawfik Raby
Carl Mazzola
Allen Camp**

An action item was developed for an ad hoc committee to develop an alternative proposed “balance of interest” (BOI) definitions that could/should be used for Consensus Committees (CC) within the ANS while still satisfying the requirements of ANSI. Please see the ANS Standards Board (ASB) Draft Minutes action item below.

Action Item 11/05-06: Calvin Hopper, chair ad hoc committee, to develop alternative balance of interest definitions (acceptable to ANSI) with Bob Bari, Tawfik Raby, and Don Spellman. Due Date: January 20, 2006.

After substantial consideration by the ad hoc committee, we make the following recommendation to change the “POLICY ON THE CERTIFICATION OF CONSENSUS COMMITTEE MEMBERSHIP” (JFM edit, 2/25/05) shown in Appendix A from six to nine types of organizations for the determination of the balance of interest (BOI) for consensus committee membership.

The changes in the BOI from 2/25/05 BOI to this 11/13/07 recommendation is reflected in the table below.

Types of Balance of Interest (BOI) Organizations

2/25/05 BOI	11/13/07 Recommended BOI
Owners	Owners
Vendors	Vendors
Architect-engineers and Consultants	Architect-engineers
	Consultants
Government agencies and National Laboratories	Government agencies
	National Laboratories
Universities and societies	Universities
	Societies
Individuals	Individuals

The revised policy change is necessary to acknowledge and to distinguish the differences in organizational interests and missions from their previous definitions in the 2/25/05 policy revision. It is judged by this ANS Standards Board (ASB) ad hoc committee that

this revised BOI by type of organization will more clearly reflect these differences. The recommended policy change is provided in Appendix B.

For clarity, examples of these organization differences by interests, objectives, or missions are provided in Appendix C.

This recommended policy change is consistent with the “ANSI Essential Requirements: Due process requirements for American National Standards,” Issue date: January 31, 2007, copyright by the American National Standards Institute (ANSI), 25 West 43rd Street, 4th Floor, New York, New York 10036, as provided at www.ansi.org. Section 2.3 from the ANSI Essential Requirements is provided in Appendix D for reference.

The submittal of this recommendation to the ASB completes the deliverable for Action Item 11/05-06 and the follow-up action item from the June 2007 ASB meeting.

Respectfully submitted,

Calvin M. Hopper, Chair N16

Date

Tawfik Raby, Chair N17

Date

Allen Camp, Chair RISC

Date

Carl Mazzola, Chair NFSC

Date

Appendix A

American Nuclear Society Standards Board

POLICY ON THE CERTIFICATION OF CONSENSUS COMMITTEE MEMBERSHIP (2/25/05)

POLICY ON THE CERTIFICATION OF CONSENSUS COMMITTEE MEMBERSHIP

1. BACKGROUND

The accredited rules and procedures for the Standards Committee require that no more than one-third of the membership of each consensus committee represent any one type of organization. In addition, the ANS Bylaws require that the Standards Board certify annually to the Board of Directors that this requirement is met. This policy provides direction to meet these requirements.

2. DEFINITIONS

2.1 *Owner/Operator*

Any organization (including utilities) that owns or operates a nuclear facility. Includes facility operators where the operator and owner are different organizations. Includes individuals who are assigned full time to the operation of a reactor, including the plant manager (or equivalent) or other position in an organization reporting directly to the plant manager. Also, national or international organizations established to represent or work on behalf of owners (e.g., INPO, EPRI, and WANO).

2.2 *Vendor*

Any organization that provides equipment (including fuel) to an owner, the government, or to another vendor. Includes organizations that also provide services to owners. (Typically includes suppliers and manufacturers.)

2.3 *Service Provider*

Any organization that provides services (but not equipment) to an owner, the government, or a vendor. Includes consulting organizations but not individuals. "Services" includes design work (including architectural services), planning, and construction management. Includes organizations that distribute equipment that constitutes a supplementary offering to support and fulfill its primary mission of providing services.

2.4 **Government**

Any federal or state agency (such as departments, administrations, commissions, and boards). Also, organizations whose primary function is to extend the capabilities of a specific government agency (e.g., NRC, DOE, DOD, DOC), including supplying materials, providing consulting services and conducting development work.

2.5 **University and Research Organizations**

Any recognized institute of higher learning. Organizations whose primary function is to conduct research, either commercially or for a government agency, except those organizations defined under government.

2.6 **Standards and Other Industry Organizations**

Representatives of other standards developing organizations if those individuals are officially representing a specific consensus committee that develops consensus standards in nuclear science and engineering of direct interest to the assigned consensus committee. Includes representation from trade organizations (such as NEI), insurance interests, and nuclear inspection organizations. Although each consensus chair must be an ANS member, for the purpose of determining balance of interests, ANS representation is not counted.

2.7 **Individual**

A person who is nationally recognized for expertise within the scope of the assigned consensus committee and whose services or travel are not paid for by any other organization defined herein (with the exception of grants administered by ANS or another organization).

3. **POLICY**

3.1 **Sponsoring Organization**

For the purpose of determining balance of interests the sponsoring organization is that organization that pays for the member's services, travel, or both, associated with the member's participation in the activities of the consensus committee. This criterion applies to full time employees of any organization defined herein regardless of financial support. However, another standards developing organization shall be considered the sponsoring organization for its individual representatives independent of financial support.

3.2 **Certification of Standards Committee Membership**

In February of each year, the Standards Administrator shall request a complete listing of members from each consensus committee chair. This listing should include the name, sponsoring organization, mailing address, telephone number and email address of each

member. Each consensus committee chair shall provide a complete membership listing to the Standards Administrator and the Standards Board Chair by May 15.

The Standards Administrator shall call each chairman who does not reply by April 1 to obtain the needed information.

The complete listing arranged by type of sponsoring organization shall be provided to the ANS Standards Board for certification at each annual meeting of ANS. The sponsoring organizations shall be those defined in 3.1 above and as set forth in the Definitions.

If a member of the Standards Board disagrees with the Chair's assignment of an individual member of a consensus committee to a specific sponsoring organization (that is, the application of the definitions), a vote may be requested. A majority of those present shall determine the appropriate assignment.

3.3 *Maintenance of Balance of Interest*

The Chairman of the Standards Committee shall review the membership of each consensus committee annually to ensure that no one type of organization holds more than one-third of the total membership. Types of organizations include: owners; vendors; service providers; government agencies; universities and research organizations; standards and other industry organizations; and individuals.

The Chair of the Standards Committee shall work with the corresponding consensus committee chair and the Standards Administrator to develop a plan of action to immediately correct any instance where the one-third rule is violated.

06/18/82

(JFM edit, 8/16/99, Revised, 1/20/04)

(JFM edit, 5/27/04; revised 6/29/04)

(JFM edit, 2/12/05, revised 2/25/05)

Appendix B

American Nuclear Society Standards Board

POLICY ON THE CERTIFICATION OF CONSENSUS COMMITTEE MEMBERSHIP (11/13/07 Recommendation)

1. BACKGROUND

The accredited rules and procedures for the Standards Committee require that no more than one-third of the membership of each consensus committee represent any one type of organization. In addition, the ANS Bylaws require that the SB certify annually to the Board of Directors that this requirement is met. This policy provides direction to meet these requirements.

2. DEFINITIONS

2.1 *Owner*

Any organization (including utilities) that owns a commercial nuclear power facility. Includes operators of such facilities where the operator and owner are different companies. Includes national or international organizations established to represent or work on behalf of owners (e.g., NEI, INPO, EPRI, and WANO).

2.2 *Vendor*

Any organization that provides equipment (including fuel) to an owner, the government, or to another vendor. Includes organizations that also provide services to owners. (Vendors are also called suppliers or manufacturers.)

2.3 *Architect-Engineer*

Any organization that provides services (but not equipment) to an owner, the government, or a vendor. Includes organizations that provide design work (including architectural services), planning, and construction management.

2.4 *Consultants*

Any organization whose mission is to provide professional services (but not equipment) for addressing technical, research, development, safety, and regulatory issues among Owners, Vendors, Government, Universities, and National Laboratories.

2.5 *Government Agency*

Any federal or state agency (such as departments, administrations, commissions, and boards) with missions to regulate use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to protect the

environment, and to advance the national, economic, and energy security of the United States.

2.6 *National Laboratories*

Organizations managing and operating government owned facilities for the purpose of basic and applied research and development for industry or government.

2.7 *University*

Any recognized institute of higher learning whose mission is to educate and to provide research through an environment of open and interactive collaboration with industry and government.

2.8 *Societies*

Standards developing organizations, including insurance and nuclear inspection, whose mission is to develop standards, consensus or otherwise, that have potential relevance to ANS standards (ANS representation is not allowed).

2.9 *Individual*

A person who is nationally recognized for expertise within the scope of the assigned consensus committee and whose services or travel are not paid for by any other organization defined herein (with the exception of grants administered by ANS or a similar organization).

2.10 *Sponsoring Organization*

The organization that is represented or pays for a persons participation in the activities of the consensus committee. Applies to employees of any organization defined herein regardless of financial support.

3. *POLICY*

3.1 *Certification of Standards Committee Membership*

The Standards Administrator shall request a complete listing of members from each consensus standards committee chairman. This listing should include the name, sponsoring organization, mailing address, telephone number and email address of each member. This request shall be made in February of each year and a complete compilation provided to the SB Chair by May 15.

The Standards Administrator shall call each chairman who does not reply by April 1 to obtain the needed information.

The complete listing arranged by type of sponsoring organization shall be provided to the ANS Standards Board for certification at each annual meeting of ANS. The sponsoring organizations shall be those set forth in the Definitions only.

3.2 ***Maintenance of Balance of Interest***

The Chairman of the Standards Committee shall review the membership of each consensus committee annually to ensure that no one type of organization holds more than one-third of the total membership. Types of organizations include: owners, vendors, architect-engineers, consultants, government agencies, national laboratories, universities, societies, and individuals.

The Chair of the Standards Committee shall work with the corresponding consensus committee chair and the Standards Administrator to develop a plan of action to immediately correct any instance where the one-third rule is violated.

(ASB revision ??/??/??)

Appendix C

Missions of Selected Recommended Types of Organizations

OWNERS

Duke Power's mission is to create superior value for its customers, employees, communities and Duke Energy investors through the generation, delivery, sale and service of electric power.

Nuclear Fuel Services, Inc.'s mission is to discover and implement cost-effective fuel manufacturing, fuel recycling, material treatment solutions, research and development, site remediation, decontamination and decommissioning, packaging and shipping innovations and safeguards and security insights.

The **Tennessee Valley Authority Nuclear** organization's mission is to ensure safe nuclear power plant operations and achieve its vision of being the best multi-site nuclear power operator in the world.

The **Nuclear Energy Institute's** mission is to promote the policies of the nuclear energy and technologies industry and to participate in both the national and global policy-making process to ensure the formation of policies that promote the beneficial uses of nuclear energy and technologies in the United States and around the world.

AREVA Framatome ANP's mission is to further improve plant performance, reduce operating costs and extend plant lifetime and thus to help our customers power the world with safe, clean and cost-effective nuclear energy.

VENDORS

Ludlum Measurements, Inc.'s mission is to provide a quality radiation detection instruments and associated hardware that meets the needs of the oil industry, new and recycled metals industry, university and medical research labs, and numerous local, state, and federal agencies at a competitive price.

Honeywell International, Inc.'s mission is to convert natural uranium ore to uranium hexafluoride that may be enriched before its use in manufacturing nuclear reactor fuel for military and industrial electric utilities.

Holtech International's mission is to develop technologies that protect public health and safety and provide utmost protection to the workers who our structures, systems, and components designed for spent fuel systems, nuclear components, consulting technology, and site services.

ARCHITECT-ENGINEERS

Lockwood Greene – CH2M Hill's architect and engineering provides global industrial engineering, design and construction services to manufacturing, process, power and institutional markets.

Flour Corporation's mission is to provide engineering, procurement, construction, and maintenance services worldwide to the energy and chemicals industries in government and commerce.

The **Shaw Group** (Stone & Webster)'s mission is to provide premier engineering, design, construction, and maintenance services to government and private-sector clients in a wide array of industries, including the energy, environmental, infrastructure, and emergency response markets.

CONSULTANTS

Nuclear Safety Associates' mission is to collaborate with the design engineering, process engineering, and operations departments, as well as the other safety disciplines, to assure personnel safety in a manner that is most economical and productive for the client

Science Applications International Corporation's mission is to provide research and engineering services.

EXCEL Services Corporation's mission is to provide the highest quality professional services to our clients and the nuclear industry for the resolution of technical, safety, and regulatory issues in support of their clients in achieving the highest level of safety and performance in nuclear facility operations relating to Regulatory and Licensing Services, Management and Consulting Services, Engineering and Technical Services, and Training and Operations Services.

Wyle Laboratories, Inc.'s mission is to provide a diverse range of services and systems to aerospace, military, commercial and government customers in the areas of high tech testing, life sciences, and technical support services including government facility operations, electronics, transportation, nuclear power, and product safety.

ABS Consulting's mission is to provide risk management services that combines industry experts, risk modeling, practical engineering and technology based solutions to assist its clients in managing their operational, security, and catastrophic risks to minimize business interruption of their operations.

GOVERNMENT AGENCIES

The **US Nuclear Regulatory Commission**'s mission is to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. That mission covers three main areas:

- Commercial reactors for generating electric power and research and test reactors used for research, testing, and training
- Uses of nuclear materials in medical, industrial, and academic settings and facilities that produce nuclear fuel
- Transportation, storage, and disposal of nuclear materials and waste , and decommissioning of nuclear facilities from service

An element in the regulatory process is research for the development and research in support of their regulatory responsibilities.

The **US Department of Energy**'s mission is to advance the national, economic, and energy security of the United States; to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex. The four strategic goals toward achieving the mission are:

- To protect our national security by applying advanced science and nuclear technology to the Nation's defense
- To protect our national and economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy
- To protect our national and economic security by providing world-class scientific research capacity and advancing scientific knowledge
- To protect the environment by providing a responsible resolution to the environmental legacy of the Cold War and by providing for the permanent disposal of the Nation's high-level radioactive waste.

The **US Department of Transportation**'s mission is to serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future.

NATIONAL LABORATORIES

Oak Ridge National Laboratory's mission is to conduct basic and applied research that provides innovative solutions to complex problems. This is accomplished with a staff of more than 4,000 and annually hosts approximately 3,000 guest researchers who spend two weeks or longer in Oak Ridge in six major mission roles with subcategories spanning a broad range of scientific studies relevant to nuclear energy applications including:

- neutron science
- energy
- high-performance computing systems
- biology

- materials science at the nanoscale
- national security

Support for the basic and applied research is typically provided by the research organizations of various US agencies. The products of the research is usually the revelation of knowledge, not policy, that is provided for use in industry by technology transfer, education, health, safety, security, energy, transportation, etc.

