

Members Present

Donald Spellman, *NFSC Chair & SB Vice Chair, ORNL*
Michael Ruby, *NFSC Vice Chair, Constellation Energy*
Patricia Schroeder, *Standards Administrator, American Nuclear Society*
Charles K. Brown, *Southern Nuclear Operating Company*
Robert H. Bryan, Jr., *Tennessee Valley Authority*
Timothy Dennis, *Individual*
Shami Dua, *AECL/CSA, Canadian Liaison*
Donald R. Eggett, *AES Engineering*
Richard Englehart, *U.S. Department of Energy*
Rick A. Hill, *GE Nuclear Energy*
N. Prasad Kadambi, *US Nuclear Regulatory Commission*
Malcolm LaBar, *General Atomic*
Jesse E. Love, *Bechtel Power Corporation*
Eric Lowen, *Idaho National Engineering & Environmental Lab*
James F. Mallay, *SB Chair, Framatome ANP*
Carl Mazzola, *Shaw Environmental & Infrastructure, Inc.*
Robert McFetridge, *Westinghouse Electric Company LLC*
Charles H. Moseley, Jr., *BWXT Y-12*
William Reuland, *Individual (Previous Affiliation: EPRI)*
James C. Saldarini, *Tetra Tech FW, Inc.*
John D. Stevenson, *J.D. Stevenson Consultants*
Steven Stamm, *Stone & Webster, Inc.*
C. D. Thomas, Jr., *Individual (Previous affiliation: Yankee Atomic Company)*
Michael J. Wright, *Grand Gulf Nuclear Station, Entergy Operations, Inc.*

Members Absent

Michael T. Cross, *Westinghouse Electric Company*
Evan Lloyd, *Exitech Corporation*
Richard Hall, *Exelon Generation Company, Inc.*
Donald Reynerson, *The Phoenix Index, Inc.*
Robert E. Scott, *Scott Enterprises*
Andy Wehrenberg, *Southern Nuclear Operating Company*

Guests

Sheila Lott, *Los Alamos National Laboratory*
Doyle Pittman, *Tennessee Valley Authority*

1. Welcome and Call to Order

Don Spellman called the meeting to order and introductions were made.

Jim Mallay announced that Don Spellman would remain as NFSC chair while Prasad Kadambi has agreed to step up as chair of the Standards Board as of June 2005. Jim also informed the committee that he has decided to leave Framatome.

2. Approve Agenda

The agenda was approved without dissent.

3. Standards Discussion Meeting

A. Chuck Moseley, Vice Chair of ANS-3.2 Working Group, provided the committee an update on the revision. NRC still needs to solidify their position on 10 CFR Part 50.69. If the working group feels the Commission's position is solid, the working group will proceed with the revisions. The final draft of ANS-3.2, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants," could be expected for NFSC balloting in March/April 2005 with comment resolutions completed prior to the June 2005 meeting.

Action Item 11/04-01: Rick Hill to e-mail BWROG Comments on Impact of New Rule 10 CFR Part 50.69 to Don Spellman, Chuck Moseley, and Clint Eldridge.
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B. Don Eggett, Chair of ANS-23 reported that he expects ANS-3.12.3, "Decommissioning of Nuclear Production and Utilization Facilities: Operator Training," to be ready for NFSC ballot by the end of January, and ANS-41.5, "Validation of Data from Radiological Analyses for Use in Environmental Remediation," possibly by the June 2005 meeting.

C. Jim Saldarini provided a status of ANS-57.2, "Design Requirements for Light Water Reactor Spent Fuel Storage Facilities at Nuclear Power Plants," and ANS-57.3, "Design Requirements for New Fuel Storage Facilities at Light Water Reactor Plants." Both were projects under the chairmanship of Don Gardner. Due to Gardner's move to Moscow as well as the events of 9-11, the comment resolutions from the 2001 NFSC ballot have not been completed. Jim has reviewed the comment resolutions and is pursuing a remaining working group member to step in as chair and complete the process. (Attachment A)

D. Carl Mazzola, Chair of ANS-25, provided an update on several standards. A draft of ANS-3.11, "Determining Meteorological Information at Nuclear Facilities," is being reviewed by its working group one final time before sending out for subcommittee review. Balloting by NFSC is anticipated mid 2005. A first draft of ANS-2.27, "Criteria for Investigations of Nuclear Materials Facilities Sites for Seismic Hazard Assessments," should be finished by the end of this year. Its compliment, ANS-2.29, "Probabilistic Seismic Hazard Analysis," can then be started. Both of these standards are risk informed. Rick Hill expressed concern with potential conflicts when compared against ANS-58.21, "External Events in PRA Methodology."

