

Members Present

N. Prasad Kadambi, *Chair, NRC*
Donald J. Spellman, *Vice Chair, ORNL*
William Burchill, *RISC Chair, Texas A&M University*
Calvin M. Hopper, *N16 Chair, ORNL*
Carl Mazzola, *NFSC Chair, Shaw Environmental and Infrastructure, Inc.*
Chuck Moseley, *Member at Large, BWXT Y12*
R. Michael Ruby, *Member at Large, Constellation Energy-Ginna NPP*
Patricia Schroeder, *Standards Administrator, American Nuclear Society*
Stephen Shepherd, *Member at Large, Southern California Edison Company//SONGS*
Steven Stamm, *Member at Large, Stone and Webster*

Members Absent

Dimitrios Cokinos, *Member at Large, BNL*
Tawfik M. Raby, *N17 Chair, NIST*
R. Michael Westfall, *Member at Large, ORNL*
Michael J. Wright, *Member at Large, Entergy*
Peter S. Hastings, *Member at Large, Duke Energy*

Guests

Ken Balkey, *VP ASME BNCS, Westinghouse*
Robert Budnitz, *Lawrence Livermore National Laboratory*
Timothy Dennis, *Independent Consultant*
Rick Grantom, *Chair ASME CNRM, South Texas Project NOC*
Robert McFetridge, *Westinghouse*

1. Call to Order

Prasad Kadambi called the meeting to order and introductions were made. Ken Balkey, Rick Grantom, and Bob McFetridge were introduced as guests.

2. Approve Agenda

The agenda was approved noting that the minutes to be approved were from the June 2006 meeting in Reno, Nevada.

3. Approval of Meeting Minutes from June 2006 Meeting in Reno, Nevada.

The minutes were approved with minor changes to the RISC Report.

4. Discuss ASME/ANS Cooperative Effort – Ken Balkey, VP ASME Board of Nuclear Codes & Standards & Rick Grantom, Chair ASME Committee on Nuclear Risk Management

Ken Balkey, VP ASME Nuclear Codes and Standards Board, addressed the Board. He stated it was going to take all of us working together to complete the task of producing the necessary standards for the industry on account of new power plants. Balkey provided an overview of the challenges ASME has faced in the last four to five years and what they have done to improve ASME's financial stability.

Balkey explained that ASME has been restructured and significant changes were made in leadership and focus. Balkey informed the Board that ASME's brand name is now ASME, not

American Society of Mechanical Engineers. The change was made because of its international membership and desire to attract more.

Balkey explained that ASME sent teams around the world to review needs of new plants. Grantom discussed a study employing the concept of System Based Codes, to examine the practical applicability, effects, and items to be resolved for future development. This concept involves a life-cycle integration of standards. For example, providing adequate structural margin provides information for determining margins and how to achieve structurally through materials, design, and inspection. Grantom offered to provide a copy of the case study for distribution to the Board.

Balkey reviewed the NRMCC Strategic Plan. He explained that the NRMCC was formed in February 2004 to assure that current, emerging risk-informed standards are developed to meet user needs and are consistent and compatible. Furthermore, it was formed to evaluate alternatives and recommend actions to optimize the number and mix of separate standards to implement a full scope of risk-informed applications. The NRMCC, co-chaired by Jim Mallay/ANS and Ray Weidler/ASME, now included members from IEEE, NRC, DOE, NEI, EPRI, as well as nuclear plant owners/operators and industry consultants.

Balkey explained that ASME has developed a PRA training program that was funded through the NRC, PWR Owners Group, BWR Owners Group, EPRI, and ASME. The training program addresses all levels – engineers, project managers, engineering managers, regulators. Balkey stated that they'd like to see their courses adapted by universities.

Donald Spellman stated that we needed to determine where the scopes of ASME and ANS cross and refocus our standards. It's time we address industry needs together along with IEEE. Balkey suggested our two societies develop a plan before we get other societies involved and then seek support. The NRMCC provides the ability for our societies to work together. Balkey informed the Board of a conversation he had with past ANS President, Dr. Larry Foulke, who suggested that ANS and ASME collaborate on security related standards.

Spellman asked Balkey if he felt ASME received sufficient support from ANSI. Balkey stated that ANSI was very helpful back in the 1970s getting the nuclear SDOs to align. Prasad Kadambi commented that ANSI is very important for accreditation and creates the value in consensus standards.