UNIVERSITIES

The **University of Tennessee**'s mission is to add value to Tennessee by educating its students, doing research and creative work that improves quality of life, and reaching out to share expertise with Tennesseans.

The **University of Chicago** Physical Sciences Division's mission is to provide research through an environment of open and highly interactive collaboration.

The **University of California**'s mission is to educate the leaders of tomorrow in our laboratories through innovative research to improve lives and to drive the economy by constantly searching for ways to expand and enhance educational opportunities for all Californians.

SOCIETIES

The **Health Physics Society**'s mission is to advance excellence in the science and practice of radiation safety through encouraging research in radiation science, developing standards, and disseminating radiation safety information for understanding, evaluating, and controlling the potential risks from radiation relative to its benefits.

The **Institute of Nuclear Materials Management**'s mission is to provide the forum for interacting with the leaders in nuclear materials management in industry, government, academia, and international organizations throughout the world for providing effective leadership and professional development in the field of nuclear materials management and for implementing the best approaches and procedures for all aspects of nuclear materials management.

INDIVIDUALS

These **individuals** are typically retired people with extensive experience who represent a valuable theoretical, technical, academic, administrative, government, etc. resource to the consensus committee. They may also represent the interests of interveners or advocates.

Appendix D
Section 2.3 Balance from
ANSI Essential Requirements:
Due process requirements for American National Standards,” Issue
date: January 31, 2007

2.3 Balance

Historically the criteria for balance are that a) no single interest category constitutes more than one-third of the membership of a consensus body dealing with safety-related standards or b) no single interest category constitutes a majority of the membership of a consensus body dealing with other than safety-related standards.

The interest categories appropriate to the development of consensus in any given standards activity are a function of the nature of the standards being developed. Interest categories shall be discretely defined, cover all materially affected parties and differentiate each category from the other categories. Such definitions shall be available upon request. In defining the interest categories appropriate to a standards activity, consideration shall be given to at least the following:

- a) producer;
- b) user;
- c) general interest.

Where appropriate, additional interest categories should be considered.¹

Appropriate, representative user views shall be actively sought and fully considered in standards activities. Whenever possible, user participants shall be those with the requisite technical knowledge, but other users may also participate. User participation should come from both individuals and representatives of organized groups. There are several user categories:

1. User-consumer: Where the standards activity in question deals with a consumer product, such as lawn mowers or aerosol sprays, an appropriate consumer participant’s view is considered to be synonymous with that of the individual user – a person using goods and services rather than producing or selling them.
2. User-industrial: Where the standards activity in question deals with an industrial product, such as steel or insulation used in transformers, an appropriate user participant is the industrial user of the product.
3. User-government: Where the standards activity in question is likely to result in a standard that may become the basis for government agency procurement, an appropriate user participant is the representative of that government agency.
4. User-labor: Where the standards activity in question deals with subjects of special interest to the American worker, such as products used in the workplace, an appropriate user participant is a representative of labor.

¹ Further interest categories that may be used to categorize directly and materially affected persons consist of, but are not limited to, the following: a) Consumer; b) Directly affected public; c) Distributor and retailer; d) Industrial/commercial; e) Insurance; f) Labor; g) Manufacturer; h) Professional society; i) Regulatory agency; j) Testing laboratory; k) Trade association.

Staff Report November 2007

Standards Development (6/9/07 – 10/31/07)

Standard Proposals: Five Project Initiation Notification System (PINS) forms were recently submitted to ANSI. Proposed standards include three revisions and two new standards. (ANS-8.12, ANS-8.19, ANS-10.4, ANS-10.7, and ANS-19.12.) Additionally, 10 PINS forms are in the approval stage.

Projects at Ballot: Seven ballots have been administered since the June 2007 meeting that included three new standards, two reaffirmations, one revision, and a recirculation. Five of these ballots are either currently open or involved in resolving ballot comments. Seven ASME ballots related to the joint standard were distributed to the RISC Committee for review and comment.

ANSI Approvals: The American National Standards Institute granted final approval as an American National Standard to four reaffirmations, one revised standards, and one new standard. (ANSI/ANS-1-2000;R2007, ANSI/ANS-8.7-1998;R2007, ANSI/ANS-8.26-2007, ANSI/ANS-15.4-2007, ANSI/ANS-59.51-1997;R2007, and ANSI/ANS-59.52-1998;R2007)

The following standards have been published in 2007:

- ANSI/ANS-6.4-2006, "Nuclear Analysis and Design of Concrete Radiation Shielding for Nuclear Power Plants" (revision of ANSI/ANS-6.4-1997; R2004)
- ANSI/ANS-6.4.2-2006, "Specification for Radiation Shielding Materials" (revision of ANSI/ANS-6.4.2-1984; R1997; R2004)
- ANSI/ANS-58.21-2007, "External Events PRA Methodology" (revision of ANSI/ANS-58.21-2003)
- ANSI/ANS-8.23-2007, "Nuclear Criticality Accident Emergency Planning and Response" (revision of ANSI/ANS-8.23-1997)
- ANSI/ANS-8.24-2007, "Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations" (new standard)
- ANSI/ANS-8.26-2007, "Criticality Safety Engineer Training and Qualification Program" (new standard)
- ANSI/ANS-15.1-2007, "The Development of Technical Specifications for Research Reactors" (revision of ANSI/ANS-15.1-1990;R1999)

Two additional standards are in production and will be published before the end of the year:

- ANSI/ANS-15.4-2007, "Selection and Training of Personnel for Research Reactors" (revision of ANSI/ANS-15.4-1988;R1999)
- ANSI/ANS-58.23-2007, "Fire PRA Methodology" (new standard)

Standards Committee Open Clarifications

Since the last meeting, there has been no progress on responding to the following clarifications:

- ANS-3.5-1985 – NFSC Subcommittee ANS-21, Inquiry received 12/12/05
- ANS-6.6.1-1991 – N17 Subcommittee ANS-6, Inquiry received 4/3/07
- ANS-56.8-2002 – NFSC Subcommittee ANS-21, Inquiry received 10/19/06

- ANS-57.1-1992 (R2005) – NFSC Subcommittee ANS-27, Inquiry received 1/8/07
- ANS-58.2-1988 – NFSC Subcommittee ANS-24, Inquiry received 11/28/05
-- errata open from 2004 completed clarification

A new inquiry was received October 29, 2007, from Calvin Hopper requesting clarification on ANSI/ANS-8.1-1998;R2007.

Consensus Committee Participation Issues

ANS staff worked with the NFSC Chair and RISC Chair on lack of participation issues within these committees. Letters were drafted to address these issues. Several members were moved to the observer category which does not have a meeting attendance or balloting requirement. Observers are kept apprised of committee business and may submit comments on projects of interest.

Volunteer Database

With a recently acquired new server at ANS, work has begun on the volunteer database. The ANS IT Department is anticipating a skeleton of the database to be completed by the end of the year.

Annual Activity Report

Notices to provide reports for the Standards Committee Report of Annual Activities are in progress. All consensus committee chairs, subcommittee chairs, and working group chairs will be contacted.

ICONS/NSN

Invoices for 2008 subscriptions of ICONS and Nuclear Standards News were mailed in September. A new ICONS promo brochure was mailed to special library associations, ANS non-member subscribers, and the Nuclear News buyers guide list. Total promotion distribution is 4650.

**STANDARDS SALES REPORT
6/1/07 TO 10/15/07**

Attachment I

Designation & Title of Standard	# Of Paper/Electronic Copies Sold	Total Price
ANS-1-2000;R2007 , Conduct of Critical Experiments	1	30.00
ANS-2.2-2002 , Earthquake Instrumentation Criteria for Nuclear Power Plants	1	42.00
ANS-2.8-1992;W2002 , Determining Design Basis Flooding at Power Reactor Sites	1	152.00
ANS-2.10-2003 , Criteria for the Handling and Initial Evaluation of Records from Nuclear Power Plant Seismic Instrumentation	1	36.00
ANS-2.23-2002 , Nuclear Plant Response to an Earthquake	3	291.00
ANS-2.26-2004 , Categorization of Nuclear Facility Structures, Systems, and Components For Seismic Design	4	342.00
ANS-3.1-1978;W1981 , Selection, Qualification Training of Personnel for Nuclear Power Plants	3	129.00
ANS-3.1-1993;R1999 , Selection, Qualification Training of Personnel for Nuclear Power Plants	2	125.40
AND-3.2-2006 , Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants	4 / 1	512.30
ANS-3.4-1983;R1988;W1996 , Medical Certification and Monitoring of Personnel Requiring Operator LTC	4	123.00
ANS-3.5-1998 , Nuclear Power Plant Simulators for Use in Operator Training & Examination	1	84.00
ANS-3.8.5-1992;W2002 , Criteria for Emergency Radiological Field Monitoring, Sampling and Analysis	1	42.00
ANS-3.8.7-1998 , Criteria for Planning, Development, Conduct and Evaluation of Drills and Exercises for Emergency Preparedness	1	48.00
ANS-3.11-2000;W2005 , Determining Meteorological Information at Nuclear Facilities	1	97.00
ANS-3.11-2005 , Determining Meteorological Information at Nuclear Facilities	4	397.80
ANS-5.1-2005 , Decay Heat Power in Light Water Reactors	4 / 1	524.38
ANS-5.10-1998;R2006 , Airborne Release Fractions at Non-Reactor Nuclear Facilities	1	90.00
ANS-6.1.1-1977;W1989 (N666) , Neutron & Gamma-Ray Flux-to-Dose-Rate Factors	1	48
ANS-6.1.1-1991;W2001 , Neutron and Gamma-Ray Fluence-To-Dose Factors	3	218.40
ANS-6.1.2-1999 , Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants	3	90.00
ANS-6.4-2006 , Nuclear Analysis and Design of Concrete Radiation Shielding for Nuclear Power Plants	5 / 3	1,178.10
ANS-6.4.2-2006 , Specification for Radiation Shielding Materials	6 / 2	465.00
ANS-6.4.3-1991;W2001 , Gamma-Ray Attenuation Coefficients and Buildup Factors for Engineering Materials	1	151.20
ANS-6.6.1-1987;R1998;R2007 , Calculation & Measurement Direct & Scattered Gamma Radiation from LWR Nuclear Power Plants	15	1465.90
ANS/HpSSC-6.8.1-1981; W1992 , Location and Design Criteria for Area Radiation Monitoring Systems for Light Water Nuclear Reactors	2	97.20
ANS-8.1-1983;R1988, W1998 , Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	1	59.40
ANS-8.1-1998;R2007 , Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	38 / 2	2,311.20
ANS-8.3-1997;R2003 , Criticality Accident Alarm Systems	5 / 2	514.80
ANS-8.5-1996;R2002;R2005 , Use of Borosilicate-Glass Raschig Rings as a Neutron Absorber in Solutions of Fissile Material	2	86.40
ANS-8.6-1983;R1988;R1995;R2001 , Safety in Conducting Subcritical Neutron-Multiplication	3	69.60
ANS-8.7-1998;R2007 , Guide for Nuclear Criticality Safety in the Storage of Fissile Materials	4	257.40
ANS-8.9-1987;R1995;W2000 , Nuclear Criticality Safety Guide for Pipe Intersections Containing Aqueous Solutions of Enriched Uranyl Nitrate	1	42.00
ANS-8.10-1983;R1988;R1999;R2005 , Criteria for Nuclear Criticality Safety Controls	2	68.40

**STANDARDS SALES REPORT
6/1/07 TO 10/15/07**

ANS-8.12-1987;R1993;R2002 , Nuclear Criticality Control and Safety of Plutonium-Uranium Fuel Mixtures Outside Reactors	1	64.80
ANS-8.14-2004 , Use of Soluble Neutron Absorbers in Nuclear Facilities Outside Reactors	3	100.80
ANS-8.15-1981;R1987;R1995;R2005 , Nuclear Criticality Control of Special Actinide Elements	1	59.40
ANS-8.17-2004 , Criticality Safety Criteria for the Handling, Storage and Transportation of LWR Fuel Outside Reactors	3 / 2	172.80
ANS-8.19-1996; W2005 , Administrative Practices for Nuclear Criticality Safety	2	45.60
ANS-8.19-2005 , Administrative Practices for Nuclear Criticality Safety	16	477.00
ANS-8.20-1991;R1999;R2005 , Nuclear Criticality Training	6	171.00
ANS-8.21-1995;R2001 , Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors	2	68.40
ANS-8.22-1997;R2006 , Nuclear Criticality Safety Based on Limiting & Controlling Moderators	1	37.80
ANS-8.23-1997;W2007 , Nuclear Criticality Accident Emergency Planning and Response	1 / 1	68.40
ANS-8.23-2007 , Nuclear Criticality Accident Emergency Planning and Response	13	1,168.40
ANS-8.24-2007 , Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations	52 / 13	5,086.20
ANS-8.26-2007 , Criticality Safety Engineer Training and Qualification Program	12 / 2	376.00
ANS-10.2-2000 , Portability of Scientific and Engineering Software	1	36.00
ANS-10.4-1987;R1998 , Guidelines for the Verification and Validation of Scientific and Engineering Computer Programs in the Nuclear Industry	2	208.00
ANS-14.1-2004 , Operation of Fast Pulse Reactors	2	68.40
ANS-15.1-2007 , The Development of Technical Specifications for Research Reactors	6 / 2	568.80
ANS-15.4-1988;R1999;W2007 , Selection and Training of Personnel for Research Reactors	5	230.40
ANS-15.8-1995;R2005 , Quality Assurance Program Requirements for Research Reactors	4	187.20
ANS-15.10-1994;W2004 , Decommissioning of Research Reactors	1	81.00
ANS-15.11-1993;R2004 , Radiation Protection at Research Reactor Facilities	2	184.00
ANS-15.16-1982;R1988;R2000 , Emergency Planning for Reactors	2	84.00
ANS-15.17-1981;R1987;R2000 , Fire Protection Program Criteria for Research Reactors	1	36.00
ANS-15.21-1996;R2006 , Format and Content for Safety Analysis Reports for Research Reactors	3	321.00
ANS-16.1-2003 , Measurement of the Leachability of Solidified Low-Level Radioactive Wastes by a Short-Term Test Procedure	2 / 3	570.00
N18.1-1971 (ANS-3.1) , Selection and Training of Nuclear Power Plant Personnel	2	63.00
ANS-18.1-1999 , Radioactive Source Term for Normal Operation of Light Water Reactors	1	72.00
ANS-19.1-2002 , Nuclear Data Sets for Reactor Design Calculations (RV of 19.1-1983;R1989)	1	54.00
ANS-19.3-2005 , The Determination of Steady State Neutron Reactor Rate Distributions and Reactivity of Nuclear Power Reactors	2	170.20
ANS-19.3.4-2002 , The Determination of Thermal Energy Deposition Rates in Nuclear Reactors (RV of 3.4-76;R83;R89)	1	42.00
ANS-19.4-1976;R1983;R1989;R2000 , A Guide for Acquisition and Documentation of Reference Power Reactor Physics Measurements for Nuclear Analysis Verification	1	60.00
ANS-19.6.1-2005 , Reload Startup Physics Test for Pressurized Water Reactors	2	171.00
ANS-19.11-1997;R2002 , Calculation and Measurement of the Moderator Temperature Coefficient of Reactivity for Water Moderated Power Reactors	1	72.00
ANS-51.1-1983;R1988;W2000 , Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants	2	279.00