Action Item 11/04-02: Pat Schroeder to send NFSC an electronic copy of ANS-58.21, "External Events in PRA Methodology."

E. Subcommittee ANS-26 Project Plan

Charlie Brown, Co-chair of ANS-26, addressed concerns with the 3.8 series standards originally published in 1970. He felt that these standards are not getting much interest from the industry (utilities). Several members speculated that the industry feels they have their act together and as such do not necessitate the use of these standards particularly when their prescriptive nature makes them difficult to use with limited personnel. After much discussion, it was decided to submit these standards for reaffirmation and plan for revisions to be written performance based. As new standard ANS-2.16, "Criteria for Modeling Design-Basis Accidental Releases from Nuclear Facilities," will cover some of the same topics as ANS-3.8.6, "Criteria for the Conduct of Offsite Radiological Assessment for Emergency Response for Nuclear Power Plants," Charlie will work with Carl Mazzola on the revision.

Action Item 11/04-03: Charlie Brown to provide reaffirmation letter/statement to Pat Schroeder to begin reaffirmation process for NFSC by 1/31/05.

Action Item 11/04-04: Pat Schroeder to put reaffirmation statement from NFSC Procedures in all reaffirmed standards – paper & electronic.

F. ANS-2.3

John Stevenson, ANS-2.3 Working Group Chair, presented the PINS for ANS-2.3, "Determining Tornado and Other Extreme Wind Characteristics at Nuclear Facility Sites," to the committee for approval. The new standard will include hurricane and extreme winds and other new data. NRC has shown interest in this standard. Rick Hill suggested for John to review ANS-58.21, "External Events in PRA Methodology," so that the two standards do not conflict.

4. Approval of November 18, 2003, Meeting Minutes

Bob Bryan motioned to accept the June 2004 minutes; Mike Ruby seconded. The June minutes were approved unanimously with editorial corrections as noted.

5. Canadian Liaison Report

Prasad Kadambi introduced Shami Dua with Atomic Energy of Canada (AECL)/Canadian Standards Association (CSA). Shami has agreed to serve as Canadian liaison to NFSC. He explained that the Canadians feel if there is already an acceptable published standard in another country, it should be adopted and not duplicated. Shami provided a brief explanation of the standard development process and bodies used in Canada. At present, the CSA is very concerned with nuclear liability. Until resolved, no nuclear standards will be published.

Action Item 11/04-05: Shami Dua to send Don Spellman e-copy of paper presented at PNC meeting last March – Canadian Approach to Standards.

Action Item 11/04-06: Don Spellman to send Shami Dua, Eric Loewen, and Dick Englehart his Power Point Presentation on the Standards Development process.

Don Eggett reminded the committee of another performance based technical session planned for the June 2005 meeting. Eggett would like to have international representation

and asked Shami for a possible recommendation of someone that might be interested from Canada.

Action Item 11/04-07: Shami Dua to sent Don Eggett IAEA ISO Comparison.

Prasad asked the committee to decide what NFSC can gain by association with Shami. Steve Stamm suggested that Canadian involvement on working groups should be invited.

Action Item 11/04-08: Shami Dua to provide a list of all standards they use to Steve Stamm.

Shami would like a list of nuclear standards used in the United States. While no such list exists, the committee will consider ways to provide this information. Bill Reuland agreed to serve as an American Liaison to the Canadian Standards Association.

6. Management Reports

A. Executive Committee – Don Spellman

While there have been no recent teleconferences of the Executive Committee, Don Spellman expects a few over the next year.

B. Chair Report – Don Spellman

Don asked the committee for suggestions to fill the open position of ANS-27 Subcommittee Chair recently vacated by Fred Pineau.

Action Item 11/04-09: Pat Schroeder to provide Don Spellman comments for ANS-57.8 reaffirmation ballot.

