

**American Nuclear Society (ANS)
Standards Board (SB) Minutes
Atlanta, Georgia
June 16, 2009**

Members Present

N. Prasad Kadambi, *Standards Board Chair, Individual*
Donald J. Spellman, *Standards Board Vice-Chair, ORNL*
Allen L. Camp, *RISC Chair, Sandia National Laboratories*
Dimitrios M. Cokinos, *Member at Large, Brookhaven National Laboratory*
Gregory Downing, *P/T Alternate for Tawfik Raby, National Institute of Standards and Technology*
Carl A. Mazzola, *NFSC Chair, Shaw Environmental and Infrastructure, Inc.*
Charles H. (Chuck) Moseley, *Member at Large, Individual*
Peter S. Hastings, *Member at Large, Duke Energy*
Calvin M. Hopper, *N16 Chair, Individual*
R. Michael Ruby, *Member at Large, Constellation Energy-Ginna NPP*
Patricia A. Schroeder, *Standards Administrator, American Nuclear Society*
Andrew Smetana, *P/T Alternate for Tawfik Raby, Savannah River National Laboratory*
R. Michael Westfall, *Member at Large, ORNL*

Members Absent

Tawfik M. Raby, *N17 Chair, NIST*
Steven L. Stamm, *Member at Large, Shaw Nuclear Services*
Michael J. Wright, *Member at Large, Entergy*

Liaisons

Russ Bell, *Alternate for John Butler, Nuclear Energy Institute Liaison*
Stanley Levinson, *ASME CNRM Liaison, AREVA NP*

Guests

James August, *CORE, Inc.*
Robert J. Budnitz, *Lawrence Berkeley National Laboratory*
Gene Carpenter, *U.S. Nuclear Regulatory Commission*
Timothy Dennis, *Individual*
Brett Dooies, *GE Hitachi*
Mary Beth Gardner, *ANS Staff*
Herbert Massie, *Defense Nuclear Facilities Safety Board*
Craig Peirce, *ANS*
William Reuland, *Individual*
Csilla Toth, *International Atomic Energy Agency*

1. Call to Order

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

2. Approve Agenda

The agenda was approved as presented with the flexibility to move items as necessary to accommodate presenters.

3. Standards Board Chair's Report

ANS Board of Director (BOD) Report – (Attachment A)

The Standards Committee Report to the Board of Directors was provided to the Standards Board (SB). Prasad Kadambi summarized the report. He explained that there was not much new to report with the exception of an update on the recently formed Nuclear Energy Standards Cooperative Collaborative (NESCC). (See Item # 4 below for discussion of the NESCC.)

Internet Conferencing in Lieu of Meeting Attendance

Kadambi explained that the Nuclear Facilities Standards Committee (NFSC) had been rather diligent in living by their policies and procedures. While some members were not meeting the attendance requirement due to lack of financial support for travel, they remained very interested. Kadambi would like to find a solution to host conference calls at meetings to allow participation via phone. Kadambi explained that he asked the ANS IT Department to investigate options. Allen Camp added that he would also be interested to have video access with conference calls to view documents.

Standards Committee Rules & Procedures Revision

Kadambi explained the reasons for proposed changes to the Standards Committee Rules and Procedures. He reminded members that revised definitions for balance of interest categories had been approved and that members felt that definitions for membership categories should be included. The revised rules and procedures had been distributed for review prior to the meeting. Members' feedback on the changes was very positive. It was agreed that consensus committee chairs should make the determination of classifying members for balance of interest based on the appropriate facts and apply consistently. The following motion was made:

MOTION: The revised Standards Committee Rules and Procedures were approved as presented for submittal to the American National Standards Institute for approval.

The motion was approved unanimously.

Calvin Hopper was recognized for leading the ad hoc committee to revise the balance of interest definitions.

Standards and NRC Regulatory Guides

Pat Schroeder explained that recent Standards Board comments on Project Initiation Notification System (PINS) forms expressed concerns with standards being written to be consistent with regulatory guides (RGs) when standards should be developed using technical best judgment. The issue was raised by Calvin Hopper. Kadambi added that while consistency with RGs need not necessarily be the primary objective, he would not want working groups to feel that our standards were divorced from RGs. Working groups should consider the merits of RG as they may relate to standards of good or best practices, keeping in mind that RGs represent just one way to meet regulations. It was noted that some standards had significant application with regulations while others did not. Regulatory practices cannot be ignored because their requirements often represent constraints within which professionals exercise their best judgment. Hence, there should not be a conflict between the demands of the best technical judgment and regulatory requirements as reflected in guidance documents.

ANS Washington Representative Report (unscheduled)

Kadambi introduced Craig Piercy, the ANS Washington Representative. Piercy provided an update on his activities. Piercy explained that he was involved with federal funding and increasing grass roots efforts. He informed the SB of the nuclear industry's new grassroots advocacy program called Nuclear Advocacy Network (NAN). The NAN was a joint project of the Nuclear Energy Institute (NEI), the American Nuclear Society (ANS), the North American Young Generation in Nuclear (NA-YGN), and Women in Nuclear (WIN). Piercy suggested that members

check out their website <http://www.nuclearadvocacynetwork.org>. His office was involved in supporting the nomination of Warren "Pete" Miller as assistant secretary for nuclear energy, Department of Energy. Piercy reminded the SB that he was looking at how the Washington office could help solicit funding for standards. He requested input on projects of importance and revised to funding needs to support. Mary Beth Gardner suggested that a statement similar to an ANS policy statement be prepared on standards for Piercy.

Action Item 6/09-01: Standards Board member to be appointed to prepare a standards policy statement for Craig Piercy.

Action Item 6/09-02: Pat Schroeder request Craig Piercy to provide an example of a write up on needs to draft a similar effort for standards.

Piercy suggested for SB to run items past ANS Executive Director Jack Tuohy. Kadambi noted that the SB should initiate involvement of the Executive Director through Mary Beth Gardner.

Report on U.S. Nuclear Regulatory Commission (NRC) Developments

Policy issues relative to Draft ANS-58.14

Prasad Kadambi summarized an issue related to the use of withdrawn standard ANSI/ANS-58.14-1993, "Safety and Pressure Integrity Classification Criteria for Light Water Reactors." He explained that General Electric (GE) referenced ANSI/ANS-58.14-1993 in the safety analysis report (SAR) submitted to the NRC for classification of structures, systems, and components (SSCs) on the economic simplified boiling water reactor (ESBWR). The NRC sent back a request for additional information in which they said that ANSI/ANS-58.14-1993 should be submitted to NRC for review. Kadambi stated that GE replied that it wasn't their place to submit a standard to the NRC for review and removed the reference although they continued to use the standard. Additionally, Kadambi stated he had heard that the AREVA's Evolutionary Power Reactor (EPR™) project was told to remove ANSI/ANS-58.14-1993 as a reference since it was withdrawn. A few SB members did not understand NRC's objection to a withdrawn standard. Kadambi noted that an effort was currently underway to revise ANS-58.14. Kadambi stated that he would look into this issue further.

Action Item 6/09-03: Prasad Kadambi to follow up on concerns that NRC may have with the use of ANSI/ANS-58.14-1993 (W2004) as a reference.

Risk-Informed, Performance-Based (RIPB) Report to the NRC Commissioners

Kadambi reported that he and Bryan Erler, Vice President of the American Society of Mechanical Engineers (ASME) Nuclear Codes and Standards Board, participated in a meeting with the Commissioners of the NRC on February 4, 2009, to provide a report on the status of standards supporting risk-informed and performance-based activities. Kadambi stated that he informed the Commission that plants were using risk-informed insights only minimally to remain in conformity with NRC requirements. The meeting discussion is available on the NRC web site at <http://www.nrc.gov/reading-rm/doc-collections/commission/tr/2009/20090204b.pdf> with meeting presentations at <http://www.nrc.gov/reading-rm/doc-collections/commission/slides/2009/20090129/>.

ASME Letter to NRC on Level 1 PRA Standard

Kadambi informed SB members about a letter that was issued by ASME to the NRC followed by a similar letter by ANS to the NRC. The letters were a request for utilities to be provided additional time to comply with new regulations endorsing the Level 1 standard. Allen Camp received feedback from the NRC that the ANS letter was not received well by some NRC staff as it was felt that the letter lectured NRC. Kadambi questioned whether there was reason for

concern regarding how the ANS letter was received by the Commission. Robert Budnitz stated that he felt there wasn't a problem at the highest level in NRC.

Mike Westfall noted that a presentation on NRC endorsement would be provided at the next NESCC meeting and suggested that ANS request the presentation at the next SB meeting in November 2009.

Report on Standards Developing Organization (SDO) Meetings

Kadambi reported that an SDO meeting was held on January 29, 2009, as a trailer for the NESCC to be formed. He stated that June 1, 2009, was the official establishment of the NESCC.

4. Nuclear Energy Standards Coordination Collaborative (NESCC)

Prasad Kadambi reported that the NESCC was being led by the National Institute of Standards and Technology (NIST) and the American National Standards Institute (ANSI). He explained that the NESCC was a joint body that included membership from ANSI, NIST, NRC, U.S. Department of Energy (DOE), and Standards Development Organizations (SDOs). Richard Black, a DOE manager, reported that DOE anticipated providing funding for priority projects to expedite the development process. Robert Budnitz stated that coordination was important to reduce duplication and eliminate gaps in standards for the nuclear power industry. He stated that Nuclear Risk Management Coordinating Committee (NRMCC) served a similar need specific to probabilistic risk assessment (PRA) standards. The NESCC had a broader scope and included more SDOs. Budnitz expressed concern that NESCC might be too large.

Kadambi reported that he represented the ANS at the NESCC meeting and in that effort voted to approve the charter. Kadambi believed that the NESCC should help support RIPB standards. Kadambi stated that ASME representatives at the NESCC meeting felt that the key issue was conformity assessment and did not have concerns with gaps in standards. Kadambi was told that conformity assessment was training on meeting conformance.

As ANS was not currently involved in training for conformance with its standards, Kadambi questioned the possibility of a need and opportunity to engage in this area. Because of the requirement for peer review in standards developed by the ANS Risk Informed Standards Committee (RISC), Budnitz did not feel that at this time there was a need for a certification program for peer reviewers. Calvin Hopper stated that he was familiar with a training program established by the Health Physics Society but did not feel that ANS had the infrastructure to support. Kadambi felt that there were areas of activity that presented opportunity to ANS that could be considered to enhance the relevance of ANS in the industry. He believed that the NESCC was the place that we could have a buy in from the broader SDO community to find gaps in products and services. Kadambi questioned what it would take to have a corresponding training program for the Level 2 PRA standard. Camp stated that he would be asking RISC members to volunteer to support training activities; however, he was unsure of the response.

James August suggested that a database be created that provided all documents needed for building new nuclear power plants. Hopper stated that the Uranium Processing Facility was currently working on such a database.

5. New Framework for Future ANS Standards Activities

Formation of Special Committee / New action item to replace Action Items 11/08-11 & 11/07-02

With the formation of the NESCC, it was felt appropriate to focus on the harmonization of international standards. Donald Spellman proposed that efforts be directed at international activities and anticipated forming a small committee to initiate.

Action Item 6/09-04: Donald Spellman to incorporate international activities to facilitate global use of ANS standards (i.e., small committee to be formed).