**STANDARDS SALES REPORT
6/1/07 TO 10/15/07**

ANS-51.10-1991;R2002 , Auxiliary Feedwater System for Pressurized Water Reactors	1	84.00
ANS-55.1-1992;R2000 , Solid Radioactive Waste Processing System for Light-Water-Cooled Reactor Plants (RV of 55.1-1979)	2	212.80
ANS-55.4-1993;R1999;R2007 , Gaseous Radioactive Waste Processing Systems for Light Water Reactor Plants	2	184.30
ANS-55.6-1993;R1999;R2007 , Liquid Radioactive Waste Processing System for Light Water Reactor Plants	2	190.00
ANS-56.2-1984;R1989;W1999 , Containment Isolation Provisions for Fluid Systems After a LOCA	1	133.00
ANS-56.8-2002 , Containment System Leakage Testing Requirements	2 / 1	286.10
ANS-56.11-1988;W2000 , Design Criteria for Protection Against the Effects of Compartment Flooding in LWR Plants	1	48.60
ANS-57.1-1992;R1998;R2005 , Design Requirements for Light Water Reactor Fuel (RV of 57.1-1980)	1	54.00
ANS-57.2-1983; W1993 , Design Requirements for Light Water Reactor Spent Fuel Facilities at Nuclear Power Plants	4	290.50
ANS-57.3-1983;W1993 , Design Requirements for New Fuel Storage Facilities at LWR Plants	2	91.20
ANS-57.5-1996; R2006 , Light Water Reactors Fuel Assembly Mechanical Design and Evaluation	2	118.80
ANS-57.7-1988;R1997;W2007 , Design Criteria for an Independent Fuel Storage Installation (Water Pool Type)	3	336.00
ANS-57.9-1992;R2000 , Design Criteria for an Independent Spent Fuel Storage Installation (Dry Type)	2 / 1	390.00
ANS-57.10-1996;R2006 , Design Criteria for Consolidation of LWR Spent Fuel	1	102.00
ANS-58.2-1988;W1998 , Design Basis for Protection of Light Water Nuclear Power Plants Against the Effects of Postulated Pipe Rupture	4	553.80
ANS-58.3-1992;R1998 , Physical Protection for Nuclear Safety-Related Systems & Components	2	208.00
ANS-58.6-1996;R2001 , Criteria for Remote Shutdown for Light Water Reactors	2	79.80
ANS-58.8-1994;R2001 , Time Response Design Criteria for Safety-Related Operator Actions	1	66.00
ANS-58.9-1981;R1987;R2002 , Single Failure Criteria for Water Reactor Safety-Related Fluid Systems	1	36.00
ANS-58.11-1995;R2002 , Design Criteria for Safe Shutdown Following Selected Design Basis Events in Light Water Reactors	1	54.00
ANS-58.21-2003;W2007 , External-Events PRA Methodology	1	127.00
ANS-58.21-2007 , External-Events PRA Methodology	22 / 5	4,284.00
ANS-59.3-1992;R2002 , Nuclear Safety Criteria for Control Air Systems (RV of 59.3-1984)	3	121.80
ANS-59.51-1976; W1989 , Fuel Oil Supply Systems for Emergency Diesel Generators	2	63.00
ANS-59.51-1997;R2007 , Fuel Oil Systems for Safety-Related Emergency Diesel Generators	4	240.00
Miscellaneous Historical Standards Sales	1	84.00
GRAND TOTAL:		\$30,082.18

Project Activity Report

Attachment J

10/30/2007

NFSC

ANS- 2 . 3	Determining Tornado and Other Extreme Wind Characteristics at Nuclear Facility Sites	ANS-25	John D. Stevenson	WG Writing Draft
ANS- 2 . 6	Guidelines for Estimating Present & Forecasting Future Population Distributions Surrounding Nuclear Facility Sites	ANS-25	Barbara Mohrman	CC PINS Comment w/WG
ANS- 2 . 8	Determining Design Basis Flooding at Power Reactor Sites	ANS-25	Rick Hill	PINS Development
ANS- 2 . 9	Evaluation of Ground Water Supply for Nuclear Facilities	ANS-25	James S. Bollinger	WG Writing Draft
ANS- 2 . 15	Criteria for Modeling and Calculating Atmospheric Transport of Routine Releases from Nuclear Facilities	ANS-24	Doyle Pittman & Cliff Glantz	WG Writing Draft
ANS- 2 . 16	Criteria for Modeling Design-Basis Accidental Releases from Nuclear Facilities	ANS-24	Doyle Pittman / Cliff Glantz	WG Writing Draft
ANS- 2 . 17	Evaluation of Radionuclide Transport in Ground Water for Nuclear Facilities	ANS-25	James Bollinger	WG Writing Draft
ANS- 2 . 21	Criteria for Assessing Atmospheric Effects on the Ultimate Heat Sink	ANS-25	Doyle Pittman & Cliff Glantz	WG Writing Draft
ANS- 2 . 22	Environmental Radiological Monitoring at Nuclear Facilities	ANS-25	Peter Fledderman	WG Writing Draft
ANS- 2 . 25	Surveys of Terrestrial Ecology Needed to License Thermal Power Plants	ANS-25	Chris Guggino	PINS Development
ANS- 2 . 27	Criteria for Investigations of Nuclear Facility Sites for Seismic Hazard Assessments	ANS-25	Kathryn L. Hanson	CC Ballot Comment w/ WG
ANS- 2 . 29	Probabilistic Seismic Hazard Analysis	ANS-24	Jean Savy	CC Ballot Comment w/ WG
ANS- 2 . 30	Assessing Capability for Surface Faulting at Nuclear Facilities	ANS-25	Joe Litehiser	WG Writing Draft
ANS- 3 . 5	Nuclear Power Plant Simulators for Use in Operator Training and Examination	ANS-21	Timothy Dennis	WG Writing Draft
ANS- 3 . 7 . 1	Facilities and Medical Care for On-Site Nuclear Power Plant Radiological Emergencies	ANS-21	Patricia (Trish) Milligan	PINS Development
ANS- 3 . 8 . 1	Criteria for Radiological Emergency Response Functions and Organizations	ANS-25	Patricia (Trish) Milligan	PINS Development
ANS- 3 . 8 . 2	Criteria for the Functional and Physical Characteristics of Radiological Emergency Response Facilities	ANS-21	Patricia (Trish) Milligan	PINS Development
ANS- 3 . 8 . 3	Criteria for Radiological Emergency Response Plans and Implementing Procedures	ANS-25	Patricia (Trish) Milligan	PINS Development
ANS- 3 . 8 . 4	Criteria for Maintaining Radiological Emergency Response Capability	ANS-21	Patricia (Trish) Milligan	PINS Development
ANS- 3 . 8 . 5	Criteria for Emergency Radiological Field Monitoring, Sampling and Analysis	ANS-24	Patricia (Trish) Milligan	PINS Development
ANS- 3 . 8 . 6	Criteria for the Conduct of Offsite Radiological Assessment for Emergency Response for Nuclear Power Plants	ANS-25	Patricia (Trish) Milligan	PINS Development
ANS- 3 . 8 . 10	Criteria for Modeling Real-time Accidental Release Consequences at Nuclear Facilities	ANS-24	Doyle Pittman & Cliff Glantz	WG Writing Draft
ANS- 3 . 12. 3	Decommissioning of Nuclear Production and Utilization Facilities: Operator Training	ANS-21	Don Eggett	WG Writing Draft

ANS- 5 . 4	Method for Calculating the Fractional Release of Volatile Fission Products from Oxide Fuel	ANS-24	Carl E. Beyer	WG Writing Draft
ANS- 18 . 1	Radioactive Source Term for Normal Operation of Light Water Reactors	ANS-24	Jim Sejvar	WG Writing Draft
ANS- 29 . 1	Operational Reactivity Management and Oversight at Light Water, Pressurized Water Power Reactors	ANS-29	Steve Shepherd	PINS @ CC
ANS- 40 . 21	Siting, Construction, and Operation of Commercial Low Level Radioactive Waste Burial Grounds	ANS-25	Daniel Hang	PINS @ CC
ANS- 40 . 35	Volume Reduction of Low-Level Radioactive Waste or Mixed Waste	ANS-27	Dennis Ferrigno	PINS Development
ANS- 40 . 37	Mobile Low-Level Radioactive Waste Processing Systems	ANS-27	Clint Miller	CC Ballot Comment w/ W ↺
ANS- 41 . 5	Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation	ANS-24	Saleem Salaymeh	CC Ballot Comment w/ W ↺
ANS- 53 . 1	Nuclear Safety Criteria for the Design of Modular Helium-Cooled Reactor Plants	ANS-28	Malcolm LaBar	WG Writing Draft
ANS- 56 . 8	Containment System Leakage Testing Requirements	ANS-21	Jim Glover	PINS Development
ANS- 57 . 2	Design Requirements for Light Water Reactor Spent Fuel Facilities at Nuclear Power Plants	ANS-27	Rob Tucker (?)	CC Ballot Comment w/ W ↺
ANS- 57 . 3	Design Requirements for New Fuel Storage Facilities at LWR Plants	ANS-27	Rob Tucker (?)	CC Ballot Comment w/ W ↺
ANS- 58 . 2	Design Basis for Protection of Light Water Nuclear Power Plants Against the Effects of Postulated Pipe Rupture	ANS-24	Jim Gilmer	PINS Development
ANS- 58 . 3	Physical Protection for Nuclear Safety-Related Systems and Components	ANS-22	John Stevenson	Ballot @ CC
ANS- 58 . 8	Time Response Design Criteria for Safety-Related Operator Actions	ANS-22	Rick Hill	CC Ballot Comment w/ W ↺
ANS- 58 . 14	Safety and Pressure Integrity Classification Criteria for Light Water Reactors	ANS-22	Mark Linn	WG Writing Draft
ANS- 58 . 16	Safety and Pressure Integrity Classification Loads and Behavior Criteria for Nuclear Facilities Other Than Large Nuclear Reactors	ANS-22	John D. Stevenson	PINS @ SB

N16

ANS- 8 . 1	Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	ANS-8	Nick Brown & Doug Bowen	CC PINS Comment w/WG
ANS- 8 . 3	Criticality Accident Alarm System	ANS-8	Shean Monahan	PINS Development
ANS- 8 . 10	Criteria for Nuclear Criticality Safety Controls in Operations with Shielding and Confinement	ANS-8	Linda M. Farrell	WG Writing Draft
ANS- 8 . 12	Nuclear Criticality Control and Safety of Plutonium-Uranium Fuel Mixtures Outside Reactors	ANS-8	Debdas Biswas	WG Writing Draft
ANS- 8 . 15	Nuclear Criticality Control of Selected Actinide Nuclides	ANS-8	Norm L. Pruvost	WG Writing Draft
ANS- 8 . 19	Administrative Practices for Nuclear Criticality Safety	ANS-8	R.W. (Bill) Carson	WG Writing Draft
ANS- 8 . 20	Nuclear Criticality Safety Training	ANS-8	Ron Knief	PINS Development
ANS- 8 . 21	Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors	ANS-8	Hans Toffer	PINS @ CC
ANS- 8 . 25	Development of Nuclear Criticality Safety Related Postings	ANS-8	Gerard F. Couture	SB PINS Comments w/ WG
ANS- 8 . 27	Burnup Credit for LWR Fuel	ANS-8	Dale Lancaster	CC Ballot Comment w/ W ↺

N17

ANS- 1	Conduct of Critical Experiments	ANS-1	Ted Schmidt	PINS Development
ANS- 5 . 1	Decay Heat Power in Light Water Reactors	ANS-19	Ian Gauld	PINS @ CC
ANS- 6 . 1 . 1	Neutron and Gamma-Ray Fluence-To-Dose Factors	ANS-6	Nolan Hertel	PINS Development
ANS- 6 . 1 . 2	Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants	ANS-6	F. Arzu Alpan	WG Writing Draft
ANS- 6 . 3 . 1	Program for Testing Radiation Shields in Light Water Reactors (LWR)	ANS-6	Jennifer Tanner	PINS Development
ANS- 6 . 4 . 3	Gamma-Ray Attenuation Coefficients & Buildup Factors for Engineering Materials	ANS-6	Jeffrey C. Ryman (PhD) Jeffrey C. Ryman (PhD)	PINS Development
ANS- 6 . 6 . 1	Calculation and Measurement of Direct and Scattered Gamma Radiation from LWR Nuclear Power Plants	ANS-6	John C. Wagner	PINS Development
ANS- 10. 3	Documentation of Computer Software	ANS-10	Ted Quinn	PINS Development
ANS- 10. 4	Verification and Validation of Non-Safety Related Scientific and Engineering Computer Programs for the Nuclear Industry	ANS-10	Charles (Chip) R. Martin	WG Writing Draft
ANS- 10. 7	Non-Real Time, High Integrity Software for the Nuclear Industry	ANS-10	Dr. Charles Martin (Chip)	WG Writing Draft
ANS- 15. 2	Quality Control for Plate-Type Uranium-Aluminum Fuel Elements	ANS-15	John Sease/Clinton Dana Cooper	WG Writing Draft
ANS- 15. 8	Quality Assurance Program Requirements for Research Reactors	ANS-15	Sean O'Kelly	WG Writing Draft
ANS- 15. 10	Decommissioning of Research Reactors	ANS-15	Sean O'Kelly	WG Writing Draft
ANS- 15. 11	Radiation Protection at Research Reactors	ANS-15	Steve Miller	Ballot @ CC
ANS- 15. 16	Emergency Planning for Research Reactors	ANS-15	Max Gildner	WG Writing Draft
ANS- 15. 17	Fire Protection Program Criteria for Research Reactors	ANS-15	Leo Bobek	WG Writing Draft
ANS- 15. 19	Shipment and Receipt of Special Nuclear Material (SNM) by Research Reactor	ANS-15	Charles McKibben	CC Ballot Comment w/ W C
ANS- 15. 20	Criteria for the Reactor Control and Safety Systems of Research Reactors	ANS-15	R.C. Nelson	PINS Development
ANS- 15. 21	Format and Content for Safety Analysis Reports for Research Reactors	ANS-15	Alexander Adams	SB PINS Comments w/ WG
ANS- 19. 1	Nuclear Data Sets for Reactor Design Calculations	ANS-19	Bob Little	WG Writing Draft
ANS- 19. 6 . 1	Reload Startup Physics Tests for Pressurized Water Reactors	ANS-19	C.T. Rombough	WG Writing Draft
ANS- 19. 9	Delayed Neutron Parameters for Light Water Reactors	ANS-19	Mikey Brady Raap	WG Writing Draft
ANS- 19. 10	Methods for Determining Neutron Fluence in BWR and PWR Pressure Vessel and Reactor Internals	ANS-19	Lambros Lois	WG Writing Draft
ANS- 19. 11	Calculation and Measurement of the Moderator Temperature Coefficient of Reactivity for Water Moderated Power Reactors	ANS-19	Russ Mosteller	PINS Development
ANS- 19. 12	Nuclear Data for Isotope Production Calculations for Medical and Other Applications	ANS-19	Marc Garland / Robert Schenter	WG Writing Draft