See Ken Balkey's presentation for more detail – Attachment A.

Rick Grantom explained the integration process. He stated his opinion that we are behind and have not met the needs of the industry with current standards. The concept for developing an integrated standard was to provide continuity and stability for the industry.

The NRMCC appointed a task group comprised of key ANS and ASME members. Their recommendation of a single PRA standard was approved September 2004 by the NRMCC. An assignment was given to Robert Bari and himself to determine the best division of assignments. ASME was assigned Level 1 while ANS was assigned the Level 2 & 3 PRA Standards. Both groups would be augmented with representatives from both societies; ANS members would be added to ASME's consensus committee and vice-versa. The ANS representatives would be full members of CNRM with balloting privileges, and likewise ASME representatives would be full members on RISC.

Bill Burchill stated that at some point he'd like to remind the Board of the history and what was acted on and approved. A totally separate issue is the business arrangement which he believes is in works.

Grantom explained the structure that they will be using for separating the scopes of the individual standards that are being integrated into the Level 1 standard. There will be different Parts corresponding to each of the scopes. A section for definitions will be applicable to all parts. Calvin Hopper suggested checking with ISO's new glossary for compatibility of definitions.

Grantom explained that the fundamental ground rule is for no new technical requirements to be written. The current infrastructure for each standard will be retained, and the technical requirements of each standard will be kept intact including commentaries, notes, etc.

Burchill informed the Board that the structure of the Level 1 integrated standard had been presented to CNRM and RISC in a joint meeting. They had been told that NRC would review the integrated standard for endorsement but would not review the individual standards. Burchill explained that currently the integration team comprises of only ASME members. It would be logical to populate the integration team with a requisite number of working group members when we pass over one of our standards.

Grantom expressed that it is important to complete the integration process as noted in the timeline. A PRA quality policy was put out a few years ago with a deadline of end 2008. Grantom explained that the utilities have a three-year moratorium to complete a fire protection plan for the NRC. A new driver by the utilities to have a tri-annual inspection on their fire PRA. NEI has requested the NRC for endorsement of the individual fire PRA standard. The concern is that holding off NRC endorsement of the fire standard until the integrated standard is approved puts the industry in a difficult position. Balkey explained that the first integrated standard would not include the low power/shut down standard.

Kadambi reiterated to the Board that the role of the NRMCC is to make recommendations for consideration and approval of each Board.

Steve Stamm acknowledged that the work ASME had done in planning for the integrated standard is impressive. Kadambi said that it had been a great overview providing much food for thought.

For more detail on the integrated process, see Grantom's presentation – Attachment B.

Action Item 11/06-01: Prasad Kadambi develop action plan for approval by ANS and ASME Boards regarding the activities called for in the discussions between ASME representatives and the ANS Board as recorded in these minutes.

Action Item 11/06-02: Prasad Kadambi assign appropriate Standards Committee members to review and report back to SB on the information that ASME provides on System Based Codes.

5. Nuclear Risk Management Coordinating Committee

Don Spellman provided a summary of the last NRMCC meeting in September. Spellman felt that Bill Burchill received pressure to complete ANS PRA standards for integration from some NRMCC members. Spellman stated that Burchill provided a realistic timetable for completion and integration of the standards. Burchill said that he felt the push is coming from the NRC. Spellman stated it would help if we could get the NRC to push back the time frame. Burchill stated that we don't have the resources to populate the ASME integrated standard while we are working to complete the single ANS standards. As consensus is achieved on each, the single standard will be provided to ASME and an ANS working group member will transition to the integrated team.

Spellman stated two concerns 1) being allowed the time to complete the standards correctly and 2) ASME assuming ownership of the ANS standards. Burchill informed the Board that ASME

had asked ANS not to publish our standards and expects them to be withdrawn once the integrated standard is approved. Kadambi stated that NEI has changed the scenario by stating that they want the fire PRA standard published as quickly as possible to support the industry. Mazzola questioned why an integrated standard is needed. Moseley expressed his thought that from a maintenance perspective, it would be easier to keep the standards separate. Spellman recommended for the integrated standard to be a top-level standard providing direction of where to find specific information, which also would provide the NRC with the standards on their time frame. Kadambi suggested that the Standards Board continue to support the integration process.