Spellman introduced Csilla Toth with the International Atomic Energy Agency (IAEA). Toth reported that IAEA was very close to putting a component classification standard on the street. She confirmed that the component classification standard was technology neutral. Spellman speculated that standards projects ANS-53.1, "Nuclear Safety Criteria and Safety Design Process for Modular Helium-Cooled Reactor Plants," and ANS-54.1, "Nuclear Safety Criteria and Design Process for Liquid-Metal-Cooled Nuclear Power Plants," could use the classification system in the IAEA document, but would need to get NRC to accept.

Spellman questioned Toth whether IAEA planned to pursue approval as an ISO standard. Toth explained that they did not feel that ISO approval was necessary as IAEA considered documents they developed to be consensus standards. Several SB members were not in agreement with this assessment; however, all were in agreement that we needed to develop standards with international consideration and take advantage of existing international standards/documents.

6. Nuclear Risk Management Coordinating Committee (NRMCC)

Progress Update

Charles Moseley complimented the cooperation of ANS and ASME representatives in the NRMCC. He explained that presently the NRMCC was co-chaired by ANS and ASME; represented respectively by Charles Moseley and Kenneth Balkey. The initial combined standard ANSI/ASME/ANS RA-S-2008 was published in 2008 with nearly a full revision published as Addenda A in early 2009.

Letter to NRC Regarding Implementation of Level 1 PRA Standard

Refer to previous discussion under #3 ASME Letter to NRC on Level 1 PRA Standard

Proposal on Forming a Joint ANS Risk Informed Standards Committee (RISC) with the ASME Committee on Nuclear Risk Management (CNRM) Committee

Allen Camp explained that merging the RISC and the CNRM had proved to be more challenging than initially anticipated. A detailed proposal was started but was found to create more complexity. At this point the thought was to leave the ANS RISC and the ASME CNRM committees intact but to create an executive committee comprised of ANS and ASME chairs. Prasad Kadambi reiterated that the main reason for considering a joint committee was to simplify and reduce the time load on committee members. Robert Budnitz believed that they haven't had the time or energy to find the correct path. Camp stated that it might work to have one joint consensus committee meeting each year and one separate consensus committee meeting. He requested permission to form an executive committee and stated that he'd make the request to RISC at their meeting scheduled the following day.

MOTION: The Standard Board endorses the creation of an executive committee with ASME and instructs RISC to appoint ANS members.

The motion was approved as noted below:

APPROVED

Allen Camp
Dimitrios Cokinos
Peter Hastings
Calvin Hopper
Prasad Kadambi
Carl Mazzola
Charles Moseley
Michael Westfall

ABSTAINED

Gregory Downing (Alternate for Tawfik Raby)

OPPOSED

Donald Spellman

7. Use of PRA Methods in Non-RISC Standards

Both Allen Camp and Robert Budnitz expressed concern with standards being written with risk-insights outside of the RISC as they may use a different approach. It was confirmed that the PRA draft standard ANS-53.1, "Nuclear Safety Criteria and Safety Design Process for Modular Helium-Cooled Reactor Plants," developed under the NFSC included a member from the RISC which was satisfactory to Camp and Budnitz. While ANS-53.1 was being supported, Budnitz expressed concern that there could be other PRA drafts standards being developed outside of the RISC that could benefit from their involvement. Budnitz stated that ANS consensus committee chairs should be approached.

As N16 Chair, Calvin Hopper stated that the criticality safety standards community preferred deterministic methods. Hopper added that he would invite RISC members to participate in N16 as well as individuals from the ANS Human Factors Professional Division. Dimitrios Cokinos, subcommittee chair under the N17 Committee, gave his opinion that the reactor physics community preferred deterministic methods but would be open to considering the use of RIPB methods.

Camp stated that one concern with the use of PRA methods in standards was maintaining consistent definitions. Carl Mazzola mentioned that the NFSC was in the process of updating the NFSC glossary. Camp suggested that a policy for working groups to be consistent with existing definitions might be needed. Although the importance of consistency with established definitions was deemed important, it was recognized that definitions might need to vary between consensus committees. Mazzola provided a list of NFSC standards (i.e., ANSI/ANS-2.26, ANSI/ANS-2.27, ANSI/ANS-2.29) that used risk-informed methods to Camp. He suggested adding a question to the PINS form whether risk-informed methods would be used.

Kadambi reintroduced Csilla Toth. Toth indicated that the IAEA Nuclear Safety Department where she worked gave her a unique position to influence nuclear safety standards activity at the international level. The standard currently in development on safety classifications used both deterministic and probabilistic methods. As many countries used IAEA standards, they must be user friendly as they are translated into several languages. A glossary was developed to use the terms consistently.

Toth emphasized the need for international communication that included the working group level. Hopper expressed concerns about administrative issues working with IAEA and political issues in collaborating.

Toth reviewed steps of developing an ANS standard and noted that IAEA had a similar approval process. She stated that it might take three to five years to get approval within the four levels of their committees. Committee members were volunteer member states and IAEA standards were voluntary. Kadambi added that the NRC used IAEA requirements for international transportation of radioactive materials.

A suggestion was made to offer IAEA a liaison position on the Standards Board.

MOTION: To officially invite IAEA to sponsor a liaison to the Standards Board.

It was felt that communication with IAEA would be welcomed by ANS and that a letter should be issued with an invite. The motion was approved with one abstention, by Greg Downing as he felt that it was not appropriate for him to vote on this issue as an alternate. Donald Spellman volunteered to provide reciprocal liaison services to IAEA.

Action Item 6/09-05: Letter to be drafted to IAEA with an invitation for a Standards Board liaison position.
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8. 2009 Standards Service Award Selection

The 2009 Standards Service Award Ad Hoc Committee included Charles Moseley and Steve Stamm with Michael Wright as chair. In the absence of Wright, Moseley announced that Calvin Hopper was chosen as the nominee for the 2009 award. The recommendation of the ad hoc committee was well received.

9. Balance of Interest (BOI) Certification – (See Attachment B)

Reports on BOI were provided to the SB along with the meeting materials for review. Prasad Kadambi stated that as Standards Board Chair it was his responsibility to report to the ANS Board of Directors that the consensus committees maintained proper balance of interest (BOI). He stated that he found one exception to the Standards Committee policy on multiple representation. Kadambi noted that the BOI for N16 showed that Calvin Hopper and Michael Westfall both carried separate votes for Oak Ridge National Laboratory. It was agreed to move Hopper to the individual category due to retirement. A motion was made to approve the BOI.

MOTION: To approve the Balance of Interest Reports with the change of Calvin Hopper to the "Individual" category.

The motion was approved unanimously.

10. Recruitment of New/Returning ANS Members to Standards

Pat Schroeder explained that a letter was drafted by a NFSC member to recruit new and returning ANS members. The letter would be directed to members of at least 35 years of age as a separate program had been previously established for the ANS Young Member Group. The letter included a summary of each consensus committees' scope and was provided to each consensus committee chair for review. Schroeder was asked to work with the consensus committee chairs to get their input on the letter and finalize.

Action Item 6/09-06: Pat Schroeder to work with consensus committee chairs to ensure an acceptable description of each consensus committee is included in the volunteer recruitment letter.

12. Consensus Committee Reports (N16, N17, NFSC, RISC)

Nuclear Criticality Safety (N16) Report – (See Attachment C)

Calvin Hopper reported that N16 approved a set of policies and procedures. He requested that Pat Schroeder review and edit for consistency with Standards Committee rules and policies.

Action Item 6/09-07: Pat Schroeder to review N16 new policies and procedures for consistency with Standards Committee's rules and policies.

Hopper stated that the inquiry he submitted on ANSI/ANS-8.1-1998 (R2007), "Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors," inquiry remained open and asked for follow up.

Action Item 6/09-08: Prasad Kadambi to request status of the ANSI/ANS-8.1-1998 (R2007) clarification submitted by Calvin Hopper.

Hopper informed members that a PINS was being developed for a new standard to be designed ANS-8.28 on nuclear criticality safety and non-destructive assay. The PINS was currently with the ANS-8 Subcommittee for review.

Research Reactors, Reactor Physics, Radiation Shielding and Computational Methods (N17) Report – (See Attachment D)

A written report was provided for review by the members.

Nuclear Facilities Standards Committee (NFSC) Report – (See Attachment E)

Carl Mazzola summarized the provided NFSC written report. Mazzola informed the members that the NFSC had a lengthy discussion on the use of "shall consider" at the previous day's meeting. He noted that the NFSC was updating their glossary. The NSFC was working to assign liaisons to ANS Professional Divisions and Technical Groups. Mazzola reported that a presentation he provided at the Professional Division Committee on the NFSC liaison program was well received.

Robert Budnitz added that a revision would be initiated for ANS-54.1, "General Safety Design Criteria for a Liquid Metal Reactor Nuclear Power Plant," soon. A PINS would be developed.

Risk Informed Standards Committee (RISC) Report – (See Attachment F)

Allen Camp stated that much of the RISC report was covered elsewhere. He reported that work continued on the low power/shutdown, Level 2, Level 3 standards projects. With the recent verbal notice of the grant approval, progress would be expedited.

11. Discuss and Resolve Action Items

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

In regards to Action Item 11/08-01 on the ASME and ANS quality assurance (QA) standards, Prasad Kadambi noted that the QA standards (ASME/NQA-1-2008, "Quality Assurance Requirements for Nuclear Facility Applications," and ANSI/ANS-3.2-2006, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants") were discussed at the NESCC meeting for possible coordination. The NRC was expected to endorse the new ASME/NQA-1-2008 and might "cherry pick" sections of ANSI/ANS-3.2-2006.

Allen Camp reported on progress on Action Item 11/08-03. He contacted the ANS Education and Training Division (ETD) Chair who did not express interest in training related to RISC standards.

Camp stated that he would discuss further with the RISC at the meeting the next day. Carl Mazzola suggested that he might want to contact the new ETD Chair at the end of the month.

After a discussion about Action Item 11/08-10 on identifying gaps in QA standards, it was suggested for Charles Moseley to write a summary of the reasons why he felt the action item should be withdrawn.

In completion of Action Item 11/08-14, Calvin Hopper provided SB members a revised policy on clarifications and interpretations. Hopper explained his concerns with the current policy. Standards Board members were asked to review and comment on the revised policy.

Action Item 6/09-09: Standard Board members to review and comment on Calvin Hopper's suggested revision to the policy on clarification/interpretations.

Action Item 6/09-10: Calvin Hopper to resend e-mail with his concerns on the current clarification/interpretation policy.

With the close of the action item for the 2009 Standards Service Award Ad Hoc Committee, a new action item was assigned.

Action Item 6/09-11: Charles Moseley, Steve Stamm, and Michael Wright to serve as the ad hoc committee for the 2010 Standards Service Award (ad hoc committee leader to be determined between members).

13. Secretary's Reports – (Attachment G, H, & I)

Pat Schroeder provided the Staff Report, Sales Report, and the standards reports including Activity, Delinquent, and Status. Significant points were highlighted. The reports were summarized for the SB. No new PINS Forms or Letter Ballots were open for approval.

14. Liaison Reports

President's Meeting

Prasad Kadambi reported that he attended the President's Meeting. Significant discussion was centered on international efforts.

Operations and Power Division (OPD)

Prasad Kadambi reported that he organized a session entitled "Status Report on Readiness for and Implementation of New Construction Inspection" to be held the following day. He also noted that the OPD was in need of a professional development committee.