RISC

ANS- 58. 22	Low Power and Shutdown PRA Methodology	RISC	Don Wakefield	CC Ballot Comment w/ W C
ANS- 58. 24	Severe Accident Progression and Radiological Release (Level 2) PRA Methodology to Support Nuclear Installation Applications	RISC	Mark Leonard	WG Writing Draft
ANS- 58. 25	Standard for Radiological Accident Offsite Consequence Analysis (Level 3 PRA) to Support Nuclear Installation Applications	RISC	Keith Woodard	WG Writing Draft

Delinquent Standards

Attachment K

10/30/2007

NFSC

Designation	Title	Subcommittee	ANSI Approval Date	Extension Date	Action Needed By	Project Activity	History
ANS- 2 . 2	Earthquake Instrumentation Criteria for Nuclear Power Plants	ANS-25	10/21/2002	12/31/2010	12/31/2010	NONE	Approved as N18.5-1974; revised 1978; revised 5/3/88. Referenced in RG 1.12. Extended to 12/31/95. Second (maximum) extension to 12/31/98. Nuppsco ballot on revision closed 9/30/97. Public review closes 11/28/97. Consensus not resolved. ANSI admin withdrew the 1988 version of this stdn on 5/19/2000. 11/21/2002- ANSI approved revision. Per Mazzola 6/04 NFSC Report -- reaffirmation should be address in 2006. 11/22/05: Per Dennis Ostrom, this standard could be written for all nuclear facilities -- C. Mazzola suggested preparing a PINS in 2006 to revise for this direction. Looking for new chair. Extension granted until 12/31/2010. Oct 2007: Under consideration for reaffirmation.
ANS- 2 . 23	Nuclear Plant Response to an Earthquake	ANS-21	5/6/2002	12/31/2010	12/31/2010	NONE	Nuppsco ballot closed 9/30/97. Public review closed 11/28/97. ANSI approved standard on 5/6/2002. Extension granted until 12/31/2010. 8/13/07: Per WGC Bob Kassawara, he expects the standard to be used in the immediate future at the Kashiwazaki plant and will be able to assess whether a revision/reaffirmation is appropriate at that time.
ANS- 3 . 1	Selection, Qualification, and Training of Personnel for Nuclear Power Plants	ANS-21	2/4/1999	2/4/2009	2/4/2009	NONE	Approved as N18.1 1971; revised in 1978; second revision in 1981; third revision approved 5/19/87. Errata issued (pages 5 and 6) 5/88. Revision approved 4/23/93. Reaffirmed - ANSI approved 2/4/99. ANS-3.1-1981 and the 1988 version were referenced in Reg Guide 1.8. Requested extension from ANSI to 12/31/2004. (8/20/03) - ANSI granted extension until 12/31/2004. Requested 2nd extension from ANSI until 12/31/2007. Action Item 11/05-07 for Tim Dennis to find new WGC. Final extension granted by ANSI until 2/24/2009. Three volunteers (Shingler, Axinn, Stiles) provided for consideration as WGC/WGM. Shingler asked to chair - response unknown.

ANS- 3 . 4	Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants	ANS-21	7/23/2002	12/31/2010	12/31/2010	NONE	Approved as N546 1976; revised 1983; reaffirmed 4/18/88; revised 2/7/96. Extension until 12/31/02. Reaffirmed-ANSI approved 7/23/02 (this RF also includes the new statement to the Fwd.). Per Mike Ruby at June 04 NFSC meeting, just lost WG Chair. Action Item 11/05-07 for Tim Dennis to find new chair. Extension granted until 12/31/2010.
ANS- 3 . 5	Nuclear Power Plant Simulators for Use in Operator Training and Examination	ANS-21	4/15/1998	4/14/2008	4/15/2008	WG Writing Draft	Approved 1979. Revised in 1981. Referenced in RG 1.149. Revised 10/25/85. Extended to 12/31/92 with new draft by 9/1/90. Revision approved 3/29/93. Revised 4/15/98. March 2002-Clarification submitted and completed; published in March 2002 Nuclear News. 3/24/03-WG is revising std. 03/13/03-ANSI granted ext. to 4/15/2005. ANSI granted last extension to 4/14/08. PINS sent to ANSI 6/29/06. Draft sent to ANS-21 1/10/07 with 30 day due date. As of 10/17/07, resolving ANS-21 comments/incorporating into draft.
ANS- 3 . 8 . 7	Criteria for Planning, Development, Conduct, and Evaluation of Drills and Exercises for Emergency Preparedness	ANS-25	1/30/1998	1/29/2008	1/29/2008	NONE	Proposed charter not approved at 3/89 meeting. Project charter approved June 1990. As of 1/97, the negative ballots have been withdrawn, but a determination of whether or not substantive changes have been made is needed. Approved 1/30/98. 3/31/03-ANSI granted last ext. to 12/31/2005. (7/21/03) - Requested extension from ANSI until 12/31/2008. (8/20/03) - ANSI granted LAST extension until 1/29/2008. Being considered for reaffirmation. Action Item 06/06-06: Charles Brown/Evan Lloyd to coordinate review of ANSI/ANS-3.8.7 to determine acceptability for reaffirmation. Transferred from ANS-26 Subcommittee to ANS-25 Subcommittee during 2007 NFSC restructuring -- ANS-26 eliminated.
ANS- 18 . 1	Radioactive Source Term for Normal Operation of Light Water Reactors	ANS-24	9/21/1999	12/31/2007	12/31/2007	WG Writing Draft	Approved as N237-1976. (Under ANS-5 management). Referenced in RG 1.112. Revised 12/31/84. Second extension to 12/31/93. Third extension to 12/31/94. (maximum extension). ANSI Withdrawn 2/13/95. Revised 9/21/99. (7/21/03) - Requested extension from ANSI until 12/31/07. (8/20/03) - ANSI granted extension until 12/31/2007. Per 11/11/04 e-mail from Andy Wehrenberg, Jim Seljvar has agreed to chair next revision. Inquiry received June 2004 determined to be a clarification. Clarification issued 12/2004 resulting in need for errata. Errata issued 12/2005. PINS sent to ANSI 3/24/06. WG has been inactive over the last year plus due to lack of information on source term data. 10/2007: WGC provided needed contacts to get data so that revision can be completed.

ANS- 51. 10	Auxiliary Feedwater System for Pressurized Water Reactors	ANS-22	7/25/2002		7/25/2007	NONE	Approved 1979. MC-1 suggests revision at 4/87 meeting; will be extensive working group meeting 11/17/87-NYPA. Extended to 12/31/89. 1979 standard withdrawn by ANSI 4/90. Revision approved 5/10/91. Extended to 12/31/98. ANSI admin withdrew on 5/7/2001, while standard was up for RF. ANSI approved RF on 07/25/2002.
ANS- 55. 1	Solid Radioactive Waste Processing System for Light-Water-Cooled Reactor Plants	ANS-22	6/7/2000	12/31/2008	12/31/2008	NONE	Approved 1979. Referenced in RG 1.143. 5 year maintenance under way; 2nd extension to 12/31/89. 1979 version withdrawn by ANSI in 4/90. ANSI/ANS-55.1 approved 7/28/92. Reaffirmation sent to ANSI w/ 2 negatives on 4/18/00. Reaffirmed by ANSI on 6/7/00. (7/21/03) - Requested extension from ANSI until 12/31/05. (8/20/03) - ANSI granted extension until 12/31/2005. Second extension until 12/31/08. WGC (Don Gardner currently not active.)
ANS- 57. 9	Design Criteria for an Independent Spent Fuel Storage Installation (Dry Type)	ANS-27	6/7/2000	12/31/2008	12/31/2008	NONE	Approved 12/31/84. NUPPSO ballot on revision close 10/19/88; awaiting resolution of negatives; extended to 12/31/90. Second extension to 12/31/91. Revised 05/14/92. Reaffirmed 6/7/2000. (7/21/03) - Requested extension from ANSI until 12/31/05. (8/20/03) - ANSI granted extension until 12/31/2005. Second extension until 12/31/08.
ANS- 58. 3	Physical Protection for Nuclear Safety-Related Systems and Components	ANS-22	10/28/1998		10/28/2008	Ballot @ CC	Approved 1977. 1997 version withdrawan 3/31/89. Revised 8/6/92. This revision includes draft material of 58.1 as Appendix B. Reaffirmed 10/28/98. First extension to 12/31/2005. 6/18/02-PINS to revise this std is in the works. (7/21/03) - Requested extension from ANSI until 12/31/05. (8/20/03) - ANSI granted extension until 12/31/2005. PINS submitted to ANSI for revision 6/10/03. John Stevenson agreed to be new WG Chair at June 04 NFSC meeting. Action Item 06/06-01: NFSC Members (especially vendors) send John Stevenson recommendations for ANS-58.3 Working Group Members. Standards transferred from Subcommittee ANS-21 to ANS-22 in 2007 restructuring. RF ballot received negative. Per comments rec'd, foreword revised for insertion in remaining copies in stock. Recirculation ballot @ NFSC due 11/15/07.
ANS- 58. 6	Criteria for Remote Shutdown for Light Water Reactors	ANS-21	8/31/2001	12/31/2009	12/31/2009	NONE	Approved 1983. Reaffirmed 03/17/1989. Combination of ANS-51.9 and 52.5. Under MC-1 management. Extended to 12/31/96. Revised 02/07/96. Mike Wright requested ballot for reaffirmation. Reaffirmed 8/31/01. ANSI granted extension until 12/31/09. Action Item 11/05-07 for Tim Dennis to find new WGC.

ANS- 58. 8	Time Response Design Criteria for Safety-Related Operator Actions	ANS-22	7/23/2001	12/31/2009	12/31/2009	CC Ballot Comment w/ W	Approved 9/14/84. Combination of ANS-51.4 and 52.3. Under MC-1 Management; MC-1 met 9/28/88 to discuss future action. Extended to 12/31/93. Second extension to 12/31/94 (maximum extension). Revised 8/23/94. First extension to 12/31/02. Reaffirmed 7/23/01. Discussion at NFSC June 2004 meeting felt no new data available to warrant revision. ANSI granted extension until 12/31/09. Currently resolving RF ballot comments.
ANS- 58. 9	Single Failure Criteria for Light Water Reactor Safety-Related Fluid Systems	ANS-22	8/14/2002		8/14/2007	NONE	Approved 1981. Reaffirmed 09/11/1987. Combination of ANS-51.7 and 52.4. Under MC-1 Management. Extended to 12/31/94. 10/94 draft to working group for approval. 2nd extension to 12/31/97. Reaffirmed 08/14/02. New statement to foreword was added. There are 2 drafts on file: March, 1994 (Action: Revision) Single Failure Criteria for Light Water Reactor Safety-Related Fluid Systems; and January, 1995 (Action: Revision) Application of the Single Failure Criterion for Light Water Reactor Safety-Related Fluid Systems. Transferred from ANS-21 to ANS-22 in 2007 NFSC restructuring.
ANS- 58. 11	Design Criteria for Safe Shutdown Following Selected Design Basis Events in Light Water Reactors	ANS-22	7/23/2002	12/31/2010	12/31/2010	NONE	Approved 5/10/83. Reaffirmed 02/02/1989. Under MC-1 Management. Extended to 12/31/96. SSC approves PC November 1992. Revised 7/10/95. First extension to 12/31/03. Reaffirmed 7/23/02 with new statement to the foreword. Transferred from ANS-21 to ANS-22 in 2007 NFSC restructuring. Extension granted until 12/31/2010.
ANS- 59. 3	Nuclear Safety Criteria for Control Air Systems	ANS-22	8/30/2002	12/31/2010	12/31/2010	NONE	Approved 1977. Revised 09/14/84. Extended to 12/31/92. Revised 7/28/92. Draft on file dated 9/1/83. Second extension to 7/28/02. At ballot RF ballot 2/23/02. ANSI withdrew on 7/26/2002. Reaffirmed 8/30/2002. Extension granted until 12/31/2010.

N16

Designation	Title	Subcommittee	ANSI Approval Date	Extension Date	Action Needed By	Project Activity	History
ANS- 8 . 6	Safety in Conducting Subcritical Neutron-Multiplication Measurements in Situ	ANS-8	7/23/2001	12/31/2009	12/31/2009	NONE	Approved at N16.3-1969. Revised 1975. Revised 5/16/83. Reaffirmed 11/30/88. Extended to 12/31/95. Reaffirmed 9/12/95. Looking to revise. First extension to 12/31/03. Reaffirmed 7/23/01. Per WGC (Valentine) e-mail of 5/12/05, he does not feel that a revision is needed. Per 11/05 minutes: no activity in WG but recommends keeping the standard alive as long as there was someone interested. ANSI granted extension until 12/31/09. Tim Valentine retired as 8.6 WGC via email 5-7-07. Bill Meyers appointed new chair as of Sept 2007.

