

Standards Board (SB)

June 14, 2022

Attended*	Voting Member Name	Role	Company
X*	Amir Afzali X - Alt: Brandon Chisholm	At-Large (2023)	Southern Nuclear Operating Company
X*	Jennifer Call	At-Large (2024)	Tennessee Valley Authority
X	Donald "Don" Eggett	Chair (2022) At-Large (2023)	Eggett Consulting LLC
X*	George Flanagan	Ex-Officio	Individual
X*	Michelle French	Ex-Officio	WECTEC
X*	Dennis Henneke	Ex-Officio	GE Hitachi
X*	Mark Linn	At-Large (2023)	Individual
X	Jean-Francois "Jef" Lucchini	Ex-Officio	Los Alamos National Laboratory
X*	Charles "Chip" Martin	Ex-Officio	Longenecker and Associates
	Carl Mazzola	Vice Chair (2022) At-Large (2023) Ex-Officio	Los Alamos National Laboratory
X	John Nakoski	At-Large (2023)	U.S. Nuclear Regulatory Commission
X*	Andrew Smetana	Ex-Officio	Individual
X	Andrew Sowder	At-Large (2024)	Electric Power Research Institute
X*	Steven Stamm	At-Large (2024)	Individual
X*	William Turkowski X* - Alt: Robert Becse	At-Large (2022)	Westinghouse Electric Company LLC
X	Larry Wetzel	Ex-Officio	BWX Technologies, Inc.
15	15/16 Votes = 93.8% Participation		
Attended	Nonvoting Member Name	Role	Company
X*	Robert Budnitz	Observer	Lawrence Berkeley National Laboratory (retired)
X*	Sudesh Gambhir	Liaison	Institute of Nuclear Power Operations
X*	Prasad Kadambi X - Alt: Robert Youngblood	Observer	Kadambi Engineering Consultants Idaho National Laboratory
X*	Robert Kalantari	Observer	Engineering Planning & Management, Inc.
X	John Mahoney	BOD Liaison	High Expectations International, LLC
X*	Frances Pimentel	Observer	Nuclear Energy Institute
X*	Ali Simpkins	Liaison	ORAU
X*	Robert Roche Rivera	Observer	U.S. Nuclear Regulatory Commission
X*	Donald Spellman	Observer	Xcel
Attended	Guest Name	Role	Company
X	Todd Anselmi	Guest	Idaho National Laboratory
X	Steven Arndt	Guest/Incoming ANS President	Oak Ridge National Laboratory
X*	James August	Guest	Individual
X*	Louise Lund	Guest	U.S. Nuclear Regulatory Commission
X	Steve Nesbit	Guest/ANS President	LMNT Consulting
X	Kenneth Petersen	Guest/Incoming ANS Vice President	Individual
X	Garrett Smith	Guest	U.S. Department of Energy
X	Richard Wood	Guest	University of Tennessee / Human Factors Instrumentation & Controls Division Liaison

*Participated remotely.

1. Welcome and Roll Call

A roll call was taken, and a quorum was established. SB Chair Don Eggett welcomed all. He recognized 10 in-person and stated how nice it was to see so many faces. With those physically in attendance and those participating remotely, the meeting is well attended. Eggett added that he talked to Steve Nesbit, Steven Arndt, and Craig Piercy yesterday and expects that they will stop into the meeting this morning at some point.

Eggett recognized the following members with terms ending/beginning:

- Carl Mazzola/Los Alamos National Laboratory—SB Vice Chair term ending
- Andrew Sowder/Electric Power Research Institute—SB Vice Chair term beginning
- William Turkowski/Westinghouse—at-large member term ending
- Robert Becse/Westinghouse—at-large member term beginning
- Robert Kalantari/Engineering Planning and Management—at-large member term beginning

2. Approval of Agenda

The agenda was approved as presented with the flexibility to move discussion items as needed to accommodate schedules.