Nuclear Energy Institute (NEI)

Prasad Kadambi explained that John Butler had replaced Jack Roe as NEI representative to the SB. As John Butler was unable to attend, Russ Bell was in attendance as an alternate. When questioned, Bell stated that NEI was cautiously optimistic on President Obama's intent for nuclear power. They were hoping to make progress on legislation for loan guarantees for construction of nuclear power plants and to make it less political. Bell reported that NEI was working with NRC on risk metrics for new plants. He believed that they would use current metrics in Regulatory Guide 1.200 but would need to watch. Furthermore, Bell stated that NRC was planning to do a clean up on rulemaking in 10 CFR 52 and that substantive changes were anticipated.

International Organization for Standardization (ISO)

Dimitrios Cokinos reported that the standard on decayed heat (ANSI/ANS-5.1-2005, "Decay Heat Power in Light Water Reactors") was resubmitted to ISO. Currently, three reactors standards were being promoted on data, design, and reload physics. Cokinos stated that the ISO meeting scheduled for June 2009 had been postponed to later in the year.

Calvin Hopper reported that Technical Committee (TC)-85/Subcommittee (SC) 5 met the previous week in Manchester, England. TC-85 was entitled "Nuclear Energy." Hopper stated that SC5 recommended that the name be changed. A proposal to change their name was sent to subcommittees for consideration. If found accepted, the change would go through the consensus process. Hopper said that IAEA had two participants on SC5. IAEA members attended the Working Group 8 meeting and expressed interest in adopting one of their standards. It was Hopper's opinion that an IAEA document was stronger than an ISO standard.

Kadambi suggested that ANS should consider developing a statement on how ANS standards were used internationally.

Mike Westfall reported that the administrative contract for the Nuclear Technical Advisory Group (NTAG) between NIST and the American Society for Testing and Materials expired next year. NTAG would be looking to the industry to show support/need.

Donald Spellman reported that SC6 had been dormant.

Institute of Electrical and Electronics Engineers (IEEE) / Nuclear Power Engineering Committee (NPEC) -- (See Attachment J)

Donald Spellman provided a report of IEEE/NPEC standards activities. He reported that a meeting was held on January 27 - 28, 2009. Spellman informed members of project authorization requests (PARs) that were approved. He stated that AdCom met on July 15, 2009, and the NPEC meeting was held July 16, 2009. NPEC members previewed a couple drafts to determine readiness for formal ballot. Spellman asked that his written report be provided to the members and included with the minutes.

15. Other Business

Prasad Kadambi noted Herbert Massie's attendance. He informed members that he had been appointed to the Standards Board and his membership would be effective at the close of the ANS meeting.

16. Adjourn

The meeting was adjourned at 4:54 p.m.

**American Nuclear Society
Standards Board Action Items from ANS June 2009 Meeting**

Action Item	Description	Responsibility	Status
6/09-01	Standards Board member to be appointed to prepare a standards policy statement for Craig Piercy.	Prasad Kadambi	Open
6/09-02	Pat Schroeder request Craig Piercy to provide example of write up on needs to draft similar effort for standards.	Pat Schroeder	Open (doen)
6/09-03	Prasad Kadambi to follow up on concerns that NRC may have with the use of ANSI/ANS-58.14-1993 (W2004) as a reference.	Prasad Kadambi	Open
6/09-04	Don Spellman to incorporate international activities to facilitate global use of ANS standards.	Don Spellman	Open
6/09-03	Letter to be drafted to IAEA with invite.	Prasad Kadambi	Open (done)
6/09-06	Pat Schroeder to work with consensus committee chairs to ensure acceptable description of each consensus committee is prepared for volunteer recruitment letter.	Consensus Committee Chairs, Pat Schroeder	Open (done)
6/09-07	Pat Schroeder to review N16 new policies and procedures for consistency with Standards Committee's rules and policies.	Pat Schroeder	Open (done)
6/09-08	Prasad Kadambi to request status of ANS-8.1 clarification.	Prasad Kadambi	Open (done)
6/09-09	Standard Board members to review and comment on Calvin Hopper's suggested revision to the policy on clarification/interpretations.	Standards Board members	Open
6/09-10	Calvin Hopper to resend email with his concerns on the current clarification/interpretation policy.	Calvin Hopper	Open (done)
6/09-11	Charles Moseley, Steve Stamm, and Mike Wright to serve as ad hoc committee for the 2010 Standards Service Award (ad hoc committee leader to be determined between members).	Charles Moseley, Steve Stamm, Mike Wright	Open
11/08-01	Carl Mazzola to follow up with Charles Moseley on work with coordinating QA standards with ASME.	Carl Mazzola, Charles Moseley	Closed
11/08-02	Pat Schroeder to make sure that consensus committee chairs get notices of SDO meetings sponsored by the NRC.	Pat Schroeder	Closed
11/08-03	Allen Camp to provide update on NRMCC action item to follow up on education and training with ANS Education & Training Professional Division and ANS Student Workshops to the Standards Board through Pat Schroeder.	Allen Camp	Open
11/08-05	Prasad Kadambi to draft new section of ANS Standards Committee Rules and Procedures to include membership categories (i.e., member, alternate, associate member, alternate, liaison).	Prasad Kadambi	Closed
11/08-08	Allen Camp to consider the potential for developing a standard for training PRA analysis similar to ANSI/ANS-8.20-1991; R1999;R2005 and ANSI/ANS-8.26-2007.	Allen Camp	Closed
11/08-10	Carl Mazzola to work with the NFSC to prepare a gap analysis on QA standards.	Carl Mazzola	Withdrawn
11/08-14	Calvin Hopper to draft a suggested revision of the policy on clarifications and interpretations to clarify the process.	Calvin Hopper	Closed
06/08-10	John Abrefah to see if ASTM had set up an LLC to secure funding and improve efficiency of standards development.	John Abrefah	Closed
11/07-02	Prasad Kadambi, Carl Mazzola, and Don Spellman 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, Don Spellman Steve Shepherd	Closed

ANS Standards Board Report

- The ANS Standards Committee has had a lead role in the formation of a public-private collaborative called the Nuclear Energy Standards Coordination Collaborative. Set up under the auspices of the American National Standards Institute and the National Institute of Standards and Technology, this Panel is expected to coordinate, as well as materially support, nuclear standards development.
- The first ASME/ANS joint PRA standard ASME/ANS RA-S-2008, “Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications,” was issued in 2008. Addendum A was published in May 2009 to address key issues identified by users.
- The ANS received a grant from the U.S. Nuclear Regulatory Commission to pursue development of three PRA standards.
- We continue to lead, along with ASME, the Nuclear Risk Management Coordinating Committee to facilitate activities on PRA standards, including those for new technologies. On February 4, 2009, ANS and ASME, along with industry representatives, made a presentation to the Commissioners of the USNRC on risk-informed and performance-based standards.
- We continue to work with the ANS Professional Divisions to facilitate communication on standards needed for the industry and encourage participation of members in standards activities.
- ANS maintains 77 current standards of which 28 are in the process of being revised. Additionally, 34 new standards are in development.
- The Standards Board certified that the balance of interest on our consensus committees meets ANSI and ANS standards rules.

**American Nuclear Society
N16, NUCLEAR CRITICALITY SAFETY
BALANCE OF INTEREST BY CATEGORY
2009**

Individuals (1)

George H. Bidinger

Government (5)

Calvin M. Hopper, Oak Ridge National Lab.
Thomas Marenchin, U.S. Nuclear Regulatory Commission
Burton Rothleder, U.S. Department of Energy
R. Michael Westfall, Oak Ridge National Lab.
Robert E. Wilson, U.S. Department of Energy

Service Providers (2)

Raymond L. Reed, Washington Safety Management Solutions
Richard G. Taylor, CS Engineering, Inc.

SDOs/Industry Organizations (3)

Robert S. Eby, AIChE Representative (Employed by USEC, Inc.)
Ronald Knief, Institute of Nuclear Materials Management (Employed by XE Corp.)
Scott P. Murray, Health Physics Society (Employed by GE)

University and Research Organizations (2)

Robert D. Busch, University of New Mexico
Ronald E. Pevey, University of Tennessee

Vendors (3)

Calvin D. Manning, AREVA-NP
W. Randy Shackelford, Nuclear Fuel Services
Larry L. Wetzel, Babcock & Wilcox Nuclear Operations Group

Total = 16 votes

Vote Summary

Individuals	1
Government	5
Service Providers	2
SDO/Org	3
Univ. & Res.	2
Vendors	<u>3</u>
TOTAL	16

FOR APPROVAL AT JUNE 2009 SB MEETING
AMERICAN NUCLEAR SOCIETY
N17, RESEARCH REACTORS, REACTOR PHYSICS,
RADIATION SHIELDING & COMPUTATIONAL METHODS
BALANCE OF INTEREST BY CATEGORY
2009

Individuals (6)

Robert E. Carter
Brian K. Grimes
William C. Hopkins
Laurence Kopp
Jack Olhoeft
Abraham Weitzberg

Government (8 members with 6 votes)

Dimitrios Cokinos, Brookhaven National Lab.
Matthew A. Hutmaker, Jr., U.S. Department of Energy
Patrick Madden / Alexander Adams, U. S. Nuclear Regulatory Commission
*Tawfik Raby, National Institute of Standards & Technology
 *Wade Richards, National Institute of Standards & Technology
 *Seymour Weiss, National Institute of Standards & Technology
Theodore Schmidt, Sandia National Lab.
Andrew Smetana, Savannah River National Lab.

Owner/Operators (1)

Ray Tsukimura, Aerotest Operations, Inc.

SDOs/Industry Organizations (4)

William H. Bell, AIChE (South Carolina Electric & Gas Co.)
Michael L. Corradini, NCRP (University of Wisconsin-Madison)
Richard Brey, HPS (Idaho State University)
James Miller, IEEE (GAMMA-METRICS) (James F. Miller Consulting Services)

Service Provider (1)

Charles Rombough, CTR Technical Services, Inc.

University and Research Organizations (4)

Nolan Hertel, Georgia Institute of Technology
Chris Heysel, McMaster University
Andrew Kadak, Massachusetts Institute of Technology
Ronald Pevey, University of Tennessee - Knoxville

Vendors (2)

Stanley Anderson, Westinghouse
Anthony Veca, GA Technologies, Inc.