ANS- 8 . 12	Nuclear Criticality Control and Safety of Plutonium-Uranium Fuel Mixtures Outside Reactors	ANS-8	3/20/2002	12/31/2010	12/31/2010	WG Writing Draft	Published in 1978 (Ref. in RG 3.47). Being revised as ANS-8.12.1 with title change; see below. First extension to 12/31/01. (Rev. of ANS-8.12-1978). Revised 9/11/87. First extension to 12/31/94. Reaffirmed 2/17/93. 4/6/93: Project charter created for "its eventual revision." (Published version calls it "ANSI/ANS-8.12-1987. Reaffirmed 3/20/2002. 8/20/03-ANSI granted extension until 12/31/2007. New chair 6/1/06: Debdas Bixwas replaced Song Huang. Extension granted until 12/31/2010. PINS for revision submitted to ANSI 9/24/07.
ANS- 8 . 21	Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors	ANS-8	7/23/2001	12/31/2009	12/31/2009	PINS @ CC	Approved 6/12/95. First extension to 12/31/03. Reaffirmed 7/23/01. (7/21/03) - Requested extension from ANSI until 12/31/2005. (8/20/03) - ANSI granted extension until 12/31/2005. As 5th anny is not until 7/23/06, extension should not have been file. WG meeting at 11/04 ANS meeting. Per N16 SB report 11/2004 -- revising. Schlessere -mail WGC 5/10/05 to recommend maintenance as 5th anny is approaching. ANSI granted extension until 12/31/09.May 2007: PINS for revision currently at ANS-8.

N17

Designation	Title	Subcommittee	ANSI Approval Date	Extension Date	Action Needed By	Project Activity	History
ANS- 6 . 1 . 2	Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants	ANS-6	2/11/1999	2/10/2009	2/10/2009	WG Writing Draft	Approved 8/19/83. Revised 12/12/89. Extended to 12/31/96. Second extension to 12/31/99. Revision approved 2/11/99. (7/21/03) - Requested extension from ANSI until 12/31/2005. (8/20/03) - ANSI approved extension until 12/31/2005. 2/1/05-New WG Chair: Arzu Alpan (per Bill Hopkins). ANSI granted last extension to 2/10/09. PINS for revisions submitted. SB PINS comment resolutions due 5/27/06. PINS submitted to ANSI 5/25/06
ANS- 10 . 2	Portability of Scientific and Engineering Software	ANS-10	12/20/2000	12/31/2008	12/31/2008	NONE	Approved originally as ANS-STD. 3-1971. Revised 1982. Revised 4/18/88. First extension to 12/31/95. Second extension to 12/31/98. Revised 12/20/00. (7/21/03) - Requested extension from ANSI until 12/31/2005. (8/20/03) - ANSI granted extension until 12/31/2005. Second extension granted until 12/31/08. Portions of this standard will be incorporated into ANS-10.4, WGC/SCC deciding if this standard should be reaffirmed or allowed to be withdrawn per 11/02/05 email for AAR.

ANS- 10. 4	Verification and Validation of Non-Safety Related Scientific and Engineering Computer Programs for the Nuclear Industry	ANS-10	8/12/1998	8/11/2008	8/11/2008	WG Writing Draft	Approved 5/13/87. First extension to 12/31/94. Second extension to 12/31/97. ANS-8 may take over as new project ANS-8.24. Reaffirmed 8/12/98. 7/19/02-PINS received to revise std. 02/07/03-PINS Notification in ANSI's publication on this date. (7/21/03) - Requested an extension from ANSI until 12/31/2004. (8/20/03) - ANSI granted extension until 12/31/2004. Per 2/2/06 email from C. Martin: Draft nearly done but WG questioning scope change and may submit new PINS -- may also consider reaffirmation. Last extension until 8/11/08. RV PINS submitted for scope change. Title changed with 2007 revised PINS - "Non-safety related" added to title. PINS to be submitted to ANSI.
ANS- 15. 2	Quality Control for Plate-Type Uranium-Aluminum Fuel Elements	ANS-15	3/11/1999	12/31/2007	12/31/2007	WG Writing Draft	Ref. in RG 2.3. Approved as N398-1974. Reaffirmed 1982. First extension to 12/31/89. Revised 3/30/90. First extension 12/31/98. Revised 3/11/99. Per Wade Richard's 1/9/03 letter: I asked John Sease to work on revising ANS 15.2. John will have a fist revision of the standard to the chair by 8/1/03. The chair will send the draft to the committee for their review by 8/4/03. (7/21/03) - Requested extension from ANSI until 12/31/07. (8/20/03) - ANSI granted extension until 12/31/2007. PINS for rev of 1999 standard sent to ANSI 1/11/07. Ballot with revised standard distributed to N17 on 5/1/07 was withdrawn 6/4/07 due to comments received on draft that it was not ready.
ANS- 15. 16	Emergency Planning for Research Reactors	ANS-15	5/3/2000	12/31/2008	12/31/2008	WG Writing Draft	Approved 1978. Revised 1982. Reaffirmed 4/18/88. Ref. in RG 2.6. First extension to 12/31/95. Second extension to 12/31/98. Reaffirmed 5/3/00. Per Wade Richard's 1/9/03 letter: Max Gildner will incorporate the committees comments and send to the chair by 1/31/03. The chair will send the standard to the ANS 15 committee for balloting by 3/4/03.(7/21/03) - Requested extension from ANSI until 12/31/2005. (8/20/03) - ANSI granted extension until 12/31/2005. 2nd extension until 12/31/08. Per ANS-15 4/04 meeting minutes, draft in at ballot in SC. PINS for RV submitted to ANSI 1/11/07. Draft provided to ANS 4/2006 but on hold until PR clears & Tawfik approval to administer ballot of N17.
ANS- 15. 17	Fire Protection Program Criteria for Research Reactors	ANS-15	5/3/2000	12/31/2008	12/31/2008	WG Writing Draft	Approved 1981. Reaffirmed 4/3/87. First extension to 12/31/94. Second extension to 12/31/97. Reaffirmed 5/3/00. Per Wade Richard's 1/9/03 letter: Leo will send a draft to the chair by 1/31/03. the chair will send the standard to ANS 15 for balloting by 5/5/03. (7/21/03) - Requested extension from ANSI until 12/31/2005. (8/20/03) - ANSI granted extension until 12/31/2005. Second extension granted until 12/31/08. PINS sent to ANSI 10/1/04.

ANS- 19. 1	Nuclear Data Sets for Reactor Design Calculations	ANS-19	7/23/2002		7/23/2007	WG Writing Draft	Approved as N411-1975. Revised 7/2/83. Reaffirmed 3/3/89. First extension to 12/31/96. Second extension to 12/31/99. Revision balloted 2/18/00; comments being resolved. ANSI withdrawn 5/19/00. ANSI approved revision - July 23, 2002. Publication Delivered: June 1, 2004. Per 6/2005 ANS-19 minutes, existing standard was reviewed and determined to need revision. PINS approved by N17 & SB sent to ANSI 9/5/06.
ANS- 19. 3 . 4	The Determination of Thermal Energy Deposition Rates in Nuclear Reactors	ANS-19	3/20/2002	12/31/2010	12/31/2010	NONE	Approved as N676-1976. Reaffirmed 1983. Reaffirmed 3/3/89. First extension to 12/31/96. Second extension to 12/31/99. ANSI withdrawn 8/19/2000. ANSI approved request for first extension to 12/31/03. Revision approve by ANSI 3/20/2002. Per 6/04 meeting minutes, Perry retired as WGC, Cokinos looking for new chair. Extension granted until 12/31/2010.
ANS- 19. 4	A Guide for Acquisition and Documentation of Reference Power Reactor Physics Measurements for Nuclear Analysis Verification	ANS-19	5/3/2000	12/31/2008	12/31/2008	NONE	Approved as N652-1976. Reaffirmed 1983. Reaffirmed 3/3/89. First extension to 12/31/96. Second extension to 12/31/99. Reaffirmed 5/3/00. (7/21/03) - Requested extension from ANSI until 12/31/05. (8/20/03) - ANSI approved extension until 12/31/2005. Second extension granted until 12/31/08. Per ANS-19 minutes 6/04 -- Cokinos looking for new chair. Per 6/2005 minutes, still looking for chair and planning to combine with ANS-19.5.

Status of Standards

Attachment L

10/30/2007

NFSC

Designation	Title	Subcommittee	Status	ANSI Approval Date	Extension Date	Action Needed By	Project Activity
ANS- 2 . 1	Guidelines for Determining the Vibratory Ground Motion for the Design of Earthquake for Nuclear Facilities	ANS-25	Inactive Project				NONE
ANS- 2 . 2	Earthquake Instrumentation Criteria for Nuclear Power Plants	ANS-25	Current ANSI/ANS	10/21/2002	12/31/2010	12/31/2010	NONE
ANS- 2 . 3	Determining Tornado and Other Extreme Wind Characteristics at Nuclear Facility Sites	ANS-25	Active Project				WG Writing Draft
ANS- 2 . 4	Guidelines for Determining Tsunami Criteria for Power Reactor Sites	ANS-25	Inactive Project				NONE
ANS- 2 . 5	Standard for Determining Meteorological Information at Nuclear Power Sites	ANS-25	Historical				NONE
ANS- 2 . 6	Guidelines for Estimating Present & Forecasting Future Population Distributions Surrounding Nuclear Facility Sites	ANS-25	Active Project				CC PINS Comment w/WG
ANS- 2 . 7	Guidelines for Assessing Capability for Surface Faulting at Power Reactor Sites	ANS-25	Historical				NONE
ANS- 2 . 8	Determining Design Basis Flooding at Power Reactor Sites	ANS-25	Active Project				PINS Development
ANS- 2 . 9	Evaluation of Ground Water Supply for Nuclear Facilities	ANS-25	Active Project				WG Writing Draft
ANS- 2 . 10	Criteria for the Handling and Initial Evaluation of Records from Nuclear Power Plant Seismic Instrumentation	ANS-21	Current ANSI/ANS	4/14/2003		4/14/2008	NONE
ANS- 2 . 11	Guidelines for Evaluating Site-Related Geotechnical Parameters at Nuclear Power Sites	ANS-25	Historical				NONE
ANS- 2 . 12	Guidelines for Combining Natural and External Man-Made Hazards at Power Reactor Sites	ANS-21	Historical				NONE
ANS- 2 . 13	Evaluation of Surface-Water Supplies for Nuclear Power Sites	ANS-25	Historical				NONE
ANS- 2 . 14	Determination of the Shape of Response Spectra for Use in Nuclear Facilities Design	ANS-25	Inactive Project				NONE
ANS- 2 . 15	Criteria for Modeling and Calculating Atmospheric Transport of Routine Releases from Nuclear Facilities	ANS-24	Active Project				WG Writing Draft
ANS- 2 . 16	Criteria for Modeling Design-Basis Accidental Releases from Nuclear Facilities	ANS-24	Active Project				WG Writing Draft
ANS- 2 . 17	Evaluation of Radionuclide Transport in Ground Water for Nuclear Facilities	ANS-25	Active Project				WG Writing Draft
ANS- 2 . 18	Standards for Evaluating Radionuclide Transport in Surface Water for Nuclear Power Sites	ANS-25	Active Project				NONE

ANS- 2 . 19	Guidelines for Establishing Site-Related Parameters for Site Selection and Design of an Independent Spent Fuel Storage Installation (Water Pool Type)	ANS-27	Historical					NONE
ANS- 2 . 20	Geology, Seismology, and Seismic Criteria (Tentative title)	ANS-25	Inactive Project					NONE
ANS- 2 . 21	Criteria for Assessing Atmospheric Effects on the Ultimate Heat Sink	ANS-25	Active Project					WG Writing Draft
ANS- 2 . 22	Environmental Radiological Monitoring at Nuclear Facilities	ANS-25	Active Project					WG Writing Draft
ANS- 2 . 23	Nuclear Plant Response to an Earthquake	ANS-21	Current ANSI/ANS	5/6/2002	12/31/2010	12/31/2010		NONE
ANS- 2 . 24	Establishing Geotechnical Parameters for Evaluating Geologic Repositories for High-Level Nuclear Waste	ANS-27	Inactive Project					NONE
ANS- 2 . 25	Surveys of Terrestrial Ecology Needed to License Thermal Power Plants	ANS-25	Active Project					PINS Development
ANS- 2 . 26	Categorization of Nuclear Facility Structures, Systems, and Components For Seismic Design	ANS-22	Current ANSI/ANS	12/02/2004				NONE
ANS- 2 . 27	Criteria for Investigations of Nuclear Facility Sites for Seismic Hazard Assessments	ANS-25	Active Project					CC Ballot Comment w/ W ☞
ANS- 2 . 28	Nuclear Material Facility Design Against Natural Phenomena	ANS-25	Inactive Project					NONE
ANS- 2 . 29	Probabilistic Seismic Hazard Analysis	ANS-24	Active Project					CC Ballot Comment w/ W ☞
ANS- 2 . 30	Assessing Capability for Surface Faulting at Nuclear Facilities	ANS-25	Active Project					WG Writing Draft
ANS- 3 . 1	Selection, Qualification, and Training of Personnel for Nuclear Power Plants	ANS-21	Current ANSI/ANS	2/4/1999	2/4/2009	2/4/2009		NONE
ANS- 3 . 2	Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants	ANS-21	Current ANSI/ANS	7/31/2006		7/31/2011		NONE
ANS- 3 . 3	Security for Nuclear Power Plants	ANS-26	Historical					NONE
ANS- 3 . 4	Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants	ANS-21	Current ANSI/ANS	7/23/2002	12/31/2010	12/31/2010		NONE
ANS- 3 . 5	Nuclear Power Plant Simulators for Use in Operator Training and Examination	ANS-21	Current ANSI/ANS	4/15/1998	4/14/2008	4/15/2008		WG Writing Draft
ANS- 3 . 6	Requirements for Preoperational and Startup Testing		Inactive Project					NONE
ANS- 3 . 7	Guide to Standard Format and Content of Emergency Plans for Nuclear Power Generating Facilities		Inactive Project					NONE
ANS- 3 . 7 . 1	Facilities and Medical Care for On-Site Nuclear Power Plant Radiological Emergencies	ANS-21	Active Project					PINS Development
ANS- 3 . 7 . 2	Emergency Control Centers for Nuclear Power Plants	ANS-26	Historical					NONE
ANS- 3 . 7 . 3	Radiological Emergency Preparedness Exercises for Nuclear Power Plants	ANS-26	Historical					NONE
ANS- 3 . 8	Criteria for Establishing Emergency Response Facilities	ANS-26	Inactive Project					NONE
ANS- 3 . 8 . 1	Criteria for Radiological Emergency Response Functions and Organizations	ANS-25	Active Project					PINS Development
ANS- 3 . 8 . 2	Criteria for the Functional and Physical Characteristics of Radiological Emergency Response Facilities	ANS-21	Active Project					PINS Development