3. SB Chair Report

A. Reminder on ANS's Respectful Behavior Policy and Statement on Diversity

([Link to Respectful Behavior Policy](#)) ([Link to Statement on Diversity](#))

Don Eggett reminded all of the respectful behavior policy available via a link in the agenda. Steven Stamm suggested that ANS staff review the policy and recommend how the Standards Board, and possibly other divisions/committees within the Society, should address and/incorporate the respectful behavior policy. Amir Afzali stated that agendas are so packed that we often don't have time to properly discuss all business. Heated discussions could be tabled with an ad hoc meeting scheduled with those involved to resolve. Scheduling an ad hoc meeting would give individuals a little bit of distance to cool down with the opportunity for sufficient time to discuss and be heard.

ACTION ITEM 6/2022-01: Pat Schroeder to review the respectful behavior policy and recommend how the SB should address.

DUE DATE: November 1, 2022

B. Report to the Board of Directors

Eggett summarized his report to the Board of Directors (BOD) on behalf of the Standards Committee. The report is embedded below for full details:



3B_SB
Chair_2022_Annual_

C. Report from ANS President's Special Session

Eggett had a conflict with the ANS President's Special Session and was not able to attend personally, but he spoke to ANS President Steve Nesbit afterwards and was provided the presentation. Items discussed during the President's Session include the following:

- The condition of the Society is improving.
- The name brand is strong.
- Many challenges remain.

- Nesbit thanked those that made the Society effective over his term as President.
- Nesbit leaves the presidency optimistic for the Society.
- Craig Piercy spent time talking about the operational aspect of the Society, expenses, and addressing the 2020 change plan and tweaks needed.

The ANS President's Special Session slides were distributed to SB members during the meeting and are embedded here.



3C_2022 Div Cmte
chairs meeting.pdf

D. Status of Revision to American National Standards Institute (ANSI)-Accredited Rules and Procedures and Revision of Policy Manual

Pat Schroeder provided a status update on the Standards Committee Rules and Procedures and the Policy Manual. Updates to both documents were approved by the Policy Task Group (PTG) and are currently out for ballot with the SB. Schroeder summarized the more significant changes to both documents. So far only minimal comments have been received. All comments will be addressed before proceeding. Only the Standards Committee Rules and Procedures need to be sent to ANSI and will serve a public review before ANS approval is granted. The Policy Manual is a supplemental procedure and does not require ANSI approval. All rules, policies, and procedures are posted to our website and publicly available.

E. Annual Balance of Interest Certification

SB certification of each consensus committee's balance of Interest reports were conducted via e-ballot ([LINK to Ballot](#)). Reports for all consensus committees were approved without objection.

F. Status on ANS/Electric Power Research Institute (EPRI) Nuclear Standards Collaborative (NSC)
Eggett provided a brief update on the formation of the NSC. The NSC has been recently faced with some barriers (i.e., MoU consideration) but is now being expedited.

G. North American Advanced Reactor Roadmap Forum



3G_ANS Standards
Presentation NEI Ad

Eggett presented at the NEI sponsored North American Advanced Reactor Roadmap Forum on June 9, 2022. A copy of the presentation is embedded above for reference. The initiative is supported by a number of utilities and their executives. The group addresses market demand, technology, reactor licensing, and project management. A draft roadmap for advanced reactors has been drafted by NEI and EPRI. More information will be provided as the forum proceeds. This forum compliments the NSC. The NSC will work hand in hand with this working group.

H. New Actions and SB Assignments

Eggett explained that he has looked at several areas of need and will be approaching SB members to take on additional responsibilities. In the interest of time, Eggett will table this discussion.

I. Review of 2021 Consensus Committee Evaluation Summary Report



3I_2020-2021
Comparison-Combir

The 2021 Consensus Committee Evaluation Summary Report was distributed to SB members in February when completed. Eggett has reviewed and doesn't feel that the reports have any alarming areas. A copy is embedded above for reference.

- J. General Comments on Various SB Initiatives
No additional initiatives were discussed.

4. SB Vice Chair Report



4A_SMART_MATRIX
_Issued_5-27-22.pdf

A. SMART Matrix Goals & Objectives
(~20 minutes)

Andrew Sowder reported on behalf of SB Vice Chair Carl Mazzola who was not able to participate. Sowder explained that significant time has been spent on reviewing and simplifying the SMART Matrix Action Items (those assigned are identified on the SMART Matrix.) Steven Stamm added that at some point there will be a need to go back to the Strategic Plan and address how each goal has been fulfilled. Don Eggett said that Steve Nesbit and Craig Piercy are supportive of the Standards Committee Strategic Plan provided it is aligned with the ANS Strategic Plan.