6. Discuss and Resolve Action Items

See list of action items at end of minutes.

In discussion of Action Item 6/05-06 on balance of interest, Chuck Moseley took an action to send ASME's definitions for balance of interest to Calvin Hopper.

Action Item 11/06-03: Chuck Moseley to send Calvin Hopper ASME's definitions for balance of interest.

Pat Schroeder stated that ANSI finds it acceptable to have floating balance of interest categories provided it can be documented and understood. Additionally Schroeder said that ANSI suggested keeping the number of categories small to aid gaining consensus in each category.

7. Standards Board Chair's Report

Report on International Standards Activities

The Board was informed of changes to the ISO Technical Committee 85/SC6. Working groups were restructured and one working group added. The working groups are 1) Reactor Analysis & Measurements, 2) Research & Test Reactors, 3) Power Reactor Siting Design, Operation, and Decommissioning, and 4) Reactor Facility Siting Design, Decommissions. Calvin Hopper informed the Board that the US must demonstrate an active secretariat to SC6 or risk losing it.

Report to Board of Directors

Prasad Kadambi provided his Board of Directors report. See Attachment C.

Report on status of Draft Process to Acquire NRC Endorsement

Prasad Kadambi explained that a process for acquiring NRC endorsement already exists in NRC Management Directive 6.5. Kadambi stated that we needed to find a way to work with NRC as noted in the directive. There are specific guidelines for on-going review of consensus standards. To accomplish a timely endorsement, the staff can use drafts before publication. Another provision in the management directive observes rights to limit endorsement for multiple reasons. It is NRC's policy to adopt consensus standards through incorporation as reference in regulatory guides, NUREGs, the standards review plan, technical reports, and technical specifications. The management directive applies to all SDOs. ANS should be looking for endorsement through reference.

Pat Schroeder was asked to include the NRC Management Directive 6.5 on the ANS Web site.

Action Item 11/06-04: Pat Schroeder to add the link for the NRC Management Directive 6.5 to the Standards Resource Section of the ANS Web site.

Kadambi informed the Board that Dr. Jennifer Uhle has replaced Dr. Richard Barrett as NRC Standards Executive.

8. ANS Strategic Plan

As directed by the ANS Strategic Plan, Prasad Kadambi informed the Board that he plans to get the Standards Committee more involved in submitting public comments to the NRC. He also looks to increase involvement with our sister SDOs and in international activities. Kadambi informed the Board that he is scheduled to meet with incoming ANS President, Donald Heinz, to provide him an update on our progress in this area.

9. Secretary's Reports

A written, staff report as well as the standards reports for activity, delinquent standards, status, and sales report was provided. See Attachment – Attachment D:

An opportunity was provided for members to comment on the PINS for ANS-40.37-200x, "Mobile Low-Level Radioactive Waste Processing Systems," and ANS-58.14-200x, "Safety and Pressure Integrity Classification Criteria for Light Water Reactors."

10. Public Comments: Non-technical, Jurisdictional – Calvin Hopper

Calvin Hopper acknowledged that he received public comments on ANS-8.24, "Validation of Neutron Transport Methods for Nuclear Criticality Safety Calculations," and ANS-8.26, "Criticality Safety Engineer Training and Qualification Program." He stated it may not be possible to resolve them to the satisfaction of everyone, but proper procedures will be followed.

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

N16

Calvin Hopper informed the Board that N16 had an active meeting with good participation the previous day. The committee reviewed proposals for ANS-8 standards and draft N16 Rules and Procedures. Hopper informed the Board that N16 membership is also concerned about the current balance of interest category definitions.

N17

See N17 Report – Attachment E.

NFSC:

Carl Mazzola reported that 19 members plus one very interested student attended yesterday's committee meeting. A category of associate member is being considered to include students or new industry entrants as participants on the committee.

Mazzola stated that ANSI/ANS-3.11-2005, "Determining Meteorological Information at Nuclear Facilities," has sold 34 copies since publication. Draft Regulatory Guide, DG-1164, Meteorological Monitoring Programs for Nuclear Power Plants, has already utilized this standard. ANSI/ANS-3.2-2006, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants," was approved and will be published soon. Three standards were recently approved for reaffirmation and two standards are currently out for ballot. Two drafts were balloted and are resolving comments. John Stevenson is championing a new standard, ANS-58.16-200x, "Safety and Pressure Integrity Classification Loads and Behavior Criteria for Nuclear Facilities Other Than Large Nuclear Reactors." A PINS form for this project and for ANS-40.37-200x, "Mobile Low-Level Radioactive Waste Processing Systems," is currently out for approval with the NFSC. Calvin Hopper suggested that an ANS-8.1 liaison be placed on ANS-40.37-200x.