ANS- 3 . 8 . 3	Criteria for Radiological Emergency Response Plans and Implementing Procedures	ANS-25	Active Project					PINS Development
ANS- 3 . 8 . 4	Criteria for Maintaining Radiological Emergency Response Capability	ANS-21	Active Project					PINS Development
ANS- 3 . 8 . 5	Criteria for Emergency Radiological Field Monitoring, Sampling and Analysis	ANS-24	Active Project					PINS Development
ANS- 3 . 8 . 6	Criteria for the Conduct of Offsite Radiological Assessment for Emergency Response for Nuclear Power Plants	ANS-25	Active Project					PINS Development
ANS- 3 . 8 . 7	Criteria for Planning, Development, Conduct, and Evaluation of Drills and Exercises for Emergency Preparedness	ANS-25	Current ANSI/ANS	1/30/1998	1/29/2008	1/29/2008		NONE
ANS- 3 . 8 . 8	Criteria for Onsite Protective Actions During a Radiological Emergency	ANS-26	Inactive Project					NONE
ANS- 3 . 8 . 9	Criteria for Radiological Emergency Response Plans and Implementing Procedures for Permanently Defueled Commercial Nuclear Power Plants	ANS-23	Inactive Project					NONE
ANS- 3 . 8 . 10	Criteria for Modeling Real-time Accidental Release Consequences at Nuclear Facilities	ANS-24	Active Project					WG Writing Draft
ANS- 3 . 9	Criteria for Radiological Emergency Response Plans and Implementing Procedures for Permanently Defueled Commercial Nuclear Power Plants Management of Light Water Reactor Maintenance Programs		Inactive Project					NONE
ANS- 3 . 10	Human Factors Design in Nuclear Power Plants		Inactive Project					NONE
ANS- 3 . 11	Determining Meteorological Information at Nuclear Facilities	ANS-21	Current ANSI/ANS	12/22/2005		12/22/2010		NONE
ANS- 3 . 12 . 1	Decommissioning of Nuclear Production and Utilization Facilities: - Defueled Security Plan	ANS-23	Inactive Project					NONE
ANS- 3 . 12 . 2	Decommissioning of Nuclear Production and Utilization Facilities: - Defueled Safety Analysis Report and Emergency Plan	ANS-23	Inactive Project					NONE
ANS- 3 . 12 . 3	Decommissioning of Nuclear Production and Utilization Facilities: Operator Training	ANS-21	Active Project					WG Writing Draft
ANS- 4	Criteria, Control and Dynamics		Inactive Project					NONE
ANS- 4 . 1	Design Basis Criteria for Safety Systems in Nuclear Power Generating Stations		Historical					NONE
ANS- 4 . 2	(No Assignment)		Inactive Project					NONE
ANS- 4 . 3	Functional Classification and Standards for Application Functions in Nuclear Power Generating Stations		Inactive Project					NONE
ANS- 4 . 3 . 1	Functional Classification for Digital Computers in Nuclear Power Generating Stations		Inactive Project					NONE
ANS- 4 . 3 . 3	Criteria for Beta Class Digital Computers Used in Critical Control and Monitoring Applications in Nuclear Power Plants		Inactive Project					NONE
ANS- 4 . 3 . 4	Criteria for the Application of Digital Computers in Non-Safety Related Functions for Nuclear Power Generating Stations		Inactive Project					NONE
ANS- 4 . 4	Functional Design of PWR Reactivity Control Systems		Inactive Project					NONE
ANS- 4 . 5	Criteria for Accident Monitoring Functions in Light-Water-Cooled Reactors	ANS-21	Historical					NONE

ANS- 4 . 6	Functional Criteria for Data Acquisition and Recording for Transient Reconstruction in Nuclear Power Plants		Inactive Project					NONE
ANS- 5 . 2	Standard Fission-Product Yields for 235U, 238U and 239PU		Inactive Project					NONE
ANS- 5 . 4	Method for Calculating the Fractional Release of Volatile Fission Products from Oxide Fuel	ANS-24	Active Project					WG Writing Draft
ANS- 5 . 6 . 2	Post Accident Access Control and HP Facilities	ANS-21	Inactive Project					NONE
ANS- 5 . 7 . 2	Post Accident Monitoring	ANS-21	Inactive Project					NONE
ANS- 5 . 9	Design Criteria for Nuclear Power Plant Radiation Monitoring Systems	ANS-22	Inactive Project					NONE
ANS- 5 . 10	Airborne Release Fractions at Non-Reactor Nuclear Facilities	ANS-24	Current ANSI/ANS	11/6/2006		11/6/2011		NONE
ANS- 7 . 60	Leakage-Rate Testing of Containment Structures for Nuclear Reactors		Inactive Project					NONE
ANS- 16. 1	Measurement of the Leachability of Solidified Low-Level Radioactive Wastes by a Short-Term Test Procedure	ANS-24	Current ANSI/ANS	7/7/2003		7/7/2008		NONE
ANS- 18. 1	Radioactive Source Term for Normal Operation of Light Water Reactors	ANS-24	Current ANSI/ANS	9/21/1999	12/31/2007	12/31/2007		WG Writing Draft
ANS- 18. 1 . 2	Radioactive Materials in Effluents from Light-Water-Cooled Nuclear Power Plants	ANS-24	Inactive Project					NONE
ANS- 18. 1 . 3	Monitoring of Radioactive Materials in Effluents from Light-Water-Cooled Nuclear Power Plants	ANS-24	Inactive Project					NONE
ANS- 18. 5	Surveys of Terrestrial Ecology Needed to License Thermal Power Plants	ANS-25	Historical					NONE
ANS- 29. 1	Operational Reactivity Management and Oversight at Light Water, Pressurized Water Power Reactors	ANS-29	Active Project					PINS @ CC
ANS- 40. 4	Storage of Bottled Gases		Inactive Project					NONE
ANS- 40. 11	Radioactive Waste Categories		Inactive Project					NONE
ANS- 40. 12	Radioactive Waste Categories		Inactive Project					NONE
ANS- 40. 21	Siting, Construction, and Operation of Commercial Low Level Radioactive Waste Burial Grounds	ANS-25	Active Project					PINS @ CC
ANS- 40. 22	Siting and Operating High-Level Waste Storage Areas		Inactive Project					NONE
ANS- 40. 23	Criteria for Acceptance of Radioactive Wastes at Federal Repositories		Inactive Project					NONE
ANS- 40. 35	Volume Reduction of Low-Level Radioactive Waste or Mixed Waste	ANS-27	Active Project					PINS Development
ANS- 40. 36	Measurement of Radionuclides in Low Level Solid Wastes	ANS-26	Inactive Project					NONE
ANS- 40. 37	Mobile Low-Level Radioactive Waste Processing Systems	ANS-27	Active Project					CC Ballot Comment w/ W c
ANS- 41	Environmental Remediation of Radioactivity Contaminated Sites		Inactive Project					NONE
ANS- 41. 2	Criteria for Remote Sensing Techniques for Site Characterization in Environmental Remediation	ANS-23	Inactive Project					NONE
ANS- 41. 3	Determination of Soil Source Terms for Use in Risk Assessment	ANS-23	Inactive Project					NONE

ANS- 41. 4	Analytical Methods for In-Situ Y-Ray Emitters in Soil	ANS-23	Inactive Project				NONE
ANS- 41. 5	Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation	ANS-24	Active Project				CC Ballot Comment w/ W C
ANS- 41. 6	Performance Tests to Evaluate Solid Waste Forms for LL Radioactive Waste and MW	ANS-23	Inactive Project				NONE
ANS- 41. 7	Performance Tests to Evaluate Waste Forms and Emissions for the Thermal Treatment of LL Radioactive and MW	ANS-23	Inactive Project				NONE
ANS- 41. 8	Performance Tests to Evaluate Criteria and Specifications for a Polymer or Cement Waste Form	ANS-23	Inactive Project				NONE
ANS- 41. 9	Performance Tests to Evaluate Criteria and Specifications for Treatment of Waste by Incineration	ANS-23	Inactive Project				NONE
ANS- 50. 1	Nuclear Safety Criteria for the Design of Stationary Light Water Reactor Plants	ANS-22	Inactive Project				NONE
ANS- 50. 2	HTGR Plant Solid Radwaste System (N204)		Inactive Project				NONE
ANS- 50. 3	LMFBR Gas Radwaste (N205)		Inactive Project				NONE
ANS- 50. 4	LMFBR Liquid Radwaste (N206)		Inactive Project				NONE
ANS- 50. 5	LMFBR Solid Radwaste (N207)		Inactive Project				NONE
ANS- 51	Pressurized Water Reactor Management Committee		Inactive Project				NONE
ANS- 51. 1	Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants	ANS-22	Historical				NONE
ANS- 51. 2	Safety Inspection System (N183)		Inactive Project				NONE
ANS- 51. 3	Residual Heat Removal System Design PWR (N185)		Inactive Project				NONE
ANS- 51. 4	Criteria for Safety Related Operator Actions (N660)		Inactive Project				NONE
ANS- 51. 5	Evaluation of Anticipated Transients Without Trip on Pressurized Water Reactor Plants (N661)		Inactive Project				NONE
ANS- 51. 6	Improved Reactor Shutdown Systems on Future PWR Plants (N662)		Inactive Project				NONE
ANS- 51. 7	Single Failure Criteria for PWR Fluid Systems	ANS-22	Historical				NONE
ANS- 51. 8	Revision and Addendum to Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants ANSI N18.2-1973		Historical				NONE
ANS- 51. 9	Criteria for Remote Shutdown of PWR Plants (N659)		Inactive Project				NONE
ANS- 51. 10	Auxiliary Feedwater System for Pressurized Water Reactors	ANS-22	Current ANSI/ANS	7/25/2002		7/25/2007	NONE
ANS- 52	BWR Management Committee		Inactive Project				NONE
ANS- 52. 1	Nuclear Safety Criteria for the Design of Stationary Boiling Water Reactor Plants	ANS-22	Historical				NONE
ANS- 52. 2	Boiling Water Reactor Standby Core and Containment Heat Removal System		Inactive Project				NONE

ANS- 52. 3	Criteria for Safety-Related BWR Operator Actions		Inactive Project	NONE
ANS- 52. 5	Criteria for Remote Shutdown for Boiling Water Reactors		Inactive Project	NONE
ANS- 53	High Temperature Gas-Cooled Reactor Management Committee	ANS-28	Inactive Project	NONE
ANS- 53. 1	Nuclear Safety Criteria for the Design of Modular Helium-Cooled Reactor Plants	ANS-28	Active Project	WG Writing Draft
ANS- 53. 2	Radioactive Gas Waste System for the Stationary Gas-Cooled Reactor Plant	ANS-28	Inactive Project	NONE
ANS- 53. 3	Gas Cooled Reactor Plant Reactor Core Assembly System	ANS-28	Inactive Project	NONE
ANS- 53. 4	Gas-Cooled Reactor Plant Containment System	ANS-28	Inactive Project	NONE
ANS- 53. 5	Gas-Cooled Reactor Plant Containment System	ANS-28	Inactive Project	NONE
ANS- 53. 6	Gas-Cooled Reactor Plant Reactivity Control System	ANS-28	Inactive Project	NONE
ANS- 53. 8	High Temperature Gas-Cooled Reactor Fuel Handling System Design	ANS-28	Inactive Project	NONE
ANS- 53. 9	Gas-Cooled Reactor Plant Containment Atmospheric Clean-Up System	ANS-28	Inactive Project	NONE
ANS- 53. 10	Gas-Cooled Reactor Plant Electric Power Systems	ANS-28	Inactive Project	NONE
ANS- 53. 11	Gas-Cooled Reactor Plant Protection System	ANS-28	Inactive Project	NONE
ANS- 53. 12	Gas-Cooled Reactor Plant Core Auxiliary Cooling System	ANS-28	Inactive Project	NONE
ANS- 53. 13	Stationary Gas-Cooled Reactor Plant Helium Purification System	ANS-28	Inactive Project	NONE
ANS- 53. 14	Gas-Cooled Reactor Plant Helium Storage System	ANS-28	Inactive Project	NONE
ANS- 53. 15	Design Criteria for the Reactor Cooling Water System of Gas-Cooled Reactor Plants	ANS-28	Inactive Project	NONE
ANS- 53. 16	Design Criteria for the Service Water System of Gas-Cooled Reactor Plants	ANS-28	Inactive Project	NONE
ANS- 53. 17	Gas-Cooled Reactor Plant New Fuel Storage System	ANS-28	Inactive Project	NONE
ANS- 53. 18	Gas-Cooled Reactor Plant Liquid Nitrogen System	ANS-28	Inactive Project	NONE
ANS- 53. 19	Gas-Cooled Reactor Plant Chilled Water System	ANS-28	Inactive Project	NONE
ANS- 53. 20	Gas-Cooled Reactor Plant Secondary Coolant Systems	ANS-28	Inactive Project	NONE
ANS- 53. 21	Gas-Cooled Reactor Plant Other Structures	ANS-28	Inactive Project	NONE
ANS- 53. 22	Gas-Cooled Reactor Plant Control Room	ANS-28	Inactive Project	NONE
ANS- 53. 23	Gas-Cooled Reactor Plant Multi-Unit Stations	ANS-28	Inactive Project	NONE
ANS- 53. 24	Gas-Cooled Reactor Plant Radioactive Liquid Waste Systems	ANS-28	Inactive Project	NONE
ANS- 54	Liquid Metal Fast Breeder Reactor (LMFBR)	ANS-22	Inactive Project	NONE

ANS- 54. 1	General Safety Design Criteria for a Liquid Metal Reactor Nuclear Power Plant	ANS-21	Historical					NONE
ANS- 54. 2	Design Bases for Facilities for LMFBR Spent Fuel Storage in Liquid Metal Outside the Primary Coolant Boundary	ANS-22	Historical					NONE
ANS- 54. 3	Principal Design Criteria for LMFBR Containments	ANS-22	Inactive Project					NONE
ANS- 54. 4	Requirements for Sustaining Safe Shutdown in Liquid Metal Cooled Fast Reactors	ANS-22	Inactive Project					NONE
ANS- 54. 6	LMFBR Safety Classification and Related Requirements	ANS-22	Inactive Project					NONE
ANS- 54. 7	Source Terms to be Used in Evaluation of Radiological Site Suitability for LMFBR Power Plants	ANS-22	Inactive Project					NONE
ANS- 54. 8	Liquid Metal Fire Protection in LMR Plants	ANS-22	Historical					NONE
ANS- 54. 9	Environmental Qualification of Safety Related Equipment in LMFBRs	ANS-22	Inactive Project					NONE
ANS- 54. 10	Risk Limit Criteria for LMFBR Design	ANS-22	Inactive Project					NONE
ANS- 54. 11	Application of Risk Limit Criteria for LMFBR Design	ANS-22	Inactive Project					NONE
ANS- 54. 12	Event Categorization Guidelines for LMFBR Design	ANS-22	Inactive Project					NONE
ANS- 54. 13	Requirements for Evaluating the Potential Radiological Consequences of LMFBR Radioactive Gas Process and Storage System Failures	ANS-22	Inactive Project					NONE
ANS- 55	Fuel and Radwaste		Inactive Project					NONE
ANS- 55. 1	Solid Radioactive Waste Processing System for Light-Water-Cooled Reactor Plants	ANS-22	Current ANSI/ANS	6/7/2000	12/31/2008	12/31/2008		NONE
ANS- 55. 2	Liquid Radioactive Waste Processing System for Pressurized Water Reactor Plants		Historical					NONE
ANS- 55. 3	Boiling Water Reactor Liquid Radioactive Waste Processing Systems		Historical					NONE
ANS- 55. 4	Gaseous Radioactive Waste Processing Systems for Light Water Reactor Plants	ANS-22	Current ANSI/ANS	5/14/2007		5/14/2012		NONE
ANS- 55. 5	no title		Inactive Project					NONE
ANS- 55. 6	Liquid Radioactive Waste Processing System for Light Water Reactor Plants	ANS-22	Current ANSI/ANS	5/14/2007		5/14/2012		NONE
ANS- 56	Containment		Inactive Project					NONE
ANS- 56. 1	Containment Hydrogen Control	ANS-24	Inactive Project					NONE
ANS- 56. 2	Containment Isolation Provisions for Fluid Systems After a LOCA	ANS-22	Historical					NONE
ANS- 56. 3	Overpressure Protection of Low Pressure Systems Connected to the Reactor Coolant Pressure Boundary	ANS-22	Historical					NONE
ANS- 56. 4	Pressure and Temperature Transient Analysis for Light Water Reactor Containments	ANS-22	Historical					NONE
ANS- 56. 5	PWR and BWR Containment Spray System Design Criteria	ANS-22	Historical					NONE