- Progress Report
Members scrolled through the SMART Matrix (embedded above) but did not take the time to review in any detail. In the future, specific items will be highlighted for those items to be discussed.

ACTION ITEM 6/2022-02: Andrew Sowder to highlight those specific items on the SMART Matrix to be discussed before each Standards Board meeting.
DUE DATE: Before each SB meeting.

- Determine Need for and Formation of an Executive Advisory Committee (EAC)
The PTG held a meeting to discuss the EAC. The PTG felt that the EAC was not redundant to the NSC or the External Communications Task Group (ECTG), and if approved by the SB, should be formed. With the EAC recognized in the Standards Committee Strategic Plan, which was approved by the SB, Steven Stamm feels that the EAC should be considered approved. Pat Schroeder will provide SB members the Strategic Plan and ballot information for their reference and consideration.

ACTION ITEM 6/2022-03: Pat Schroeder to provide SB members a copy of the Standards Committee Strategic Plan and the link to the ballot to determine and verify if SB approval of the EAC was received.
DUE DATE: July 1, 2022

- Task Groups Actions
Task Group actions were not reviewed in detail.
- New Actions and SB Assignments
This topic was discussed as part of Agenda Item 3H.

B. Standards Service Award

Douglas Bowen was announced as the recipient of the 2022 Standards Service Award. The SB approved his nomination by ballot. The award will be presented at the 2022 ANS Winter Meeting in Phoenix, Arizona. Don Eggett will have the pleasure of informing Bowen prior to the Winter Meeting.

ACTION ITEM 6/2022-04: Don Eggett to inform Douglas Bowen on his selection for the 2022 Standards Service Award.
DUE DATE: July 1, 2022

Dennis Henneke's, John Nakoski's, and Larry Wetzel's offers to assist Andrew Sowder in the selection of the 2023 Standards Service Award were accepted.

ACTION ITEM 6/2022-05: Andrew Sowder to chair the 2023 Standards Service Award Selection Committee with support from Dennis Henneke, John Nakoski, and Larry Wetzel.
DUE DATE: May 1, 2023

5. Secretary Report

Pat Schroeder presented the secretary report. The report includes information about staff activities, a sales report, and the associate member report. The full report is embedded below for your reference.



5_Secretary-Staff-Report.pdf

The following action items were assigned during discussion of the report:

ACTION ITEM 6/2022-06: Pat Schroeder to inform working group chairs of the availability of the Standards Committee Volunteer Database.
DUE DATE: July 15, 2022

ACTION ITEM 6/2022-07: Pat Schroeder to check with Engineering Village to see if ANS will be provided reports on subscriber searches that net ANS standards results.
DUE DATE: August 1, 2022

ACTION ITEM 6/2022-08: Pat Schroeder to add an item to the next agenda for members to express appreciation or provide positive feedback.
DUE DATE: November 1, 2022

6. Review of Open Action Items Report

A. Report on Open Action Items

Open action items were reviewed. The action item status report can be found following these minutes.

B. Concurrence to Close Report of Completed Action Items

Members were provided a few minutes to review the report of completed action items after which the following motion was made:

MOTION:

To close the list of completed action items.

The motion was approved unanimously. Action items approved as closed are provided on the embedded report.



6B_SB Action Item Report_CLOSED.pdf

7. Current and Emergent Issues

A. ANS Advanced Reactor Working Group (ARWG)

Concerns on the makeup of the ARWG and a recently drafted letter to be issued by the Society to the U.S. Nuclear Regulatory Commission (NRC) were expressed during yesterday's Risk-informed, Performance-based Principles and Policy Committee (RP3C) meeting. The concern with the letter is the tone and what some feel are inaccuracies in the timeframe and responsiveness of NRC staff members. The letter drafted by the ARWG is being considered by ANS executives and may see changes. The ARWG was formed by ANS President Nesbit under the Operations and Power Division and does not report to a standards committee, but the framework affects standards and the Standards Committee activities. Amir Afzali would like to make sure that the root cause is addressed so there are no additional incidences. To do so, it is key for the ARWG to be inclusive and have the right membership. Don Eggett represents the Standards Committee on the ARWG. He added that standards have been discussed but are not part of the current initiative, which is NRC rulemaking. Additionally, the ARWG has representatives from ANS divisions and the Young Member Group (YMG). Pat Schroeder has sent a request to Aubrey Whittington for a copy of the charter and the group's roster. She will share this information with the SB when received.