Total = 24 votes (26 members) ***3 NIST members share 1 vote**

<u>Vote Summary:</u>	
Individuals	6
Government	6
Owner/Operator	1
SDOs	4
Service Provider	1
Univ. & Res	4
Vendors	<u>2</u>
TOTAL	24

FOR APPROVAL AT JUNE 2009 SB MEETING
American Nuclear Society
Nuclear Facilities Standards Committee - NFSC
Balance of Interest by Category
2009

Individual (5)

Timothy Dennis
Richard Englehart
N. Prasad Kadambi
William Reuland
John Stevenson

Government (4)

C. E. (Gene) Carpenter, U.S. Nuclear Regulatory Commission
Pranab Guha, U.S. Department of Energy
Sheila Lott, Los Alamos National Laboratory
Donald Spellman, Oak Ridge National Laboratory (NFSC Liaison to IEEE NPEC)

Owner/operator (6)

William Bell, South Carolina Electric & Gas Company
Charles Brown, Southern Nuclear Operating Company
Richard Hall, Exelon Generation Company
Peter Hastings, Duke Energy (NuStart Liaison)
R. Michael Ruby, Constellation Energy
Michael Wright, Entergy Nuclear South

Service Provider (10 members w/7 votes)

James August, CORE, Inc.
*Jeffery Brault, Shaw MOX Project
 *Kevin Bryson, Shaw Environmental Inc.
 *Carl Mazzola, Shaw Environmental & Infrastructure, Inc.
 *Steven Stamm, Shaw Nuclear Services
Donald Eggett, Automated Engineering Services Corp.
Richard Hill, ERIN Engineering and Research, Inc.
Evan Lloyd, Exitech Corporation
Jesse Love, Bechtel Power Corporation
J. Andrew Wehrenberg, Southern Nuclear Operating Company

SDOs/Industry Organizations (1)

Charles Moseley, ASME NQA Liaison

Vendors (5 members w/4 votes)

Eric Loewen, General Electric Company
Robert McFetridge, Westinghouse Electric Company (existing reactors)
Timothy Meneely, Westinghouse Electric Company (new reactors)
*Dennis Newton, AREVA-NP
 *W. Norman Prillaman, AREVA-NP

Total = 31 members with 27 committee votes
(*shares one vote)

<u>Vote Summary:</u>	
Individuals	5
Government	4
Owner/operator	6
Service Provider	7
SDOs/Ind. Org	1
Vendors	4
	<u>27</u>

FOR APPROVAL AT JUNE 2009 SB MEETING
AMERICAN NUCLEAR SOCIETY
RISK INFORMED STANDARDS CONSENSUS COMMITTEE (RISC)
BALANCE INTEREST BY CATEGORY
2009

Individual (1)

M. K. (Ravi) Ravindra

Government (6)

Robert Bari, Brookhaven National Laboratory
Richard Black, U. S. DOE, Office of Nuclear Safety Policy and Standards
Robert J. Budnitz, Lawrence Berkeley National Laboratory
Allen Camp, Sandia National Laboratories
Mary Drouin, U.S. NRC, Office of Nuclear Regulatory Research
Jon Young, Pacific Northwest National Laboratory

Owner/operator (4)

John P. Gaertner, Electric Power Research Institute
Kenneth Kiper, FPL Energy Company
Greg Krueger, Exelon Nuclear
Daniel W. (Bill) Stillwell, South Texas Project Nuclear Operating Company

Service Provider (5)

Paul Amico, SAIC
Rick A. Hill, ERIN Engineering and Research, Inc.
Gene Hughes, ETRANCO
Jean Savy, Risk Management Solutions
Donald Wakefield, ABS Consulting

SDOs/Industry Organizations (1)

Biff Bradley, Nuclear Energy Institute

Vendor (4 members with 3 votes)

*Frederick Emerson, General Electric
*Dennis Henneke, General Electric
David Finnicum, Westinghouse (Combustion Engineering)
Stanley Levinson, AREVA-NP

Total = 21 members with 20 votes (*shares one vote: Emerson/Henneke for GE)

Vote Summary:

Individual	1
Government	6
Owner/Operator	4
Service Provider	5
SDOs	1
Vendor	3
Total	20

Revised 5-17-09

N16 Progress Report June 2009

PINS in Development

ANS-8.3, "Criticality Accident Alarm System" (revision of ANSI/ANS-8.3-1997; R2003)

ANS-8.20, "Nuclear Criticality Safety Training" (revision of ANSI/ANS-8.20-1991; R1999; R2005)

ANS-8.28, NCS & NDA Needs/Applications Standard – title to be defined (new standard)

PINS in Approval Process/Resolving Comments

ANS-8.25, "Development of Nuclear Criticality Safety Related Postings" (new standard)

Standards in Development

ANS-8.1, "Nuclear Criticality Safety in Operations With Fissionable Materials Outside Reactors" (revision of ANSI/ANS-8.1-1998; R2007)

ANS-8.10, "Criteria for Nuclear Criticality Safety Controls in Operations with Shielding and Confinement" (revision of ANSI/ANS-8.10-1983; R1988; R1999; R2005)

ANS-8.12, "Nuclear Criticality Control and Safety of Plutonium-Uranium Fuel Mixtures Outside Reactors" (revision of ANSI/ANS-8.12-1987; R1993; R2002)

ANS-8.15, "Nuclear Criticality Control of Selected Actinide Nuclides" (revision of ANSI/ANS-8.15-1981; R1987; R1995; R2005)

ANS-8.19, "Administrative Practices for Nuclear Criticality Safety" (revision of ANSI/ANS-8.19-2005)

ANS-8.21, "Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors" (revision of ANSI/ANS-8.21-1995; R2001)

Other Issues

- N16 Rules & Procedures
- ANS-8.1 Clarification/Interpretation regarding ¶ 4.1.2 Process Analysis, ¶ 4.2.4 Double Contingency Principle, and Appendix A relationships and meanings/intents and seeming inconsistencies.
- A clarification was issued on ANSI/ANS-8.19-2005, "Administrative Practices for Nuclear Criticality Safety," and published in the April 2009 issue of *Nuclear News*.
- Progress of long-outstanding PINS & Standard development of a posting standard.

N17 Progress Report June 2009

Approved by ANSI

ANSI/ANS-6.1.2-1999 (R2009), "Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants" (reaffirmation)

ANSI/ANS-15.2-1999 (R2009), "Quality Control for Plate-Type Uranium-Aluminum Fuel Elements" (reaffirmation)

ANSI/ANS-19.10-2009, "Methods for Determining Neutron Fluence in BWR and PWR Pressure Vessel and Reactor Internals" (new standard)

N17 Action Completed

ANSI/ANS-6.1.2-1999 (R200x), "Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants" (reaffirmation)

ANSI/ANS-15.2-1999 (R200x), "Quality Control for Plate-Type Uranium-Aluminum Fuel Elements" (reaffirmation)

ANSI/ANS-19.10-200x, "Methods for Determining Neutron Fluence in BWR and PWR Pressure Vessel and Reactor Internals" (new standard)

In N17 Ballot/Vote (or resolving comments)

ANS-15.11-200x, "Radiation Protection at Research Reactors" (revision of ANSI/ANS-15.11-1993; R2004)

ANSI/ANS-10.2-1999 (R200x), "Quality Control for Plate-Type Uranium-Aluminum Fuel Elements" (reaffirmation)

ANS-15.17-200x, "Fire Protection Program Criteria for Research Reactors" (revision of ANSI/ANS-15.17-1981; R1987; R2000)

**NFSC Chairman's Report
ANS June 2009 Meeting • Atlanta, Georgia**

I. Standards approved by NFSC (3)

Standard	Status	SC
ANSI/ANS-2.23-2002 (R200x) , Nuclear Plant Response to an Earthquake (reaffirmation)	BSR-9 Submitted to ANSI for approval	ANS-21
ANSI/ANS-55.1-1992 (R200x) , Solid Radioactive Waste Processing System for Light-Water-Cooled Reactor Plants (reaffirmation)	BSR-9 Submitted to ANSI for approval	ANS-21
ANSI/ANS-58.9-2002 (R2009) , Single Failure Criteria for Light Water Reactor Safety-Related Fluid Systems (reaffirmation)	Reaffirmation approved by ANSI 2/24/2009	ANS-22

II. Standards and draft standards at ballot or comment resolution (4)

Standard	Status	SC
ANS-3.5 , Nuclear Power Plant Simulators for Use in Operator Training and Examination (revision of ANSI/ANS-3.5-1998)	Recirculation ballot closed 6/13/09	ANS-21
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-40.37 , Mobile Low-Level Radioactive Waste Processing Systems (reinvigoration of historic standard)	resolving comments/revising draft	ANS-27
ANS-53.1 , Nuclear Safety Criteria for the Design of Modular Helium-Cooled Reactor Plants (new standard)	resolving comments/revising draft	ANS-28

III. PINS approved by NFSC (4)

Standard	Status	SC
ANS-2.2 , Earthquake Instrumentation Criteria for Nuclear Power Plants (revision of ANSI/ANS-2.2-2002)	PINS being reviewed by SB	ANS-25
ANS-2.25 , Surveys of Terrestrial Ecology Needed to License Thermal Power Plants (reinvigoration of historic standard)	PINS submitted to ANSI 5/2009	ANS-25
ANS-3.1 , Selection, Qualification, and Training of Personnel for Nuclear Power Plants (revision of ANSI/ANS-3.1-1993 (R1999))	PINS submitted to ANSI 5/2009	ANS-21
ANS-51.10 , Auxiliary Feedwater System for Pressurized Water Reactors (revision of ANSI/ANS-51.10-1991 (R2008))	PINS submitted to ANSI 5/2009	ANS-22

IV. PINS forms in approval process (4)

Standard	Status	SC
ANS-2.6 , Guidelines for Estimating Present & Forecasting Future Population Distributions Surrounding Nuclear Facility Sites (new standard)	resolving NFSC comments	ANS-25
ANS-29.1 , Operational Reactivity Management and Oversight at Light Water, Pressurized Water Power Reactors (new standard)	resolving NFSC comments	ANS-29
ANS-40.21 , Siting, Construction, and Operation of Commercial Low Level Radioactive Waste Burial Grounds (new standard)	resolving NFSC comments	ANS-25
ANS-56.8 , Containment System Leakage Testing Requirements (revision of ANSI/ANS-56.8-2002)	resolving subcommittee comments	ANS-21

V. PINS in preparation (4)

Standard	Status	SC
ANS-2.8 , Determining Design Basis Flooding at Power Reactor Sites (reinvigoration of historic standard)	to be drafted by WG	ANS-25
ANS-40.35 , Volume Reduction of Low-Level Radioactive Waste or Mixed Waste (reinvigoration of historic standard)	to be drafted by WG	ANS-27
ANS-58.2 , Design Basis for Protection of Light Water Nuclear Power Plants Against the Effects of Postulated Pipe Rupture (reinvigoration of historic standard)	to be drafted by WG	ANS-24
ANS-58.8 , Time Response Design Criteria for Safety-Related Operator Actions (revision of ANSI/ANS-58.8-1994 (R2008))	to be drafted by WG	ANS-24

RISC Progress Report June 2009

Publication

ANSI/ASME/ANS RA-S-2008, "Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications," was published in December 2008.

ANSI/ASME/ANS RA-Sa-2009, "Addenda to ASME/ANS RA-S-2008, Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications," was approved 2/2/2009 and published in April 2009. This "addendum" is actually an entirely new version, meaning that the entire 2008 version has been replaced by this version.

Action Completed

The RISC was provided an opportunity to comment on the ASME draft standard for Probabilistic Risk Assessment for Advanced Non-LWR Nuclear Power Plant Applications.

The RISC was provided an opportunity to comment on NFSC draft standard ANS-53.1-20xx, "Nuclear Safety Criteria and Safety Design Process for Modular Helium-Cooled Reactor Plants."

Grant Awarded for RISC PRA Standards

An NRC grant to support the RISC PRA standards has been awarded. Verbal confirmation has been received. Formal confirmation with contract details will be forthcoming.