Mazzola stated that a letter commenting on the Draft Regulatory Guide, DG-1145, Combined License Applications for Nuclear Power Plants (LWR Edition), was sent to the NRC that provided comments from the NFSC. He also reported on an Electric Utility Consultants, Inc. (EUCI) conference where he presented a paper on the six meteorological standards.

Mazzola reported that the NFSC discussed soliciting liaisons with INPO and NuStart. Additionally, two ad hoc committees were formed -- one to deal with clarifications/interpretations and the second to consider a separate subcommittee on security. Mazzola also informed the Board that the NFSC discussed restructuring the current eight subcommittees.

Mazzola questioned whether a motion was necessary to add an "associate member" category for inclusion of student or other young members on the NFSC. Chuck Moseley suggested determining some type of criteria for responsibilities of this membership. Bill Burchill suggested using the term of "observer" as in the RISC By-Laws. Prasad Kadambi expressed concern that the term "observer" implied the individual was not an actual member of the committee. Kadambi suggested that the term "associate member" could include not only students but also young members such as entry level NRC staff.

Action Item 11/06-05: Pat Schroeder to send Carl Mazzola a copy of the RISC By-Laws to consider definition of "observer" membership category for reference in developing a definition for a new "associate member" category for the NFSC.

See attached NFSC Report for more detail – Attachment F.

RISC:

Bill Burchill reminded the Board that the RISC Committee met last April separately for a full day and jointly with ASME's CNRM for a half day. A special committee was appointed to resolve negative ballots on ANS-58.21-200x, "External-Events PRA Methodology." Burchill stated that he had expected to have all but one negative resolved, but it did not happen. Of the four negatives, one has been resolved and an additional one should be resolved with the commitment of a pilot study by the end of the year. Burchill said that he plans to submit the draft of ANS-58.21-200x to the integration team as soon as these are resolved.

Burchill estimated that half of the comments had been resolved on ANS-58.22-200x, "Low Power and Shutdown PRA Methodology." The draft is being restructured as directed by RISC. Burchill commented that the ANS-58.23 working group had done an excellent job of getting through most of the 349 ballot comments. Both drafts standards were expected to be re-balloted in early 2007. Neither will be turned over to the integration process until consensus has been reached. Burchill stated that ANS-58.21-200x, ANS-58.22-200x, and ANS-58.23-200x, "Standard on Methodology for Fire PRA," would be published as approved by Standards Board motion at the June 2006 meeting.

Burchill explained that the ANS-58.24/Level 2 PRA Standard and ANS-58.25/Level 3 PRA Standard have had slow starts. The lack of travel funds for working group members had hampered progress. Neither project had established a timetable for completion.

Burchill reminded the Board that the integrated PRA standard was approved by the Board via email October 2004. The endorsement was for a high level integrated standard but did not include detail of the consensus process. Business issues still need to be worked out. Burchill said he doesn't believe that there had been any discussion about sharing revenue from training.

Prasad Kadambi questioned whether a PINS form for the integrated standard had been completed.

Action Item 11/06-06: Bill Burchill to check with Rick Grantom about a PINS form for the integrated standard.

Kadambi stated that the concept of working with ASME is already reflected in our decision-making and our discussion does not alter this cooperative effort. With success in this venture, we will be able to do more collectively.

See RISC Report for more detail – Attachment G.

11. Liaison Reports

No liaison reports were provided.

12. ANS Standards Committee Policies

Balance of Interest Policy

Discussed under agenda item #6.

Implementation of Maintenance Procedures

To allow sufficient time to review the revised Implementation of Maintenance Procedures Policy, it was decided that the policy should be distributed to the Board for comment after the meeting via email.

Action Item 11/06-07: Pat Schroeder to distribute revised Implementation of Maintenance Procedures Policy to Board for comment.