**ACTION ITEM 6/2022-09: Pat Schroeder to distribute the ARWG charter and roster to the SB.
DUE DATE: July 1, 2022**

B. International Efforts to Harmonize Codes & Standards and Regulations

Andrew Sowder reported on the NEI and EPRI effort to develop the North American Advanced Reactor Roadmap. The presentation explains the strategy, timeline, framework, goals and objectives, and process. See the below embedded presentation for full details.



7B_North American
Advanced Reactor R

Sowder has made sure that standards are included in the roadmap. EPRI is accountable to the executives they report to and can help with acquiring staffing for priority standards. Don Eggett added that the NSC is part of the bigger picture within this initiative. Sowder explained that the goal is to broaden beyond the domestic to the international community noting that the European Union Requirements Group has expressed interest in supporting. Richard Wood explained Institute of Electrical and Electronics Engineers' (IEEE's) efforts to harmonize standards with the International Organization of Standardization (ISO), International Electrotechnical Commission (IEC), International Atomic Energy Agency (IAEA), and the Cooperation in Reactor Design Evaluation and Licensing (CORDEL). Sowder has recently re-engaged with CORDEL and considers this connection a priority issue. Sowder will follow up with Wood offline to gain more information about IEEE's international harmonization efforts and share with the SB.

**ACTION ITEM 6/2022-10: Andrew Sowder to follow up with Richard Wood on efforts to harmonize IEEE standards with ISO, IEC, IAEA, and CORDEL standards and guidance documents.
DUE DATE: September 1, 2022**

Wood added that IEEE Subcommittee 45A, which he chairs, is giving consideration to a standard for digital twins.

C. Harmonization of ANS Glossary with International Terminology

Eggett stated that Pat Schroeder offered to add definitions from recently published ANS standards into the ANS Glossary. Any new definitions for the same term would need to be reviewed and a

determination of a preferred term made. Eggett looks to SB members for help to make this determination. Donald Spellman offered to help with developing a process for determining preferred definitions if deemed beneficial but did not want to take on the role of evaluating terms and making the determination himself.

- D. Joint Committee on Nuclear Risk Management (JCNRM) Subcommittee Reorganization
Dennis Henneke reported that the JCNRM is halfway through the reorganization. He summarized the structure change that created a new subcommittee and a couple of new working groups. There are a couple remaining leadership vacancies. A process document for communication between groups has been prepared. The next JCNRM meeting is scheduled for this coming September in Chattanooga. The reorganization will be finalized before this time. The reorganization is important to better balance the committee's work. With the revision of the flagship standard just issued, several of the new standards in development are able to be finalized. All should be ready for ballot within the next year or so with the first issued for ballot likely by the end of this year.
- E. Status of ANS-30.1, *Integrating Risk and Performance Objectives into New Reactor Nuclear Safety Designs* (new guidance standard)
Mark Linn reported that the working group has re-engaged with addressing comments from the September 2021 ballot. An extensive rewrite is necessary to convert the "consensus standard" to a guidance standard and to address some specific comments. The working group has a path forward and is looking to complete the revised draft by the end of the summer. With this change to a guidance document, the boilerplate material in the frontend of the document needs to be revised.