In RISC Ballot/Vote (or resolving comments)

ANS-58.22-20xx, "Low Power Shutdown PRA Methodology"

- Writing group led by Don Wakefield
- Reballot issued due to substantive changes
- Reballot closed October 2008 with 674 committee comments and 116 public comments
- Revised draft to be issued for a third ballot before the end of 2009

Standards in Progress

ANS-58.24-20xx, "Severe Accident Progression and Radiological Release (Level 2) PRA Methodology to Support Nuclear Installation Applications"

- Writing group led by Mark Leonard, underway since 2005
- Development to be expedited with grant funds
- Preliminary draft for RISC review in 2010
- Ballot date to be determined

ANS-58.25-20xx, "Standard for Radiological Accident Offsite Consequence Analysis (Level 3 PRA) to Support Nuclear Installation Applications"

- Writing group led by Keith Woodard, underway since 2005
- Development to be expedited with grant funds
- Preliminary draft for RISC review in 2010
- Ballot date to be determined

Other Issues

- Committee has not yet reached consensus on how to treat "qualitative" methodologies in its "PRA" standards
- Coordination with NRMCC and ASME-CNRM
- Combining ANS RISC with ASME CNRM

Staff Report June 2009

Standards Development

Project Initiation Notification System (PINS) forms were submitted to ANSI announcing initiation of five standards projects that include four revisions to current standards and one proposed new standard. These include:

- ANS-2.25, "Surveys of Terrestrial Ecology Needed to License Thermal Power Plants," (new standard – reinvigoration of historical standard)
- ANS-3.1, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants," (revision)
- ANS-6.1.2, "Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants," (revision)
- ANS-15.2, "Quality Control for Plate-Type Uranium-Aluminum Fuel Elements," (revision)
- ANS-51.10, "Auxiliary Feedwater System for Pressurized Water Reactors," (revision)

Year to date, seven ballots have been administered for approval of new or revised standards and reaffirmations of current standards. The American National Standards Institute (ANSI) granted final approval as American National Standards to five reaffirmations and one new standard.

ASME/ANS RA-Sa-2009 Addenda (Rev. 1) to current standard ASME/ANS RA-S-2008, "Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications," was approved by ANSI on February 2, 2009, and has just been published. This joint standard combines ASME RA-S-2002, "Probabilistic Risk Assessment for Nuclear Power Plant Applications (PRA)," ANSI/ANS-58.21-2007, "External-Events in PRA Methodology," and ANSI/ANS-58.23-2007, "Fire PRA Methodology."

Four ANS standards were published just before the end of 2008. This includes ANSI/ANS-2.27-2008, "Criteria for Investigations of Nuclear Facility Sites for Seismic Hazard Assessments," ANSI/ANS-2-29-2008, "Probabilistic Seismic Hazard Analysis," ANSI/ANS-10.4-2008, "Verification and Validation of Non-Safety-Related Scientific and Engineering Computer Programs for the Nuclear Industry," and ANSI/ANS-15.16-2008, "Emergency Planning for Research Reactors." ANSI/ANS-19.10-2009, "Methods for Determining Neutron Fluence in BWR and PWR Pressure Vessel and Reactor Internals," was published early June of 2009.

Standards Committee News

The Nuclear Facilities Standards Committee (NFSC), the N16 Nuclear Criticality Safety, and the Risk Informed Standards Committee (RISC) are all scheduled to meet at the upcoming ANS Annual Meeting in Atlanta, Georgia, along with the Standards Board and numerous working groups. Several Standards Committee groups continue to take advantage of teleconferencing capabilities through the ANS phone system. The Standards Committee continues to look for new ways to foster communication with ANS Professional Divisions and other standards developing and industry organizations with similar scopes.

Standards Committee members attended a meeting with representatives of federal agencies and standards development organizations in January 2009. The meeting was held to discuss the establishment of a coordinating committee for nuclear energy standards called the "Nuclear Energy Standards Coordination Collaborative." The coordinating committee will provide a cross-stakeholder forum to facilitate and coordinate the timely identification, development and

revision of standards for the design, operation, development, licensing, and deployment of nuclear power plants. The next NESCC meeting is scheduled for June 1, 2009, at the NIST offices in Gaithersburg, Maryland.

Clarifications

Clarifications were issued on ANSI/ANS-3.5-1998 (withdrawn), "Nuclear Power Plant Simulators for Use in Operator Training and Examination," ANSI/ANS-19.6.1-2005, "Reload Startup Physics Tests for Pressurized Water Reactors," and ANSI/ANS-56.8-2002, "Containment System Leakage Testing Requirements." All clarifications were published in *Nuclear News* and *Nuclear Standards News*. Additionally clarifications are publicly available under "Related Sections" in the ANS On-line Store under standards. (<http://www.ans.org/standards/clarifications/>)

Standards Meeting with Japanese Delegation at ANS Headquarters

A meeting on standards was held in January of 2009 at ANS headquarters with industry personnel from Tokyo, Japan. The meeting was held to discuss the United States' standards development process, participation of regulatory agencies and industry organizations in the development of standards, and the endorsement of standards by the U.S. Nuclear Regulatory Commission.

Standards Presentation at Medical Issues Seminar

ANS Standards Administrator presented at the Medical Issues Seminar on June 8, 2009, in Chicago. The presentation was arranged by Sciencetech to provide information on the standards development process and in particular how it applied to a revision of ANSI/ANS-3.4-1996 (R2002), "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants.

Annual Activity Report

The 2008 Standards Committee Report of Activities has been completed and was posted to the ANS Web site. The Report is available for download on the Standards Resources page without charge.

New On-Line Volunteer Database

With the completion of the ANS Web site redesign, work was restarted on the new on-line database. Much of the work on the database has already been completed by the ANS Webmaster. Once up and running, individuals interested in volunteering to support the ANS standards program will be able to complete a web-based, volunteer form and upload their resume for consideration and placement. Furthermore, the information will be maintained in a password-protected database with searchable capabilities for Standards Committee chairs when forming standards groups. Additionally, the database will be able to store historical information about members' standards activities. Completion of the database is anticipated within the next few months.

Standards Service Award

Nominations for the 2009 Standards Service Award were provided to the selection committee. The nominee will be announced at the June Standards Board meeting in Atlanta, Georgia.

ANSI Audit

The American National Standards Institute (ANSI) has scheduled an audit of the ANS standards program for March of 2010. All ANSI-Accredited Standards Developers are audited every five to six years to confirm compliance with procedures to maintain accreditation.

STANDARDS SALES REPORT
Report Date: 10/16/08 – 5/15/09

Attachment H

Designation & Title of Standard	# Of Paper/Electronic Copies Sold	Total Price
ANS-1-2000;R2007 , Conduct of Critical Experiments	1	27.90
ANS-2.2-2002 , Earthquake Instrumentation Criteria for Nuclear Power Plants (RV of 2.2-1988)	2	79.20
ANS-2.3-1983;W1993 , Standard for Estimating for Extreme Wind Characteristics at Nuclear Power Plants	2	117.80
ANS-2.5-1984;R1990;W2001 , Standard for Determining Meteorological Information at Nuclear Power Sites	2	79.20
ANS-2.7-1982;W1993 , Criteria and Guidelines for Accessing Capability for Surface Faulting at Power Reactor Sites	1	39.60
ANS-2.8-1992;W2002 , Determining Design Basis Flooding at Power Reactor Sites	4	516.80
ANS-2.9-1980;R1989;W2000 , Evaluation of Ground Water for Nuclear Power Sites	1	67.50
ANS-2.10-2003 , Criteria for the Handling and Initial Evaluation of Records from Nuclear Power Plant Seismic Instrumentation	2	66.60
ANS-2.11-1978;R1989; W2000 , Guidelines for Evaluating Related Geotechnical Parameters at Nuclear Power Sites	1	93.60
ANS-2.12-1978;W1988 , Guidelines for Combining Natural and External Man-Made Hazards at Power Reactor Sites	2	243.20
ANS-2.13-1979;R1988;W2000 , Evaluation of Surface Water Supplies for Nuclear Power Plants	1	84.60
ANS-2.17-1980;R1989;W2000 , Evaluation of Radionuclide Transport in Ground Water for Nuclear Power Sites	2	165.30
ANS-2.19-1981;R1990;W2001 , Guidelines for Establishing Related Parameters	1	100.80
ANS-2.23-2002 , Nuclear Plant Response to an Earthquake	2/1	285.60
ANS-2.25-1982;R1989;W1999 , Surveys of Terrestrial Ecology Needed to License Thermal Power Plants	1	86.40
ANS-2.26-2004 , Categorization of Nuclear Facility Structures, Systems, and Components For Seismic Design	5/4	827.20
ANS-2.27-2008 , Criteria for Investigations of Nuclear Facility Sites for Seismic Hazard Assessments	23/2	2,284.80
ANS-2.29-2008 , Probabilistic Seismic Hazard Analysis	25/3	2,888.50
ANS-3.1-1993;R1999 , Selection, Qualification Training of Personnel for Nuclear Power Plants	7	462.30
AND-3.2-2006 , Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants	1/2	345.00
ANS-3.3-1988;W1992 , Security for Nuclear Power Plants	2	117.80
ANS-3.4-1983;R198; W1996 , Medical Certification and Monitoring of Personnel Requiring Operator LTC	2	74.00
ANS-3.4-1996;R2002 , Medical Certification and Monitoring of Personnel Requiring Operator LTC	3	132.00
ANS-3.5-1998;W2008 , Nuclear Power Plant Simulators for Use in Operator Training & Examination	1	78.30
ANS-3.7.1-1995;W2005 , Facilities and Medical Care for On-Site Nuclear Power Plant Radiological Emergencies (RV of 3.7.1-1979;R1986)	1	45.00
ANS-3.8.1-1995;W2005 , Criteria for Radiological Emergency Response Functions and Organizations	1	78.30
ANS-3.8.2-1995;W2005 , Criteria for Functional and Physical Characteristic of Radiological Emergency Response Facilities (formerly ANS-3.7.2-1995)	1	45.00
ANS-3.8.3-1995;W2005 , Criteria for Radiological Emergency Response Plans & Implementing Procedures	1	45.00

STANDARDS SALES REPORT
Report Date: 10/16/08 – 5/15/09

ANS-3.8.4-1995;W2005 , Criteria for Maintaining Radiological Emergency Response Capability	1	33.30
ANS-3.8.5-1992;W2002 , Criteria for Emergency Radiological Field Monitoring, Sampling and Analysis	1	39.60
ANS-3.8.6-1995;W2005 , Criteria for the Conduct of Offsite Radiological Assessment for Emergency Response for Nuclear Power Plants	1	45.00
ANS-3.8.7-1998;W2008 , Criteria for Planning, Development, Conduct and Evaluation of Drills and Exercises for Emergency Preparedness	1	50.00
ANS-3.11-2005 , Determining Meteorological Information at Nuclear Facilities	1/4	535.00
ANS-4.5-1980;R1986;W2001 , Criteria for Accident Monitoring Functions in Light-Water-Cooled Reactors	2	100.80
ANS-5.1-2005 , Decay Heat Power in Light Water Reactors	3/6	1,044.00
ANS-5.4-1982;W1993;W2003 , Method for Calculating the Fractional Release of Volatile Fission Products from Oxide Fuel	2	70.30
ANS-5.10-1998;R2006 , Airborne Release Fractions at Non-Reactor Nuclear Facilities	1	104.00
ANS-6.1.1-1991;W2001 , Neutron and Gamma-Ray Fluence-To-Dose Factors	8	607.50
ANS-6.1.2-1999;R2009 , Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants	3	86.80
ANS-6.3.1-1987;R1998;R2007 , Program for Testing Radiation Shields in Light Water Reactors	1/1	124.00
ANS-6.4-2006 , Nuclear Analysis and Design of Concrete Radiation Shielding for Nuclear Power Plants	1/2	475.60
ANS-6.4.2-2006 , Specification for Radiation Shielding Materials	1	55.80
ANS-6.4.3-1991;W2001 , Gamma-Ray Attenuation Coefficients and Buildup Factors for Engineering Materials	6	1,030.40
ANS-6.6.1-1987;R1998;R2007 , Calculation & Measurement Direct & Scattered Gamma Radiation from LWR Nuclear Power Plants	2/1	313.60
ANSI/ANS/HpSSC-6.8.1-1981; W1992 , Location and Design Criteria for Area Radiation Monitoring Systems for Light Water Nuclear Reactors	1	50.40
ANS/IEEE-7.4.3.2;R1990;R1993;W2003 , Standards Criteria for Digital Computers in Safety Systems of Nuclear Power Plants	1	45.00
ANS-8.1-1998;R2007 , Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	2/7	652.50
ANS-8.3-1997;R2003 , Criticality Accident Alarm Systems (RF of ANS-8.3-1997)	7/5	631.80
ANS-8.7-1998;R2007 , Guide for Nuclear Criticality Safety in the Storage of Fissile Materials	2	131.10
ANS-8.9-1987;R1995;W2000 , Nuclear Criticality Safety Guide for Pipe Intersections Containing Aqueous Solutions of Enriched Uranyl Nitrate	1	44.00
ANS-8.10-1983;R1988;R1999;R2005 , Criteria for Nuclear Criticality Safety Controls	0/1	37.00
ANS-8.14-2004 , Use of Soluble Neutron Absorbers in Nuclear Facilities Outside Reactors	1	37.00
ANS-8.17-1994;R1989;R1997;W2004 , Criticality Safety Criteria for the Handling, Storage and Transportation of LWR Fuel Outside Reactors	0/1	31.00
ANS-8.17-2004 , Criticality Safety Criteria for the Handling, Storage and Transportation of LWR Fuel Outside Reactors	3/4	240.50
ANS-8.19-1996; W2005 , Administrative Practices for Nuclear Criticality Safety	0/1	25.00
ANS-8.19-2005 , Administrative Practices for Nuclear Criticality Safety	1/4	148.80
ANS-8.20-1991;R1999;R2005 , Nuclear Criticality Training	3	107.30