13. Addenda, Supplements, or Errata Sheets – Tawfik Raby

Although Tawfik Raby was not able to attend the meeting, Pat Schroeder explained that he was looking for a way to expedite minimal revisions to current standards through addenda, supplements, or errata. Upon research, Schroeder found that updating requirements in standards could be handled through addenda or supplements, but that the approval process for these avenues would also require a PINS form and consensus balloting. Additionally, it would require updating our rules and procedures to accommodate.

14. Notification of Unfinalized Ballot Tally Information

Pat Schroeder informed the Board that occasionally committee members asked about ballot tallies specifically negatives. Schroeder stated that she had provided information about the tally without identifying the names of balloters while comments were being resolved. Once the ballot tally is final, the information is public. Schroeder asked the Board for direction. The Standards Board agreed to treat as pre-decisional (non-public) unfinalized ballot tally information.

15. Other Business

Appointment of 2007 SSA Nomination Committee

Chuck Moseley volunteered to participate on the 2007 Standards Service Award Nomination Committee. Prasad Kadambi stated that he'd like to have Dimitrios Cokinos and Mike Wright on the committee as well.

Action Item 11/06-08: Prasad Kadambi contact Dimitrios Cokinos and Mike Wright about serving on the 2007 SSA Nomination Committee.

16. Adjourn

The meeting was adjourned at 4:09pm

**American Nuclear Society
Standards Board Action Items from ANS November 2006 Meeting**

Action Item	Description	Responsibility	Status
11/06-01	Prasad Kadambi develop action plan for approval by ANS and ASME Boards regarding the activities called for in the discussions between ASME representatives and the ANS Board as recorded in these minutes.	Prasad Kadambi	Open
11/06-02	Prasad Kadambi assign appropriate Standards Committee members to review and report back to SB on the information that ASME provides on System Based Codes.	Prasad Kadambi	Open
11/06-03	Chuck Moseley to send Calvin Hopper ASME's definitions for balance of interest.	Chuck Moseley	Open
11/06-04	Pat Schroeder to add the link for the NRC Management Directive 6.5 to the Standards Resource Section of the ANS Web site.	Pat Schroeder	Open (done)
11/06-05	Pat Schroeder to send Carl Mazzola a copy of the RISC By-Laws to consider definition of "observer" membership category for reference in developing a definition for a new "associate member" category for the NFSC.	Pat Schroeder	Open (done)
11/06-06	Bill Burchill to check with Rick Grantom about a PINS form for the integrated standard.	Bill Burchill	Open
11/06-07	Pat Schroeder to distribute revised Implementation of Maintenance Procedures Policy to Board for comment.	Pat Schroeder	Open (done)
11/06-08	Prasad Kadambi contact Dimitrios Cokinos and Mike Wright about serving on the 2007 SSA Nomination Committee.	Prasad Kadambi	Open
6/06-01	Prasad Kadambi and Don Spellman to work on policy for gaining NRC/SDO endorsement.	Prasad Kadambi and Don Spellman	Closed
6/06-02	Donald Spellman check with Prasad Kadambi for an endorsement procedure that other SDOs may already have with NRC.	Prasad Kadambi and Don Spellman	Closed
6/06-03	Pat Schroeder to conduct a benchmark study that encompasses the copyright protection of paper and electronic copies of ANS standards, pricing policy, ANS contract with IHS vs. ASME contract with IHS, and number of ANS standards printed through IHS contracts.	Pat Schroeder	Closed
6/06-04	Don Spellman to discuss a corporate sponsorship of the ANS standards program with Prasad Kadambi and possibly with Bill Naughton.	Don Spellman and Prasad Kadambi	Closed
6/06-05	Steve Stamm to provide a citation for the 2006 Standards Service Award acknowledging Bob Budnitz's contributions.	Steve Stamm	Closed
6/06-06	Don Spellman with Prasad Kadambi develop letter to N17 with recommendation to recruit members from operating research reactors and the two national research reactors.	Don Spellman and Prasad Kadambi	Open
6/06-08	Peter Hastings to head special committee to review and provide comments on 10CFR 50.53.	Peter Hastings	Closed
11/05-01	Pat Schroeder to approach Young Members Group to develop Standards Committee mentor program.	Pat Schroeder	Closed
11/05-06	Calvin Hopper, chair ad hoc committee, to develop alternative balance of interest definitions (acceptable to ANSI) with Bill Burchill, Tawfik Raby, and Don Spellman. Due Date: June 2007	Consensus Committee Chairs	Open