ANS- 56. 6	Pressurized Water Reactor Containment Ventilation Systems	ANS-22	Historical				NONE
ANS- 56. 7	Boiling Water Reactor Containment Ventilation Systems	ANS-22	Historical				NONE
ANS- 56. 8	Containment System Leakage Testing Requirements	ANS-21	Current ANSI/ANS	11/27/2002	12/31/2010	12/31/2010	PINS Development
ANS- 56. 9	Environmental Envelopes for Light Water Reactor Nuclear Power Plants	ANS-21	Inactive Project				NONE
ANS- 56. 10	Subcompartment Pressure and Temperature Transient Analysis in LWRs	ANS-24	Historical				NONE
ANS- 56. 11	Design Criteria for Protection Against the Effects of Compartment Flooding in LWR Plants	ANS-24	Historical				NONE
ANS- 56. 12	Environmental Qualifications of Mechanical Equipment for Nuclear Power Plants		Inactive Project				NONE
ANS- 57	Fuel Management Committee		Inactive Project				NONE
ANS- 57. 1	Design Requirements for Light Water Reactor Fuel Handling Systems	ANS-27	Current ANSI/ANS	7/20/2005		7/20/2010	NONE
ANS- 57. 2	Design Requirements for Light Water Reactor Spent Fuel Facilities at Nuclear Power Plants	ANS-27	Active Project				CC Ballot Comment w/ W ⤴
ANS- 57. 3	Design Requirements for New Fuel Storage Facilities at LWR Plants	ANS-27	Active Project				CC Ballot Comment w/ W ⤴
ANS- 57. 4	Failed Fuel Detection Systems	ANS-27	Inactive Project				NONE
ANS- 57. 5	Light Water Reactors Fuel Assembly Mechanical Design and Evaluation	ANS-27	Current ANSI/ANS	2/28/2006		2/28/2011	NONE
ANS- 57. 6	Quality Assurance Program Requirements for Design and Manufacture of Fuel for Nuclear Power Plants	ANS-27	Inactive Project				NONE
ANS- 57. 7	Design Criteria for an Independent Spent Fuel Storage Installation (Water Pool Type)	ANS-27	Withdrawn	5/28/1997	5/27/2007		NONE
ANS- 57. 8	Fuel Assembly Identification	ANS-27	Current ANSI/ANS	1/12/2005		1/12/2010	NONE
ANS- 57. 9	Design Criteria for an Independent Spent Fuel Storage Installation (Dry Type)	ANS-27	Current ANSI/ANS	6/7/2000	12/31/2008	12/31/2008	NONE
ANS- 57. 10	Design Criteria for Consolidation of LWR Spent Fuel	ANS-27	Current ANSI/ANS	7/6/2006		7/6/2011	NONE
ANS- 58. 1	Plant Design Against Missiles	ANS-21	Inactive Project				NONE
ANS- 58. 2	Design Basis for Protection of Light Water Nuclear Power Plants Against the Effects of Postulated Pipe Rupture	ANS-24	Active Project				PINS Development
ANS- 58. 3	Physical Protection for Nuclear Safety-Related Systems and Components	ANS-22	Current ANSI/ANS	10/28/1998		10/28/2008	Ballot @ CC
ANS- 58. 4	Criteria for Technical Specifications for Nuclear Power Stations	ANS-21	Historical				NONE
ANS- 58. 5	Probabilistic Risk Assessment	ANS-24	Inactive Project				NONE
ANS- 58. 6	Criteria for Remote Shutdown for Light Water Reactors	ANS-21	Current ANSI/ANS	8/31/2001	12/31/2009	12/31/2009	NONE
ANS- 58. 8	Time Response Design Criteria for Safety-Related Operator Actions	ANS-22	Current ANSI/ANS	7/23/2001	12/31/2009	12/31/2009	CC Ballot Comment w/ W ⤴
ANS- 58. 9	Single Failure Criteria for Light Water Reactor Safety-Related Fluid Systems	ANS-22	Current ANSI/ANS	8/14/2002		8/14/2007	NONE

ANS- 58. 10	Realistic Methods for LWR Event Analysis	ANS-24	Inactive Project				NONE
ANS- 58. 11	Design Criteria for Safe Shutdown Following Selected Design Basis Events in Light Water Reactors	ANS-22	Current ANSI/ANS	7/23/2002	12/31/2010	12/31/2010	NONE
ANS- 58. 12	Criteria for Availability of AC Power at Light Water Reactor Power Plants	ANS-21	Inactive Project				NONE
ANS- 58. 14	Safety and Pressure Integrity Classification Criteria for Light Water Reactors	ANS-22	Active Project				WG Writing Draft
ANS- 58. 15	Criteria for Severe Accident Evaluation	ANS-24	Inactive Project				NONE
ANS- 58. 16	Safety and Pressure Integrity Classification Loads and Behavior Criteria for Nuclear Facilities Other Than Large Nuclear Reactors	ANS-22	Active Project				PINS @ SB
ANS- 58. 20	Program for Collection of Reliability Data on Nuclear Power Plant Protection and Engineered Safety Systems and Components		Historical				NONE
ANS- 59			Inactive Project				NONE
ANS- 59. 1	Nuclear Safety Related Cooling Water Systems for Light Water Reactors	ANS-22	Historical				NONE
ANS- 59. 2	Safety Criteria for HVAC Systems Located Outside Primary Containment	ANS-22	Historical				NONE
ANS- 59. 3	Nuclear Safety Criteria for Control Air Systems	ANS-22	Current ANSI/ANS	8/30/2002	12/31/2010	12/31/2010	NONE
ANS- 59. 4	Generic Requirements for Light Water Nuclear Power Plant Fire Protection		Historical				NONE
ANS- 59. 6	Requirements for Fire Hazard Analysis at Light Water Nuclear Power Plants		Inactive Project				NONE
ANS- 59. 7	Control Room HVAC		Inactive Project				NONE
ANS- 59. 51	Fuel Oil Systems for Safety-Related Emergency Diesel Generators	ANS-22	Current ANSI/ANS	10/4/2007		10/4/2012	NONE
ANS- 59. 52	Lubricating Oil Systems for Safety-Related Emergency Diesel Generators	ANS-22	Current ANSI/ANS	10/4/2007		10/4/2012	NONE
ANS- 59. 53	Starting Air Systems for Standby Diesel Generators	ANS-22	Inactive Project				NONE
ANS- 59. 54	Combustion Air Systems for Standby Diesel Generators	ANS-22	Inactive Project				NONE
ANS- 59. 55	Coolant System for Standby Diesel Generators	ANS-22	Inactive Project				NONE

N16

Designation	Title	Subcommittee	Status	ANSI Approval Date	Extension Date	Action Needed By	Project Activity
ANS- 8	Fissionable Materials Outside Reactors		Inactive Project				NONE
ANS- 8 . 1	Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	ANS-8	Current ANSI/ANS	5/16/2007		5/16/2012	CC PINS Comment w/WG
ANS- 8 . 2	Proposed Standard on Computer Codes -- never named	ANS-8	Inactive Project				NONE
ANS- 8 . 3	Criticality Accident Alarm System	ANS-8	Current ANSI/ANS	6/12/2003		6/12/2008	PINS Development

ANS- 8 . 4	Proposed Standard on Shipping Containers -- not named	ANS-8	Inactive Project				NONE
ANS- 8 . 5	Use of Borosilicate-Glass Raschig Rings as a Neutron Absorber in Solutions of Fissile Material	ANS-8	Current ANSI/ANS	5/14/2007		5/14/2012	NONE
ANS- 8 . 6	Safety in Conducting Subcritical Neutron-Multiplication Measurements in Situ	ANS-8	Current ANSI/ANS	7/23/2001	12/31/2009	12/31/2009	NONE
ANS- 8 . 7	Nuclear Criticality Safety in the Storage of Fissile Materials	ANS-8	Current ANSI/ANS	9/12/2007		9/12/2012	NONE
ANS- 8 . 7 . 1	Storage of Fissile Material	ANS-8	Inactive Project				NONE
ANS- 8 . 8	Criticality Safety Limits for Special Applications	ANS-8	Inactive Project				NONE
ANS- 8 . 9	Nuclear Criticality Safety Guide for Pipe Intersections Containing Aqueous Solutions of Enriched Uranyl Nitrate	ANS-8	Historical				NONE
ANS- 8 . 9 . 1	Nuclear Criticality Safety Criteria for Steel-Pipe Intersections Containing Aqueous Solutions of Fissile Materials	ANS-8	Historical				NONE
ANS- 8 . 10	Criteria for Nuclear Criticality Safety Controls in Operations with Shielding and Confinement	ANS-8	Current ANSI/ANS	4/1/2005		4/1/2010	WG Writing Draft
ANS- 8 . 11	Validation of Calculational Methods for Nuclear Criticality Safety	ANS-8	Historical				NONE
ANS- 8 . 12	Nuclear Criticality Control and Safety of Plutonium-Uranium Fuel Mixtures Outside Reactors	ANS-8	Current ANSI/ANS	3/20/2002	12/31/2010	12/31/2010	WG Writing Draft
ANS- 8 . 13 . 1	Criteria for Establishing and Applying a Solid Angle Method for Nuclear Criticality Safety		Inactive Project				NONE
ANS- 8 . 13 . 2	Guide for Evaluating Interaction Between Units of Low Enriched Uranium Using the Surface Density Method		Inactive Project				NONE
ANS- 8 . 14	Use of Soluble Neutron Absorbers in Nuclear Facilities Outside Reactors	ANS-8	Current ANSI/ANS	5/25/2004		5/25/2009	NONE
ANS- 8 . 15	Nuclear Criticality Control of Selected Actinide Nuclides	ANS-8	Current ANSI/ANS	7/15/2005		7/15/2010	WG Writing Draft
ANS- 8 . 16	Maximum Subcritical Limits for Slightly Enriched Uranium Compounds Processed in LWR Fuel Cycle	ANS-8	Inactive Project				NONE
ANS- 8 . 17	Criticality Safety Criteria for the Handling, Storage and Transportation of LWR Fuel Outside Reactors	ANS-8	Current ANSI/ANS	11/03/2004		11/3/2009	NONE
ANS- 8 . 18	Use of Chlorinated Polyvinyl Chloride (CPVC) as a Neutron Absorber	ANS-8	Inactive Project				NONE
ANS- 8 . 19	Administrative Practices for Nuclear Criticality Safety	ANS-8	Current ANSI/ANS	5/16/2005		5/16/2010	WG Writing Draft
ANS- 8 . 20	Nuclear Criticality Safety Training	ANS-8	Current ANSI/ANS	9/16/2005		9/16/2010	PINS Development
ANS- 8 . 21	Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors	ANS-8	Current ANSI/ANS	7/23/2001	12/31/2009	12/31/2009	PINS @ CC
ANS- 8 . 22	Nuclear Criticality Safety Based on Limiting and Controlling Moderators	ANS-8	Current ANSI/ANS	12/8/2006		12/8/2011	NONE
ANS- 8 . 23	Nuclear Criticality Accident Emergency Planning and Response	ANS-8	Current ANSI/ANS	3/23/2007		3/23/2012	NONE
ANS- 8 . 24	Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations	ANS-8	Current ANSI/ANS	3/16/2007		3/16/2012	NONE
ANS- 8 . 25	Development of Nuclear Criticality Safety Related Postings	ANS-8	Active Project				SB PINS Comments w/ WG

ANS- 8 . 26	Criticality Safety Engineer Training and Qualification Program	ANS-8	Current ANSI/ANS	6/20/2007	6/20/2012	NONE
ANS- 8 . 27	Burnup Credit for LWR Fuel	ANS-8	Active Project			CC Ballot Comment w/ W C

N17

Designation	Title	Subcommittee	Status	ANSI Approval Date	Extension Date	Action Needed By	Project Activity
ANS- 1	Conduct of Critical Experiments	ANS-1	Current ANSI/ANS	10/11/2007		10/11/2012	PINS Development
ANS- 5	Energy and Fission Product Release, a management committee of NUPPSCO		Inactive Project				NONE
ANS- 5 . 1	Decay Heat Power in Light Water Reactors	ANS-19	Current ANSI/ANS	4/1/2005		4/1/2010	PINS @ CC
ANS- 5 . 3	Fission Product Release to the Coolant of Light Water Reactors from Failed or Defective Fuel		Inactive Project				NONE
ANS- 5 . 6	Radiation Protection Design Criteria		Inactive Project				NONE
ANS- 5 . 6 . 1	Criteria for Accident Shielding		Inactive Project				NONE
ANS- 5 . 7 . 1	Post Accident Sampling		Inactive Project				NONE
ANS- 5 . 8	Delayed Neutron Data		Inactive Project				NONE
ANS- 6	Radiation Protection and Shielding	ANS-6	Inactive Project				NONE
ANS- 6 . 1 . 1	Neutron and Gamma-Ray Fluence-To-Dose Factors	ANS-6	Active Project				PINS Development
ANS- 6 . 1 . 2	Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants	ANS-6	Current ANSI/ANS	2/11/1999	2/10/2009	2/10/2009	WG Writing Draft
ANS- 6 . 2 . 1	Shielding Benchmark Problems	ANS-6	Inactive Project				NONE
ANS- 6 . 2 . 2	Benchmark Problems for Radiation Energy Spectra Unfolding		Inactive Project				NONE
ANS- 6 . 3 . 1	Program for Testing Radiation Shields in Light Water Reactors (LWR)	ANS-6	Current ANSI/ANS	4/20/2007		4/20/2012	PINS Development
ANS- 6 . 4	Nuclear Analysis and Design of Concrete Radiation Shielding for Nuclear Power Plants	ANS-6	Current ANSI/ANS	9/29/2006		9/29/2011	NONE
ANS- 6 . 4 . 2	Specification for Radiation Shielding Materials	ANS-6	Current ANSI/ANS	9/28/2006		9/28/2011	NONE
ANS- 6 . 4 . 3	Gamma-Ray Attenuation Coefficients & Buildup Factors for Engineering Materials	ANS-6	Active Project				PINS Development
ANS- 6 . 5	Glossary of Terms in Shielding and Dosimetry		Inactive Project				NONE
ANS- 6 . 6 . 1	Calculation and Measurement of Direct and Scattered Gamma Radiation from LWR Nuclear Power Plants	ANS-6	Current ANSI/ANS	3/5/2007		3/5/2012	PINS Development
ANS- 6 . 6 . 2	Standard on Neutron Air Scattering		Inactive Project				NONE
ANS- 6 . 7 . 1	Radiation Zoning for Design of Nuclear Power Plants		Inactive Project				NONE