A printout of volunteers from the database was shown to the committee. Don would like each subcommittee chair to contact those members noted as inactive under their subcommittee and encourage these past members to become involved.

Action Item 11/04-10: Pat Schroeder to provide subcommittee chairs list of inactive volunteers from database.

Action Item 11/04-11: Pat Schroeder to provide subcommittee chairs summary list of recent volunteers provided to them.

Chuck Moseley suggested an article be written for Nuclear News on volunteering that provides specific projects in need and their respective working group chairs' e-mail addresses.

C. NFSC Coordinator/Vice Chair Report

Mike Ruby reviewed the new Maintenance Hot List Report (Attachment B) with the committee. This report lists all of our current standards that will hit their tenth anniversary within the next 2-1/2 years or less. For obvious reasons these are the standards that should become priorities.

D. Secretary Report – Pat Schroeder

Pat Schroeder provided the following reports:

- 1.) NFSC Activity Report (Attachment C)
- 2.) Status of Standards by Subcommittee (Attachment D)
- 3.) Delinquent Standards Report (Attachment E)
- 4.) NFSC Identification/Organizational Chart of Active Standards by Subcommittee (Attachment F)

A brief explanation was provided of each of these reports. While the reports are not new, this is first time they were prepared using the new Access database. Pat asked for all subcommittee chairs to review the reports and notify her of any inaccuracies so the database can be corrected.

Pat provided a summary of the recommendation/findings from the ANSI Audit performed at the end of September 2004. On the whole the audit findings were quite positive. Several of the findings involved the PINS forms. The auditor found several instances where the PINS form was an after thought to the development of the draft. ANSI would like to see PINS form filed in a timelier manner. The auditor also suggested that we eliminate consensus balloting of PINS forms as this is not a requirement and slows down the development process. When discussed, the entire committee felt consensus balloting of PINS were an extremely important step that warranted the extra time.

7. Subcommittee Reports

A. ANS-21 Nuclear Power Plant Design Criteria & Operations – T. Dennis

The PINS for ANS-3.5, “Nuclear Power Plant Simulators for Use in Operator Training and Examination,” has been drafted and will be presented to the NFSC in the upcoming weeks.

Tom Thomas would like to see ANS-4.5, “Criteria for Accident Monitoring Functions in Light-Water-Cooled Reactors,” revised. NRC should be approached for involvement. Tom feels this is an excellent test case for a joint venture with NEI, ASME, and NRC. Rick Hill suggests that historic standards ANS-58.13, “Design for Post-Accident Access External to LWR Primary Reactor Containments,” and ANS-58.15, “Criteria for Severe Accident Evaluation,” as well as the revision of reg. guide 1.97 and ACR700 may tie into a revision.

Action Item 11/04-12: Mike Ruby to generate a PINS to justify need for a revision to ANS-4.5.

Action Item 11/04-13: Mike Ruby to work with Tim Dennis, Shami Dua, Rick Hill, and Prasad Kadambi to resolve what action ANS should take on a coordinated standard (ANS-4.5).

Tom Thomas suggested core damage assessment as an area that should be considered for a new standard. The committee expressed concern that it would be difficult to get the needed utility support to write such a standard.

B. ANS-22 Nuclear Power System Level Design – R. Hill

Rick Hill plans to start beefing up the committee next year for many of his standards approaching their tenth anniversary in 2006. His search continues for a NRC representative for ANS-51.1, "Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants," and ANS-52.1, "Nuclear Safety Criteria for the Design of Stationary Boiling Water Reactor Plants." The representative from Sweden is planning to withdraw if no representative from the NRC is found. ANS 51.1/52.1 is being written in a way that will have an additional, parallel risk-informed path. Optimistically, both standards should be done in early 2006. Shami Dua will investigate a possible Canadian representative for this writing group.

Rick Hill announced that he would be leaving GE Nuclear Energy, which will affect his involvement as subcommittee chair.

Action Item 11/04-14: Don Spellman to find ANS-22 Subcommittee Chair to replace Rick Hill.