ACTION ITEM 6/2022-11: Pat Schroeder to revise the boilerplate material in the frontend of ANS standards to be applicable to ANS guidance documents and provide to SB leadership for review. A copy of the revised frontend re-write should be provided to John Mahoney after reviewed by SB leadership.
DUE DATE: August 1, 2022

- F. Status of ANS-57.11, *Integrated Safety Assessments for Nonreactor Nuclear Facilities* (new standard)
Chip Martin informed members of the SB and guests that some industry members resigned from the working group earlier this year which was followed by a letter from NEI. He believes that industry members' concerns center around fears that the NRC will require licensees to backfit to the standard. Historically, the standard was initiated by a request from George Apostolakis when he was an NRC Commissioner but the industry, in general, never really wanted the standard in the first place although they participated for about a decade before resigning. There was an NRNFCC ballot issued in 2019 that closed with four negatives and received added comments from three other committees. In total, about 150 comments were received. The working group has a full day meeting scheduled tomorrow (6/15/22) to try and develop resolutions to all comments. One consideration is to convert the standard to a guidance document. While NRC has pulled out, the U.S. Department of Energy (DOE) is now very interested and planning to fund a trial use of the document when it nears completion.

The working group nor the NRNFCC has an NRC representative at this time. Martin has drafted a letter to NRC Standards Executive Louise Lund with a request to appoint an NRC representative to the NRNFCC but recognizes that NRC resources are very tight. John Nakoski added that the NRC has over 300 positions that they are trying to fill and need to prioritize their resources.

Lastly, Martin added that he has talked with Robert Budnitz to get his opinion on whether the JCNRM would consider developing a risk-informed, performance-based (RIBP) standard on Integrated Safety Assessments (ISAs) to harmonization DOE and NRC requirements. Dennis Henneke stated that the JCNRM has been looking at new opportunities and would consider any proposal if need was found, but he questioned the need for an ISA standard particularly with the resignation of some of the working group's industry representatives.

G. Status of Risk-Informed Emergency Preparedness (RIEP) Guidance Document

Eggett recently received the revised Project Initiation Notification Systems (PINS) form for a RIPB guidance document from Greg Hudson, one of the projects chairs. Initially, there were questions about which consensus committee would take the lead. The PINS now recognizes the JCNRM in a significant support role with the Large Light Water Reactor Consensus Committee (LLWRCC) as the lead consensus committee. He thinks and believes the PINS should move forward. The proposed RIEP Guidance Document brought up questions about consensus committee assignment for scopes that overlap consensus committees. While the decision on the RIEP Guidance Document has been made, Eggett would like to setup an ad hoc committee to propose a process for consensus committee assignments on future standards and products that involve dual consensus committees.

ACTION ITEM 6/2022-12: Don Eggett to setup an ad hoc committee to propose a process for consensus committee assignments on future standards and products that involve dual consensus committees.

DUE DATE: November 1, 2022

H. Other Current, Elevated, and Emergent Issues

Members briefly discussed two current industry issues —nuclear waste issue and Diablo Canyon continued operation.

8. Risk-informed, Performance-based Principles and Policy Committee (RP3C) Report

A. RP3C Meeting Report

Robert Youngblood introduced himself and explained that an emergency came up and RP3C Chair Prasad Kadambi was not available. Youngblood is stepping in for Kadambi as the RP3C Vice Chair. He reported that the ARWG was discussed at the RP3C meeting. Kadambi was asked to chair the ARWG by ANS President Steve Nesbit. Much time was spent discussing a letter drafted by the ARWG to be sent to the NRC under the signature of Nesbit and concerns that the ARWG does not have sufficient industry representation. Amir Afzali is getting more information about the ARWG and will pass the information on to Dennis Henneke and Robert Budnitz so that all can engage and keep informed. In addition, Eggett scheduled an hour outside of the RP3C meeting to discuss the ARWG with Afzali and provide a summary of activities ongoing within the group that provided additional satisfaction to his concerns. RP3C members also were treated to a presentation from Svetlana Lawrence with Idaho National Laboratory on light water reactor sustainability program goals. More details on the RP3C meeting can be found in the embedded report.



8A_RP3C_Report_2_
SB.pdf

B. Consensus Committee/RP3C Collaboration

The embedded report provides the list and schedule for all ANS standards in development that are incorporating RIPB methods.



8B_Proposed
Schedule for ANS RIPI

C. RIPB Guidance Document, Trial Use, and Training Status

The RIPB Guidance Document has been issued for trial use. Training on the Guidance Document is anticipated to start next month. Training is envisioned in two parts – 1) overview of the Guidance Document and 2) case studies. Feedback is expected after the training and once a draft is completed for ballot. The Guidance Document is expected to be revised in a year and a half or so to

include feedback and lessons learned. Youngblood was asked to take back a request to James O'Brien and Prasad Kadambi to establish a mechanism to collect feedback on the Guidance Document.