ANS- 6 . 7 . 2	Radiation Zoning of LWR Plants for Accident Conditions		Inactive Project					NONE
ANS- 6 . 8 . 1	Location and Design Criteria for Area Radiation Monitoring Systems for Light Water Nuclear Reactors (under ANS-5)	ANS-5	Historical					NONE
ANS- 6 . 8 . 2	Selection of and Design Criteria for Continuous Process and Effluent Radiation Monitors for Light Water Reactors (under ANS-5)	ANS-5	Inactive Project					NONE
ANS- 6 . 9	Criteria for Post Accident Radiological Control	ANS-6	Inactive Project					NONE
ANS- 6 . 9	Designing for Post-Accident Radiological Conditions		Inactive Project					NONE
ANS- 7 . 4 . 3	Standard Criteria for Digital Computers in Safety Systems of Nuclear Power Generating Stations		Historical					NONE
ANS- 10	Mathematics and Computation		Inactive Project					NONE
ANS- 10. 2	Portability of Scientific and Engineering Software	ANS-10	Current ANSI/ANS	12/20/2000	12/31/2008	12/31/2008		NONE
ANS- 10. 3	Documentation of Computer Software	ANS-10	Active Project					PINS Development
ANS- 10. 4	Verification and Validation of Non-Safety Related Scientific and Engineering Computer Programs for the Nuclear Industry	ANS-10	Current ANSI/ANS	8/12/1998	8/11/2008	8/11/2008		WG Writing Draft
ANS- 10. 5	Accommodating User Needs in Scientific and Engineering Computer Software Development	ANS-10	Current ANSI/ANS	4/17/2006		4/17/2011		NONE
ANS- 10. 6	Guidelines for Tailoring Computer Standards to the Creation and Control of Nuclear Industry Software		Inactive Project					NONE
ANS- 10. 7	Non-Real Time, High Integrity Software for the Nuclear Industry	ANS-10	Active Project					WG Writing Draft
ANS- 14	Fast Pulse Reactors	ANS-14	Inactive Project					NONE
ANS- 14. 1	Operation of Fast Pulse Reactors	ANS-14	Current ANSI/ANS	4/23/2004		4/23/2009		NONE
ANS- 15	Operations of Research Reactors	ANS-15	Inactive Project					NONE
ANS- 15. 1	The Development of Technical Specifications for Research Reactors	ANS-15	Current ANSI/ANS	4/20/2007		4/20/2012		NONE
ANS- 15. 2	Quality Control for Plate-Type Uranium-Aluminum Fuel Elements	ANS-15	Current ANSI/ANS	3/11/1999	12/31/2007	12/31/2007		WG Writing Draft
ANS- 15. 3	Records and Reports for Research Reactors	ANS-15	Inactive Project					NONE
ANS- 15. 4	Selection and Training of Personnel for Research Reactors	ANS-15	Current ANSI/ANS	8/17/2007		8/17/2012		NONE
ANS- 15. 5	Never Titled		Inactive Project					NONE
ANS- 15. 6	Review of Experiments for Research Reactors		Inactive Project					NONE
ANS- 15. 7	Research Reactor Site Evaluation	ANS-15	Historical					NONE
ANS- 15. 8	Quality Assurance Program Requirements for Research Reactors	ANS-15	Current ANSI/ANS	9/14/2005		9/14/2010		WG Writing Draft
ANS- 15. 9	Never Titled	ANS-15	Inactive Project					NONE
ANS- 15. 10	Decommissioning of Research Reactors	ANS-15	Active Project					WG Writing Draft

ANS- 15. 11	Radiation Protection at Research Reactors	ANS-15	Current ANSI/ANS	5/27/2004		5/27/2009	Ballot @ CC
ANS- 15. 12	Design Objectives for and Monitoring of Systems Controlling Research Reactor Effluents	ANS-15	Historical				NONE
ANS- 15. 14	Design Objectives for and Monitoring of Systems Controlling Research Reactor Effluents	ANS-15	Inactive Project				NONE
ANS- 15. 15	Criteria for the Reactor Safety Systems of Research Reactors	ANS-15	Historical				NONE
ANS- 15. 16	Emergency Planning for Research Reactors	ANS-15	Current ANSI/ANS	5/3/2000	12/31/2008	12/31/2008	WG Writing Draft
ANS- 15. 17	Fire Protection Program Criteria for Research Reactors	ANS-15	Current ANSI/ANS	5/3/2000	12/31/2008	12/31/2008	WG Writing Draft
ANS- 15. 18	Administrative Controls for Research Reactors	ANS-15	Historical				NONE
ANS- 15. 19	Shipment and Receipt of Special Nuclear Material (SNM) by Research Reactor	ANS-15	Active Project				CC Ballot Comment w/ W r
ANS- 15. 20	Criteria for the Reactor Control and Safety Systems of Research Reactors	ANS-15	Active Project				PINS Development
ANS- 15. 21	Format and Content for Safety Analysis Reports for Research Reactors	ANS-15	Current ANSI/ANS	9/29/2006		9/29/2011	SB PINS Comments w/ WG
ANS- 19	Physics of Reactor Design	ANS-19	Inactive Project				NONE
ANS- 19. 1	Nuclear Data Sets for Reactor Design Calculations	ANS-19	Current ANSI/ANS	7/23/2002		7/23/2007	WG Writing Draft
ANS- 19. 2	Definitions of Reactor Physics Terms and Parameters	ANS-19	Inactive Project				NONE
ANS- 19. 2 . 1	Terms and Definitions for Breeder Reactor Systems	ANS-19	Inactive Project				NONE
ANS- 19. 3	Determination of Steady-State Neutron Reaction-Rate Distributions and Reactivity of Nuclear Power Reactors -- Slight change 2005 Added "Power"	ANS-19	Current ANSI/ANS	9/16/2005		9/16/2010	NONE
ANS- 19. 3 . 4	The Determination of Thermal Energy Deposition Rates in Nuclear Reactors	ANS-19	Current ANSI/ANS	3/20/2002	12/31/2010	12/31/2010	NONE
ANS- 19. 4	A Guide for Acquisition and Documentation of Reference Power Reactor Physics Measurements for Nuclear Analysis Verification	ANS-19	Current ANSI/ANS	5/3/2000	12/31/2008	12/31/2008	NONE
ANS- 19. 5	Requirements for Reference Reactor Physics Measurements	ANS-19	Historical				NONE
ANS- 19. 6 . 1	Reload Startup Physics Tests for Pressurized Water Reactors	ANS-19	Current ANSI/ANS	11/29/2005		11/29/2010	WG Writing Draft
ANS- 19. 7	Calculation of Doppler Reactivity for Use in Thermal Light Water Reactor Safety Analysis (New)	ANS-19	Inactive Project				NONE
ANS- 19. 8	Fission Product Yields for 235U, 238U, and 239P	ANS-19	Active Project				NONE
ANS- 19. 9	Delayed Neutron Parameters for Light Water Reactors	ANS-19	Active Project				WG Writing Draft
ANS- 19. 10	Methods for Determining Neutron Fluence in BWR and PWR Pressure Vessel and Reactor Internals	ANS-19	Active Project				WG Writing Draft
ANS- 19. 11	Calculation and Measurement of the Moderator Temperature Coefficient of Reactivity for Water Moderated Power Reactors	ANS-19	Current ANSI/ANS	12/17/2002	12/31/2010	12/31/2010	PINS Development
ANS- 19. 12	Nuclear Data for Isotope Production Calculations for Medical and Other Applications	ANS-19	Active Project				WG Writing Draft

ANS- 54. 4	Nonmetallic Thermal Insulation for Austenitic Stainless Steel in LMFBRs		Inactive Project		NONE
ANS- 58. 13	Design for Post-Accident Access External to LWR Primary Reactor Containments	ANS-5	Inactive Project		NONE

RISC

Designation	Title	Subcommittee	Status	ANSI Approval Date	Extension Date	Action Needed By	Project Activity
ANS- 58. 21	External-Events PRA Methodology	RISC	Current ANSI/ANS	3/1/2007		3/1/2012	NONE
ANS- 58. 22	Low Power and Shutdown PRA Methodology	RISC	Active Project				CC Ballot Comment w/ W
ANS- 58. 23	Fire PRA Methodology	RISC	Active Project				NONE
ANS- 58. 24	Severe Accident Progression and Radiological Release (Level 2) PRA Methodology to Support Nuclear Installation Applications	RISC	Active Project				WG Writing Draft
ANS- 58. 25	Standard for Radiological Accident Offsite Consequence Analysis (Level 3 PRA) to Support Nuclear Installation Applications	RISC	Active Project				WG Writing Draft

None

Designation	Title	Subcommittee	Status	ANSI Approval Date	Extension Date	Action Needed By	Project Activity
ANS-							NONE
ANS-			Inactive Project				NONE
ANS- 7 . 20	Proposed Guide for the Design of a Nuclear Pool Facility -- draft	ANS-7	Inactive Project				NONE
ANS- 9	Glossary of Terms in Nuclear Science and Technology		Historical				NONE
ANS- 9 . 1	Health Physics		Inactive Project				NONE
ANS- 9 . 2	Shielding		Inactive Project				NONE
ANS- 9 . 3	Regulatory Guide		Inactive Project				NONE
ANS- 9 . 4	Utility		Inactive Project				NONE
ANS- 9 . 5	Safeguards		Inactive Project				NONE
ANS- 9 . 6	Glossary Liaison		Inactive Project				NONE
ANS- 9 . 7	Special Activities		Inactive Project				NONE
ANS- 9 . 8	Fusion Term		Inactive Project				NONE

ANS- 10. 1	Nuclear Reactor Classification System	Historical	NONE
ANS- 11	Design Guides for Radioactive Materials Handling Facility and Specialized Equipment	Inactive Project	NONE
ANS- 11. 1	General Criteria for Design, Construction, Operation, Maintenance, and Decommissioning for Radioactive Materials Handling Facilities	Inactive Project	NONE
ANS- 11. 2		Inactive Project	NONE
ANS- 11. 3	Shielding Wall Service Penetrations	Inactive Project	NONE
ANS- 11. 4	Direct View Windows	Inactive Project	NONE
ANS- 11. 6	Direct Viewing/TV-Audio	Inactive Project	NONE
ANS- 11. 7	Access Doors and Transfer Devices for Personnel and Equipment	Inactive Project	NONE
ANS- 11. 8	Illumination	Inactive Project	NONE
ANS- 11. 9	Manipulators, Auxilliary Tools and Remote Handling Devices	Inactive Project	NONE
ANS- 11. 11		Inactive Project	NONE
ANS- 11. 12	Hot Cell Atmosphere Control Systems	Inactive Project	NONE
ANS- 11. 13	Concrete Radiation Shields	Historical	NONE
ANS- 11. 13	In-Cell Utility Requirements	Historical	NONE
ANS- 11. 14	Design Guide for Fire Prevention, Detection and Control for Radioactive Materials Handling Facilities	Inactive Project	NONE
ANS- 11. 15	Wall Finishes and Protective Coatings	Inactive Project	NONE
ANS- 11. 16	Gloveboxes	Inactive Project	NONE
ANS- 11. 17	Operations and Maintenance of Radioactive Materials Handling Facilities	Inactive Project	NONE
ANS- 11. 18	Decontamination and Decommissioning	Inactive Project	NONE
ANS- 13		Inactive Project	NONE
ANS- 16	Isotopes and Radiation	Inactive Project	NONE
ANS- 18	Environmental Impact Evaluation	Inactive Project	NONE
ANS- 18. 2	Environmental Monitoring and Data Evaluation	Inactive Project	NONE
ANS- 18. 2 . 1	Methods for Inferring Environmental Doses	Inactive Project	NONE
ANS- 18. 2 . 2	Specific Environmental Monitoring Program to Assess Operational Dose from LWR Power Reactors	Inactive Project	NONE
ANS- 18. 3 . 1	Entrainment: Guide to Steam Electric Power Plant Cooling System Siting, Design and Operation for Controlling Damage to Aquatic Organisms	Inactive Project	NONE

ANS- 18. 3 . 2	Cold Shock: Guide to Steam Electric Power Plant Cooling System Siting, Design and Operation for Controlling Damage to Aquatic Organisms	Inactive Project	NONE
ANS- 18. 3 . 3	Entrapment/Impingement: Guide to Steam Electric Power Plant Cooling System Siting, Design and Operation for Controlling Damage to Aquatic Organisms at Water Intake Structures	Inactive Project	NONE
ANS- 18. 4	Aquatic Ecological Surveys Required for Siting, Design, and Operation of Thermal Power Plants	Inactive Project	NONE
ANS- 18. 6	Discharge of Thermal Effluents into Surface Waters	Inactive Project	NONE
ANS- 18. 7	Control and Monitoring of the Discharge of Chemicals	Inactive Project	NONE
ANS- 18. 8	Guidelines for Environmental and Economic Analysis of the Regional Effects of Power Facilities	Inactive Project	NONE
ANS- 40. 6	Design Guide for a Radioisotope Laboratory (Type B)	Inactive Project	NONE
ANS- 40. 31	Collection and Storage of Waste for Disposal at Disposal Sites	Inactive Project	NONE
ANS- 40. 32	Compaction of Wastes for Disposal at Disposal Sites	Inactive Project	NONE
ANS- 60	Power Plant Productivity Definitions	Inactive Project	NONE