STANDARDS SALES REPORT
Report Date: 10/16/08 – 5/15/09

ANS-8.21-1995;R2001 , Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors	1	37.00
ANS-8.22-1997;R2006 , Nuclear Criticality Safety Based on Limiting & Controlling Moderators	2	88.00
ANS-8.23-1997 , Nuclear Criticality Accident Emergency Planning and Response	0/1	37.00
ANS-8.23-2007 , Nuclear Criticality Accident Emergency Planning and Response	4/3	620.40
ANS-8.24-2007 , Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations	2/5	582.90
ANS-8.26-2007 , Criticality Safety Engineer Training and Qualification Program	3/3	170.50
ANS-8.27-2008 , Burnup Credit for LWR Fuel	23/9	1,093.20
ANS-10.2-2000 , Portability of Scientific and Engineering Software	1	37.00
ANS-10.4-1987;R1998;W2008 , Guidelines for the Verification and Validation of Scientific and Engineering Computer Programs in the Nuclear Industry	4/2	621.30
ANS-10.4-2008 , Verification and Validation of Non-Safety Related Scientific and Engineering Computer Programs for the Nuclear Industry	21/9	2,894.30
ANS-10.5-1994;W2004 Accommodating User Needs In Computer Program Development	1	44.00
ANS-15.1-2007 , The Development of Technical Specifications for Research Reactors	4/4	555.00
ANS-15.4-2007 , Selection and Training of Personnel for Research Reactors	6/2	418.20
ANS-15.8-1995;R2005 , Quality Assurance Program Requirements for Research Reactors	4	200.00
ANS-15.11-1993;R2004 , Radiation Protection at Research Reactor Facilities	2	192.00
ANS-15.16-2008 , Emergency Planning for Research Reactors	5/3	380.00
ANS-16.1-2003;R2008 , Measurement of the Leachability of Solidified Low-Level Radioactive Wastes by a Short-Term Test Procedure	14/9	2,332.60
ANS-18.1-1984;W1994 , Radioactive Source Term for Normal Operation of Light Water Reactors	1	69.00
ANS-18.1-1999 , Radioactive Source Term for Normal Operation of Light Water Reactors	5	360.00
ANS-19.1-1983;R1989;W2000 , Nuclear Data Sets for Reactor Design Calculations	0/2	106.40
ANS-19.3-2005 , The Determination of Steady State Neutron Reactor Rate Distributions and Reactivity of Nuclear Power Reactors	2	182.40
ANS-19.3.4-2002;R2008 , The Determination of Thermal Energy Deposition Rates in Nuclear Reactors (RV of 3.4-76;R83;R89)	1/2	127.60
ANS-19.4-1976;R1983;R1989;R2000 , A Guide for Acquisition and Documentation of Reference Power Reactor Physics Measurements for Nuclear Analysis Verification	1	62.00
AND-19.5-1995;W2005 , Requirements for Reference Reactor Physics Measurements	1	25.00
ANS-19.6.1-2005 , Reload Startup Physics Test for Pressurized Water Reactors	1/3	357.20
ANS-19.11-1997;R2002 , Calculation and Measurement of the Moderator Temperature Coefficient of Reactivity for Water Moderated Power Reactors	1	75.00
ANS-40.35-1991;W2001 , Volume Reduction of Low-Level Radioactive Waste or Mixed Waste	1	78.30
ANS-51.1-1983;R1988;W2000 , Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants	3	481.40

STANDARDS SALES REPORT
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ANS-52.1-1983;R1988;W2001 , Nuclear Safety Criteria for the Design of Stationary Boiling Water Reactor Plants	2	311.60
ANS-54.1-1989;W1999 , General Safety Design Criteria for a Liquid Metal Reactor Nuclear Power Plant	2	124.20
ANS-54.8-1988;W1998 , Liquid Metal Fire Protection in LMR Plants	1	55.80
ANS-56.2-1984;R1989;W1999 , Containment Isolation Provisions for Fluid Systems After a LOCA	1	128.70
ANS-56.5-1979;R1987;W2000 (Errata Issued), PWR and BWR Containment Spray System Design Criteria	2	193.80
ANS-56.8-1994;W2002 , Containment System Leakage Testing Requirements	1	107.00
ANS-56.8-2002 , Containment System Leakage Testing Requirements	2/1	310.30
ANS-56.10-1982;R1987;W1997 , Subcompartment Pressure & Temperature Transient Analysis in Light Water Reactors	1	102.00
ANS-57.1-1992;R1998,R2005 , Design Requirements for Light Water Reactor Fuel (RV of 57.1-1980)	1	50.40
ANSI/ANS-57.2-1983; W1993 , Design Requirements for Light Water Reactor Spent Fuel Facilities at Nuclear Power Plants	1	99.00
ANS-57.3-1983;W1993 Design Requirements for New Fuel Storage Facilities at LWR Plants	1	45.00
ANS-57.7-1988;R1997; W2007 , Design Criteria for an Independent Fuel Storage Installation (Water Pool Type)	1	117.00
ANS-57.9-1992;R2000 , Design Criteria for an Independent Spent Fuel Storage Installation (Dry Type)	0/2	262.20
ANS-58.2-1988;W1998 , Design Basis for Protection of Light Water Nuclear Power Plants Against the Effects of Postulated Pipe Rupture	9	1,268.40
ANS-58.3-1992;R1998;R2008 , Physical Protection for Nuclear Safety-Related Systems & Components	13	1,286.20
ANS-58.6-1996;R2001 , Criteria for Remote Shutdown for Light Water Reactors	1	39.60
ANS-58.8-1994;R2001;R2008 , Time Response Design Criteria for Safety-Related Operator Actions	13	807.30
ANS-58.9-1981;R1987;R2002;R2009 , Single Failure Criteria for Water Reactor Safety-Related Fluid Systems	4	144.30
ANS-58.14-1993;W2004 , Safety and Pressure Integrity Classification Criteria for LWR	5	765.00
ANS-58.21-2007 , External-Events PRA Methodology	2/7	1,587.80
ANS-58.23-2007 , Fire PRA Methodology	6/11	2,737.80
Misc Standards – Historical & Drafts	20	953.80
GRAND TOTAL		\$40,099.30

Project Activity Report

6/3/2009

Attachment I

NFSC

ANS- 2 . 2	Earthquake Instrumentation Criteria for Nuclear Power Plants	ANS-25	Farhang Ostadian (PhD)	PINS @ SB
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	OPEN	PINS Development
ANS- 2 . 9	Evaluation of Ground Water Supply for Nuclear Facilities	ANS-25	James S. Bollinger	WG Writing Draft
ANS- 2 . 13	Evaluation of Surface-Water Supplies for Nuclear Power Sites	ANS-25	Lance Vail	PINS Development
ANS- 2 . 15	Criteria for Modeling and Calculating Atmospheric Transport of Routine Releases from Nuclear Facilities	ANS-24	John Ciolek & Cliff Glantz - VC	WG Writing Draft
ANS- 2 . 16	Criteria for Modeling Design-Basis Accidental Releases from Nuclear Facilities	ANS-24	John Ciolek / Cliff Glantz - VC	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 . 18	Standards for Evaluating Radionuclide Transport in Surface Water for Nuclear Power Sites	ANS-25	Angelos Findikakis	PINS Development
ANS- 2 . 21	Criteria for Assessing Atmospheric Effects on the Ultimate Heat Sink	ANS-25	Steve Vigeant / Cliff Glantz - VC	WG Writing Draft
ANS- 2 . 22	Environmental Radiological Monitoring at Nuclear Facilities	ANS-25	OPEN	WG Writing Draft
ANS- 2 . 25	Surveys of Terrestrial Ecology Needed to License Thermal Power Plants	ANS-25	Chris Guggino	WG Writing Draft
ANS- 2 . 30	Assessing Capability for Surface Faulting at Nuclear Facilities	ANS-25	Joe Litehiser	WG Writing Draft
ANS- 3 . 1	Selection, Qualification, and Training of Personnel for Nuclear Power Plants	ANS-21	Russell Smith	WG Writing Draft
ANS- 3 . 4	Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants	ANS-21	Barbara Stevens	PINS Development
ANS- 3 . 5	Nuclear Power Plant Simulators for Use in Operator Training and Examination	ANS-21	Timothy Dennis	CC Ballot Comment w/ WG
ANS- 3 . 7 . 1	Facilities and Medical Care for On-Site Nuclear Power Plant Radiological Emergencies	ANS-25	OPEN	PINS Development
ANS- 3 . 8 . 1	Criteria for Radiological Emergency Response Functions and Organizations	ANS-25	OPEN	PINS Development
ANS- 3 . 8 . 2	Criteria for the Functional and Physical Characteristics of Radiological Emergency Response Facilities	ANS-25	OPEN	PINS Development
ANS- 3 . 8 . 3	Criteria for Radiological Emergency Response Plans and Implementing Procedures	ANS-25	OPEN	PINS Development
ANS- 3 . 8 . 4	Criteria for Maintaining Radiological Emergency Response Capability	ANS-25	OPEN	PINS Development
ANS- 3 . 8 . 5	Criteria for Emergency Radiological Field Monitoring, Sampling and Analysis	ANS-24	OPEN	PINS Development