C. ANS-23 Decommissioning and Site Remediation – D. Eggett

While Don Eggett had to leave for another commitment, Pat Schroeder was able to provide the committee with a limited update. At the June meeting it was recommended that Don take four inactive, proposed standards to the DD&R power division to determine interest. The proposed standards are:

ANS-41.2, "Criteria for Remote Sensing Techniques for Site Characterization in Environmental Remediation"

ANS-41.3, "Determination of Soil Source Terms for Use in Risk Assessment"

ANS-41.4, "Analytical Methods for In-Situ Y-Ray Emitters in Soil"

ANS-41.6, "Performance Tests to Evaluate Solid Waste Forms for LL Radioactive Waste and MW"

According to the files, ANS-41.4, was transferred to IEEE's 42.2 subcommittee because of an existing series of standards within this topic. A search of IEEE current standards found many standards of similar subjects. Reviewing the file on ANS-41.6, it looks like the old working group chair chose to take the draft to another standard developing organization – ASME or ASTM. Don Spellman recalls this situation and confirmed that ANS lost this draft.

D. ANS-24 Analysis – A. Wehrenberg

Andy Wehrenberg was unable to attend and provide a report.

E. ANS-25 Siting – C. Mazzola

Carl Mazzola provided a detailed status report of subcommittee activities. (Attachment G) The PINS for ANS-2.15, "Criteria for Modeling and Calculating Atmospheric Transport of Routine Releases from Nuclear Facilities," ANS-2.16, "Criteria for Modeling Design-Basis Accidental Releases from Nuclear Facilities," and ANS-2.21, "Criteria for Assessing Atmospheric Effects on the Ultimate Heat Sink," are currently with the Standards Board for approval. The working group will hold its first meeting at the ANS November meeting. A

PINS for ANS-2.22, "Environmental Monitoring at Nuclear Facilities," was provided to the committee.

Action Item 11/04-15: Carl Mazzola to provide Pat Schroeder with PINS for ANS-2.6, ANS-2.8, ANS-2.17, ANS-2.25, and ANS-2.30.

F. ANS-26 Emergency Planning/Issues for New EP Standards for Terrorist Acts – C. Brown/E. Lloyd
See 3E for discussion of Subcommittee ANS-26 Project Plan.

G. ANS-27 Fuel Cycle and Waste Management - Open
See discussion of ANS-57.2 and ANS-57.3 in section 3C and 6B previously noted.

H. ANS-28 Gas Cooled Reactor Standards – M. LaBar
Inaugural meeting of subcommittee was a year ago. At present subcommittee members and ANS-53.1 working group members are one in the same. The group is comprised of many outstanding individuals from a variety of organizations. Once the first standard is completed, members will take on the roll of working group chairs to branch out and form numerous working groups for development of several additional standards. Currently they are holding a monthly teleconference and meet every quarter. The group has solidified the scope for its first standard, ANS-53.1, "Nuclear Safety Criteria for the Design of Modular Helium-Cooled Reactor Plants," and produced an outline for the risk informed standard.

Action Item 11/03-16: Malcolm LaBar to provide Pat Schroeder with PINS for ANS-53.1.

8. NFSC Executive Committee Approval of NFSC Procedures

Jim Saldarini recommended that the new procedures be used as a living document and updated annually. Congratulations were extended to Jim from the entire committee on finishing the two-year long, labor-intensive project.

Carl Mazzola motioned to approve the new NFSC procedures; Don Spellman seconded. Tim Dennis motioned to amend the rules to eliminate the last two sentences of 7b. With no second to the amendment, the motion failed. The motion to approve the NFSC procedures as a living document passed with one vote of dissent.

9. Action Items

See Attachment H.

10. Liaison Reports

A. ASME/NQA – C. Moseley
See Attachment I.

11. Other Business

A. New Standard Needed Flow Chair – B. Reuland
See Attachment J.

B. Referencing EPRI documents in Standards – B. Reuland
See Attachment K.

C. March 2005 NFSC Meeting

Carl Mazzola offered to host a March meeting at his site in Knoxville, TN.

Action Item 11/03-17: ExC members should identify possible replacement members for NFSC.
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The meeting was adjourned at 5:25 p.m.