ANS- 3 . 8 . 6	Criteria for the Conduct of Offsite Radiological Assessment for Emergency Response for Nuclear Power Plants	ANS-25	OPEN		PINS Development
ANS- 3 . 8 . 10	Criteria for Modeling Real-time Accidental Release Consequences at Nuclear Facilities	ANS-24	John Ciolek & Cliff Glantz - V C		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			PINS Development
ANS- 40 . 21	Siting, Construction, and Operation of Commercial Low Level Radioactive Waste Burial Grounds	ANS-25	Daniel Hang		CC PINS Comment w/WG
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/ WG
ANS- 41 . 5	Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation	ANS-24	Saleem Salaymeh & Tom Rucker		CC Ballot Comment w/ WG
ANS- 51 . 10	Auxiliary Feedwater System for Pressurized Water Reactors	ANS-22	David Murphy		WG Writing Draft
ANS- 53 . 1	Nuclear Safety Criteria and Safety Design Process for Modular Helium-Cooled Reactor Plants	ANS-28	Jim August		CC Ballot Comment w/ WG
ANS- 55 . 1	Solid Radioactive Waste Processing System for Light-Water-Cooled Reactor Plants	ANS-22	Open		Letter Ballot @ SB
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/ WG
ANS- 57 . 3	Design Requirements for New Fuel Storage Facilities at LWR Plants	ANS-27	Rob Tucker (?)		CC Ballot Comment w/ WG
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 . 8	Time Response Design Criteria for Safety-Related Operator Actions	ANS-22	Rick Hill		PINS Development
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 for Non-Reactor Nuclear Facilities	ANS-22	OPEN		WG Writing Draft
<u>N16</u>					
ANS- 8 . 1	Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	ANS-8	Nick Brown & Doug Bowen		WG Writing Draft
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	Charles Rombough		WG Writing Draft
ANS- 8 . 17	Criticality Safety Criteria for the Handling, Storage and Transportation of LWR Fuel Outside Reactors	ANS-8	Brian O. Kidd		Ballot @ CC

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	David Erickson	WG Writing Draft
ANS- 8 . 22	Nuclear Criticality Safety Based on Limiting and Controlling Moderators	ANS-8	Michael Crouse	PINS Development
ANS- 8 . 23	Nuclear Criticality Accident Emergency Planning and Response	ANS-8	James S. Baker	PINS Development
ANS- 8 . 25	Development of Nuclear Criticality Safety Related Postings	ANS-8	Gerard F. Couture	SB PINS Comments w/ WG
ANS- 8 . 28	NCS & NDA Needs/Applications Standard	ANS-8	Jerry McKamy	PINS Development
<u>N17</u>				
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	WG Writing Draft
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	PINS Development
ANS- 6 . 6 . 1	Calculation and Measurement of Direct and Scattered Gamma Radiation from LWR Nuclear Power Plants	ANS-6	OPEN	PINS Development
ANS- 10 . 2	Portability of Scientific and Engineering Software	ANS-10	Robert Singletery	Ballot @ CC
ANS- 10 . 3	Documentation of Computer Software	ANS-10	Ted Quinn	PINS Development
ANS- 10 . 7	Non-Real Time, High Integrity Software for the Nuclear Industry	ANS-10	Charles Martin	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 Reese	WG Writing Draft
ANS- 15 . 17	Fire Protection Program Criteria for Research Reactors	ANS-15	Leo Bobek	CC Ballot Comment w/ WG
ANS- 15 . 19	Shipment and Receipt of Special Nuclear Material (SNM) by Research Reactor	ANS-15	Charles McKibben	CC Ballot Comment w/ WG
ANS- 15 . 20	Criteria for the Reactor Control and Safety Systems of Research Reactors	ANS-15	Thomas Myers	WG Writing Draft
ANS- 15 . 21	Format and Content for Safety Analysis Reports for Research Reactors	ANS-15	Alexander Adams	PINS Development
ANS- 19 . 1	Nuclear Data Sets for Reactor Design Calculations	ANS-19	Bob Little	WG Writing Draft

ANS- 19 . 3	Determination of Steady-State Neutron Reaction-Rate Distributions and Reactivity of Nuclear Power Reactors -- Slight change 2005 Added "Power"	ANS-19	Ben Rouben	PINS Development
ANS- 19 . 4	A Guide for Acquisition and Documentation of Reference Power Reactor Physics Measurements for Nuclear Analysis Verification	ANS-19	Dimitrios Cokinos	PINS Development
ANS- 19 . 6 . 1	Reload Startup Physics Tests for Pressurized Water Reactors	ANS-19	C.T. Rombough	WG Writing Draft
ANS- 19 . 8	Fission Product Yields for 235U, 238U, and 239P	ANS-19	OPEN	PINS Development
ANS- 19 . 9	Delayed Neutron Parameters for Light Water Reactors	ANS-19	Mikey Brady Raap	WG Writing Draft
ANS- 19 . 11	Calculation and Measurement of the Moderator Temperature Coefficient of Reactivity for Pressurized Water Reactors (for RV of 1997 issue)	ANS-19	Russ Mosteller	WG Writing Draft
ANS- 19 . 12	Nuclear Data for the Production of Radioisotope	ANS-19	Marc Garland / Robert Schenter	WG Writing Draft
<u>RISC</u>				
ANS- 58 . 22	Low Power and Shutdown PRA Methodology	RISC	Don Wakefield	CC Ballot Comment w/ WG
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

6/3/2009

NFSC

Designation	Title	ANSI			History
		Subcommittee	Approval Date	Extension Date	
ANS- 2 . 2	Earthquake Instrumentation Criteria for Nuclear Power Plants	ANS-25	11/21/2002	12/31/2010	PINS @ SB 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. Farhang Ostadan appointed WGC 12/11/08 and will lead a revision. PINS approved by NFSC. PINS submitted to SB w/due date of 6/10/09.
ANS- 2 . 10	Criteria for the Handling and Initial Evaluation of Records from Nuclear Power Plant Seismic Instrumentation	ANS-21	4/14/2003	12/31/2011	NONE Approved in 1979. Under revision and ballot. Extended to 7/31/86; maximum extension to 12/31/89. ANSI withdrawn on 4/90. Re-ballot on 6/19/91. Substantive changes to draft. Ballot new draft. Re-ballot due 3/19/98. 2.01-this stdn has been transferred from ANS-25 subcommittee to ANS-21. 09/30/02- sent to third ballot to NFSC. ANSI Approved - April 14, 2003; Publication Delivered: June 1, 2004. Extension granted until 12/31/2011.
ANS- 2 . 23	Nuclear Plant Response to an Earthquake	ANS-21	5/6/2002	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. RF ballot closed 2/17/09 w/o negs. LB submitted to SB w/due date of 5/15/09. BSR-9 sent to ANSI for certification of RF on 6/2/09.

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	PINS Development	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 Timi Dennis to find new chair. Extension granted until 12/31/2010. 1/2009: New Chair B. Stevens committed to project.
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. WG Meeting being held during ANS Annual meeting June 2008. Rec'd email from ANSI on 9/24/08 that this standard will be administratively withdrawn on 9/18/2009.
ANS- 55. 1	Solid Radioactive Waste Processing System for Light-Water-Cooled Reactor Plants	ANS-22	6/7/2000	6/7/2010	6/7/2010	Letter Ballot @ SB	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-22 SCC Dennis Newton agreed to initiate a RV of this standard in order to resolve comment on RF ballot of ANS-55.6. RV to be initiated. New WGC needed. Extension granted until 6/7/2010. RF ballot issued w/due date of 4/27/09. RF ballot closed w/o comment. LB sent to SB w/due date of 5/28/09.

ANS- 56. 8	Containment System Leakage Testing Requirements	ANS-21	11/27/2002	12/31/2010	12/31/2010	PINS Development	Approved 1981. Revised 1987. Was originally N45.4-1972 (ANS-7.60). Revised 1/20/87. Extended to 12/31/94. Revised 8/4/94. 11/27/2002- ANSI approved revision. Suggested at June 04 NFSC meeting to make next revision performed based. J. Glover requested PINS form for revision via phone call 3-21-05. Per e-mail from J. Glover 3-21-05, this standard was made performed based in the 2002 revision. Per 11/10/06 email: WG discussing proper direction for revision - PINS will be submitted before work on draft begins. Extension granted until 12/31/2010. WGC provided PINS to SCC T. Dennis. PINS sent to ANS-21 for approval 8/10/ 2007. As of 5/08: no word from SCC regarding subcommittee approval.
ANS- 57. 9	Design Criteria for an Independent Spent Fuel Storage Installation (Dry Type)	ANS-27	6/7/2000	6/7/2010	6/7/2010	NONE	Approved 12/31/84. NUPSCO 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. Action Item 11/07-13: Jeff Brault to facilitate a review of ANSI/ANS-57.9-1992; R2000 prior to next meeting (6/08) to determine if revision or reaffirmation applicable. Names to help w/review provided to J. Brault by Wright, Roe, & Hill. Extension granted until 6/7/2010.
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. 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. Open Action Item for D. Newton to find new WGC.
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. Standard reviewed by R. Hill. Findings sent to D. Newton/M. Ruby for consideration if RF appropriate.

N16

Designation	Title	ANSI				History
		Subcommittee	Approval Date	Extension Date	Action Needed By	
ANS- 8 . 3	Criticality Accident Alarm System	ANS-8	6/12/2003	6/12/2011	6/12/2011	PINS Development Approved as N16.2-1969. Revised 1979. Revised (and combined with N2.3) 1986; (ref. in RG 8.12). Revised 8/29/86. Revision to ANS-8 ballot 9/10/92; closes 10/12/92. Extended to 12/31/93. 2nd extension to 12/31/95. 3rd extension to 12/31/96. Withdrawn 12/31/1996. Revised 5/28/97. ISO 7753 in file for comparison. ANSI reaffirmed on 6/12/2003. According to N16 SB 11/2004 report, revision in works. Per 11/05 Minutes, PINS form in works for revision. Work has been underway for some time on the revision w/o a PINS form. Project is currently out of compliance with ANSI's PINS requirement. New WGC 9/2007: Shean Monahan. Sent email 5/20/08 to S. Monahan regarding PINS requirement. Extension granted until 6/12/2001.
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. 10/2008: Email sent to WGC to consider revision/reaffirmation/withdrawal.
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 . 14	Use of Soluble Neutron Absorbers in Nuclear Facilities Outside Reactors	ANS-8	5/25/2004	5/25/2009	5/25/2009	NONE Draft should be ready for 11/87 meeting of ANS-8. 4/30/2003- Schlessler said the scope is changing. 08/03- PINS was balloted at ANS8/N16 level and approved. ANSI approved this new standard on 5/25/04. Available for Sale 10/18/04. Per ANS-8 11/2005 minutes: WG has not meet since 2004 revision.

ANS- 8 . 21 Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors ANS-8 7/23/2001 12/31/2009 12/31/2009 WG Writing Draft 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. Schlusser e-mail WGC 5/10/05 to recommend maintenance as 5th anny is approaching. ANSI granted extension until 12/31/09. May 2007. PINS for a revision of ANS-8.21 to incorporate a revision of ANS-8.5 approved w/o comment by SB -- submitted to ANSI 2/12/08. H. Toffer retired as WGC effective 12/1/08 - David E rickson took over as WGC same day.

N17

Designation	Title	Subcommittee	ANSI			History
			Approval Date	Extension Date	Action Needed By	
ANS- 10 . 2	Portability of Scientific and Engineering Software	ANS-10	12/20/2000	12/20/2010	12/20/2010	Ballot @ CC 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. Extension granted until 12/20/2010. N17 Decision made to reaffirm. RF Ballot due May 30, 2009.
ANS- 14 . 1	Operation of Fast Pulse Reactors	ANS-14	4/23/2004		4/23/2009	NONE Approved as N394 1975. Reaffirmed 1982. Reaffirmed 1989 4/11/89. First extension to 12/31/96. Second extension to 12/31/99. Reaffirmed 5/3/00. Must tell ANSI to change their records 'cos they say it was w/d on 5/19/00. 08/05/02-ANSI said that the std is considered NEW however, they are keeping the designation as ANSI/ANS-14.1-1975 (R2000). 08/05/02- ANS-14 SC has a revised proposed draft to ballot, but a PINS for RV was not done. 04/09/03--Sent PINS to ANSI. (7/21/03) - Requested extension from ANSI until 12/31/2005. (8/20/03) - ANSI granted extension until 12/31/2005. Revision of standard approved by ANSI on 4/23/04 - ANSI/ANS-14.1-2004. A vailable for Sale-9/2/04. WGC T. Schmidt requested that a reaffirmation be initiated.

ANS- 15. 11	Radiation Protection at Research Reactors	ANS-15	5/27/2004	5/27/2009	CC Ballot Comment w/ WG	Approved 1977. Revised 12/2/87. First extension to 12/31/94. Revised 7/23/93. Les Slaybak will review for revision. Richards would like comments by 2/98 and then to ANS-15 by 4/98. Per Wade Richards's 1/9/03 letter: Pedro Perez will send a revised standard to the chair by 1/31/03. The chair will send the standard to ANS 15 for balloting by 3/4/03. First extension to 12/31/01. Second extension 7/23/2003. ANSI approved reaffirmation of ANSI/ANS-15.1-1993 version - 5/27/04. Revision in the works, need PINS. PINS for RV submitted to ANSI 11/11/07. Ballot for RV close 12/10/07. CR due from WGC 3/10/08. As of 5/08, CRs remain open -- 3rd notice sent to WGC 5-19-08. 7/2008: Steve Reese replaced Steve Miller as WGC. CRs issued, neg reversed. 10/10/08: rebalot issue w/substantive change; due date = 12/9/08. Rebalot closed 12/9/08 w/1 neg sent to WGC 12/18/08. Rebalot CRs distributed 6/2/09. One negative ballot asked to consider CR & upgrade vote by 7/2/09.
ANS- 15. 17	Fire Protection Program Criteria for Research Reactors	ANS-15	5/3/2000	5/3/2010	CC Ballot Comment w/ WG	Approved 1981. Reaffirmed 4/3/87. First extension to 12/31/94. Second extension to 12/31/97. Reaffirmed 5/3/00. Per Wade Richards'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. 10/2008 Draft ready for subcommittee review. Email sent to W. Richards for status & to see if ANS-15.17 is ready for N17 ballot. Ballot for RV closed 3/20/09 with 3 NEGS. CRs due 6/29/09.
ANS- 19. 1	Nuclear Data Sets for Reactor Design Calculations	ANS-19	7/23/2002	7/23/2012	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. 4	A Guide for Acquisition and Documentation of Reference Power Reactor Physics Measurements for Nuclear Analysis Verification	ANS-19	5/3/2000	5/3/2010	PINS Development	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 -- Cokinios looking for new chair. Per 6/2005 minutes, still looking for chair and planning to combine with ANS-19.5. Per ANS-19 11/07 minutes: D. Cokinios agreed to chair revision. WG to be formed -- WG will consider combining with historical RV of ANS-19.5. Extension granted until 5/3/2010.

ANS- 19 . 11 Calculation and Measurement of the Moderator Temperature Coefficient of Reactivity for Pressurized Water Reactors (for RV of 1997 issue) ANS-19 12/17/2002 12/31/2010 12/31/2010 12/31/2010 WG Writing Draft

Approved 9/25/97. Publication in process and completed. ANSI granted extension until 12/31/2005. Reaffirmed 12/17/2002. (7/21/03) - Requested extension from ANSI until 12/31/2007. (8/20/03) - ANSI granted extension until 12/31/2007. Maintenance will be discussed at ANS-19 meeting -- 11/15/04. Per 6/2005 minutes, Mosteller will review and decide if reaffirmation or revision is appropriate. Per 6/2007 ANS-19 minutes, Mosteller reported that there will be a revision but nothing major. Extension granted until 12/31/2010. PINS approved by N17 with title change. "Water Moderated Power Reactors" changed to "Pressurized Water Reactors." Approved PINS sent to ANSI 1/23/08.

Status of Standards

6/3/2009

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	11/21/2002	12/31/2010	12/31/2010	PINS @ SB
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	12/31/2011	12/31/2011	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	Active Project				PINS Development
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				PINS Development

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				WG Writing Draft
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	Current ANSI/ANS	7/31/2008		7/31/2013	NONE
ANS- 2 . 28	Nuclear Material Facility Design Against Natural Phenomena	ANS-25	Inactive Project				NONE
ANS- 2 . 29	Probabilistic Seismic Hazard Analysis	ANS-24	Current ANSI/ANS	7/31/2008		7/31/2013	NONE
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	Active Project	2/4/1999	2/4/2009		WG Writing Draft
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	PINS Development
ANS- 3 . 5	Nuclear Power Plant Simulators for Use in Operator Training and Examination	ANS-21	Active Project				CC Ballot Comment w/ WG
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-25	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-25	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-25	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	Historical	1/30/1998	1/29/2008	PINS Development
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
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	8/4/2008	8/4/2013
ANS- 18. 1	Radioactive Source Term for Normal Operation of Light Water Reactors	ANS-24	Current ANSI/ANS	9/21/1999	12/31/2007
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 Development
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		CC PINS Comment w/WG
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/ WG
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/ WG
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	10/14/2013 WG Writing Draft
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 and Safety Design Process for Modular Helium-Cooled Reactor Plants	ANS-28	Active Project	CC Ballot Comment w/ WG
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. 5	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	6/7/2010	6/7/2010	Letter Ballot @ SB
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/ WG
ANS- 57. 3	Design Requirements for New Fuel Storage Facilities at LWR Plants	ANS-27	Active Project				CC Ballot Comment w/ WG
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	Historical	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	6/7/2010		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	3/18/08	3/18/2013		NONE
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	8/25/2008	8/25/2013		PINS Development
ANS- 58. 9	Single Failure Criteria for Light Water Reactor Safety-Related Fluid Systems	ANS-22	Current ANSI/ANS	2/24/2009	2/24/2014		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 for Non-Reactor Nuclear Facilities	ANS-22	Active Project						WG Writing Draft
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

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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	WG Writing Draft
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	6/12/2011	6/12/2011	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
ANS- 8 . 6	Safety in Conducting Subcritical Neutron-Multiplication Measurements in Situ	ANS-8	Current ANSI/ANS	7/23/2001	12/31/2009
ANS- 8 . 7	Nuclear Criticality Safety in the Storage of Fissile Materials	ANS-8	Current ANSI/ANS	9/12/2007	9/12/2012
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
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
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
ANS- 8 . 15	Nuclear Criticality Control of Selected Actinide Nuclides	ANS-8	Current ANSI/ANS	7/15/2005	7/15/2010
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
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
ANS- 8 . 20	Nuclear Criticality Safety Training	ANS-8	Current ANSI/ANS	9/16/2005	9/16/2010
ANS- 8 . 21	Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors	ANS-8	Current ANSI/ANS	7/23/2001	12/31/2009
ANS- 8 . 22	Nuclear Criticality Safety Based on Limiting and Controlling Moderators	ANS-8	Current ANSI/ANS	12/8/2006	12/8/2011
ANS- 8 . 23	Nuclear Criticality Accident Emergency Planning and Response	ANS-8	Current ANSI/ANS	3/23/2007	3/23/2012
ANS- 8 . 24	Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations	ANS-8	Current ANSI/ANS	3/16/2007	3/16/2012
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 Current ANSI/ANS 8/14/2008 8/14/2013 NONE

ANS- 8 . 28 NCS & NDA Needs/Applications Standard ANS-8 Active Project PINS Development

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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 NUPPSO		Inactive Project				NONE
ANS- 5 . 1	Decay Heat Power in Light Water Reactors	ANS-19	Current ANSI/ANS	4/1/2005		4/1/2010	WG Writing Draft
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	2/23/2009		2/23/2014	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	12/20/2010	12/20/2010	Ballot @ CC
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	Historical	10/28/08		10/28/2013	NONE
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	3/23/2009		3/23/2014	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	CC Ballot Comment w/ WG
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	9/23/2008	9/23/2013	NONE
ANS- 15. 17	Fire Protection Program Criteria for Research Reactors	ANS-15	Current ANSI/ANS	5/3/2000	5/3/2010	CC Ballot Comment w/ WG
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			WG Writing Draft
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	WG Writing Draft
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	7/23/2012	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	PINS Development
ANS- 19. 3 . 4	The Determination of Thermal Energy Deposition Rates in Nuclear Reactors	ANS-19	Current ANSI/ANS	10/31/2008	10/31/2013	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	5/3/2010	PINS Development
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			PINS Development
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	Current ANSI/ANS	2/24/09	2/24/2014	NONE
ANS- 19. 11	Calculation and Measurement of the Moderator Temperature Coefficient of Reactivity for Pressurized Water Reactors (for RV of 1997 issue)	ANS-19	Current ANSI/ANS	12/17/2002	12/31/2010	WG Writing Draft
ANS- 19. 12	Nuclear Data for the Production of Radioisotope	ANS-19	Active Project			WG Writing Draft

ANS- 54 . 4 Nonmetallic Thermal Insulation for Austenitic Stainless Steel in LMFBFRs
 ANS- 58 . 13 Design for Post-Accident Access External to LWR Primary Reactor Containments

Inactive Project
 Inactive Project

NONE
 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/ WG
ANS- 58 . 23	Fire PRA Methodology	RISC	Current ANSI/ANS	11/20/2007			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-			Inactive Project				NONE
ANS-							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

Liaison Report to ANS from IEEE/PES/NPEC

A Meeting was held in Cocoa Beach, Florida on January 27, 28, 2009

A meeting of the Administrative Sub-Committee (AdCom) was held January 27, 2009 prior to the NPEC meeting.

The following Project Authorization Requests were reviewed:

- P-1290 – Revision to the Guide for MOV Motor Application, Protection, Control and Testing in Nuclear Generating Stations
- P765 – Preferred Power Supply for Nuclear Power Plants
- P1792 -- The NPEC meeting was held January 28, 2009. The following Standards Activities occurred:
 - P 7.4.3-2 – Standard Criteria for Digital Computers in Safety Systems for Nuclear Power Generating Stations – Standard Preview to NPEC. The document was given permission to ballot.
 - P 1786 – Human Factors Guide for Application of Computerized Operating Procedure Systems at Nuclear Power Generating Stations and other Operating Facilities – Work in Progress Report.

Two Technical Presentations were given:

Considerations in Upgrading to Digital I&C Technology

STP Units 3 & 4, Instrumentation and Controls

The NPEC N 2008-02 was held July 15 and 16, 2008 in Toronto.

AdCom met on July 15th. The following PARs were approved:

- P – 336, IEEE Standard Installation, Inspection and Testing Requirements for Power, Instrumentation and Control Equipment at Nuclear Power Facilities. This revision will change from a “Guide” to a “Recommended Practice”
- P --577, IEEE Standard Requirements for Reliability Analysis in the Design and Operation of Safety Systems for Nuclear Power Generating Stations
- P – 933, Guide for the Definition of Reliability Program Plans
- IEEE 622, Heat Tracing was instructed to move directly to a Re-affirmation ballot.

The NPEC meeting was held July 16, 2009. The following documents received previews at the meeting:

- P627 – Standard for the Qualification of Equipment Used in Nuclear Facilities – Permission to Ballot was given to this document.
- P692 – Criteria for Security Systems for Nuclear Power Generating Stations – Permission to Ballot was given to this document.