NFSC November 2004 Action Items

Action Item	Description	Responsibility	Status
06/03-19	Send Kadambi ANS-41.6 and ANS-41.7 to be considered for performance-based standards Due Date: February 2005	Don Eggett	Open
06/03-22	Mock-up a special standards membership database to be posted on the ANS website by the NFSC ExC teleconference in March 2004. Due Date: June 2004	Pat Schroeder and Don Spellman	Closed
06/02-01	Jim Mallay will provide NFSC with an SB approved guidance document for how balance of interest should be counted within the ANS standards committees.	Jim Mallay	Pending Standard Board Approval
6/01-13	Send proposed PINS form to ANS Headquarters for the revisions of ANS-58.2. New Due Date: November 2004	Andy Wehrenberg	Open
11/03-08	ANS HQ will work toward the update and completion of volunteer list. Will contact chairs and ask them to provide list of volunteers on their committees. Due Date: Nov 2004	Don Spellman, Mike Ruby, and Pat Schroeder	Open
6/04-05	Don Spellman to check with DOE to see if they will support – 3.12.1 & 3.12.3. Due Date: January 2005	Don Spellman	Open
6/04-06	Don Eggett to take 41.2, 41.3, 41.4 & 41.6 for DD&R review to determine need for revision of these standards. Due Date: June 2005	Don Eggett	Open
6/04-07	Andy Wehrenberg to get a hold of Carl Beyer WGC-5.4. May need to contact Emory Collins as well. Due Date: June 2005	Andy Wehrenberg	Open
6/04-13	Carl Mazzola to complete PINS for ANS-2.9.	Carl Mazzola	Open
11/04-01	Rick Hill to e-mail BWROG Comments on Impact of New Rule 10 CFR Part 50.69 to Don Spellman, Chuck Moseley, and Clint Eldridge	Rick Hill	Closed
11/04-02	Pat Schroeder to send NFSC an electronic copy of ANS-58.21, "External Events in PRA Methodology."	Pat Schroeder	Closed
11/04-03	Charlie Brown to provide reaffirmation letter/statement to Pat Schroeder to begin	Charlie Brown/ Evan Lloyd	Open

	reaffirmation process. Due Date: 1/31/05		
11/04-04	Pat Schroeder to put reaffirmation statement from NFSC Procedures in all reaffirmed standards – paper & electronic. Due Date: December 31, 2004	Pat Schroeder	Closed
11/04-05	Shami Dua to send Don Spellman e-copy of paper presented at PNC meeting last March – Canadian Approach to Standards. Due Date: December 31, 2004	Shami Dua	Closed
11/04-06	Don Spellman to send Shami Dua, Eric Loewen, and Dick Englehart his Power Point Presentation on the Standards Development process. Due Date: December 31, 2004	Don Spellman	Closed
11/04-07	Shami Dua to send Don Eggett IAEA ISO Comparison. Due Date: December 31, 2004	Shami Dua	Closed
11/04-08	Shami Dua to provide a list of all standards they use to Steve Stamm. Due Date: November 1, 2005	Shami Dua	Open
11/04-09	Pat Schroeder to provide Don Spellman comments for ANS-57.8 reaffirmation ballot. Due Date: December 1, 2004	Pat Schroeder	Closed
11/04-10	Pat Schroeder to provide subcommittee chairs list of inactive volunteers from database. Due Date: November 1, 2005	Pat Schroeder	Open
11/04-11	Pat Schroeder to provide subcommittee chairs summary list of recent volunteers provided to them. Due Date: December 1, 2004	Pat Schroeder	Closed
11/04-12	Mike Ruby to generate a PINS to justify need for a revision to ANS-4.5 Due Date: November 1, 2005	Mike Ruby	Open
11/04-13	Mike Ruby to work with Tim Dennis, Shami Dua, Rick Hill, and Prasad Kadambi to resolve what action ANS should take on a coordinated standard (ANS-4.5). Due Date: June 2006	Mike Ruby, Tim Dennis, Shami Dua, Rick Hill, and Prasad Kadambi	Open
11/04-14	Don Spellman to find ANS-22 Subcommittee Chair to replace Rick Hill.	Don Spellman	Open
11/04-15	Carl Mazzola to provide Pat Schroeder with PINS for ANS-2.6, ANS-2.8, ANS-2.17, ANS-2.25, and ANS-2.30.	Carl Mazzola	Open
11/04-16	Malcolm LaBar to provide Pat Schroeder with PINS for ANS-53.1.	Malcolm LaBar	Open

11/04-17	ExC members should identify possible replacement members for NFSC.	ExC Members	Open
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