ACTION ITEM 6/2022-13: Robert Youngblood [for Prasad Kadambi] to request James O'Brien and Prasad Kadambi to establish a mechanism to collect feedback on the use of the Guidance Document.
DUE DATE: July 1, 2022

D. RIPB Community of Practice (COP) Report

Twenty-four CoPs have been held since February of 2020. The CoPs have gained a measure of success and have developed a following of individuals including members and nonmembers. Presentations are posted to RP3C's public website. A few of the presentations have had hundreds of views.

9. Succession Planning Discussion for Consensus Committee Leadership

List of Consensus Committee Leadership Terms Ending in 2023			
ESCC	Carl Mazzola	ESCC Chair	2/7/2020
ESCC	Leah Parks	ESCC Vice Chair	11/11/2020
FWDCC	Jef Lucchini	FWDCC Chair	6/16/2020
FWDCC	Maryanne Stasko	FWDCC Vice Chair	6/16/2020
LLWRCC	Michelle French	LLWRCC Chair	7/23/2020
LLWRCC	Mark Linn	LLWRCC Vice Chair	10/15/2020
NCSCC	Larry Wetzel	NCSCC Chair	2/7/2020
NCSCC	W. Randy Shackelford	NCSCC Vice Chair	2/7/2020
NRNFCC	Charles Martin	NRNFCC Chair	9/12/2020
NRNFCC	Andrew De La Paz	NRNFCC Vice Chair	10/15/2020
RARCC	George Flanagan	RARCC Chair	2/7/2020
RARCC	Bruce Bevard	RARCC Vice Co-Chair	2/7/2020
SRACC	Andrew Smetana	RARCC Chair	2/7/2020
SRACC	Julie Jarvis	RACC Vice Chair	2/7/2020

As indicated by the above list, the majority of three-year terms for consensus committee chairs and vice chairs are set to expire next year. Policy requires that a notice be issued to consensus committee members two months in advance with an opportunity to express interest in the position. There is no limit to the number of terms a consensus committee chair or vice chair can serve. Current chairs and vice chairs need to decide if they are interested in an additional term. Consensus committee members are informed of all potential candidates in advance of the election ballot. Consensus committee chairs are asked to start on succession planning.

ACTION ITEM 6/2022-14: Consensus committee chairs to work on succession planning for leadership terms ending in 2023.
DUE DATE: November 1, 2022

10. Consensus Committee Chair Reports

Don Eggett stressed how important it is for each consensus committee to make sure they are working on the right priorities and how important it is for SB members to help provide guidance in this effort. Before getting into consensus committee reports, Eggett reviewed the top 20 standards from the 2015 Standards Prioritization Survey. He acknowledged that many of the standards on the list have since been completed while others may no longer need to be pursued. He also recognized that the list did not include any standards for advanced reactors. Lastly, Eggett reported that he began quarterly meetings with consensus committee chairs to discuss needs, challenges, and priorities. For reference, the list of top 20 standards from the 2015 Standards Priority Survey is embedded below.



10_Status_Top20_2015_Priority_Survey_

A. Environmental and Siting Consensus Committee (ESCC)

In ESCC Chair Carl Mazzola's absence, Jennifer Call provided a few brief highlights of ESCC activities. While in most cases the committee has sufficient staffing, they have struggled to get some "new blood" and a replacement for her Siting: Atmospheric Subcommittee position. Mazzola's full report is embedded below for reference.



10A_ESCC_Chair_Report-2022_Annual-F

B. Fuel, Waste, and Decommissioning Consensus Committee (FWDCC)

Like Call noted above, FWDC Chair Jef Lucchini recognized struggles with recruiting new members. The FWDC has several staffing needs. John Mahoney provided some insight into initiatives of the BOD that could result in increased interest in standards. He explained that ANS has just gotten a new membership database and is getting a better understanding of the number of new members. Recruits of young members are up 30%. The BOD is looking at creating a nuclear professional certification. They are also exploring the use of a video as a recruiting and orientation tool so new members know what their opportunities are. The BOD understand that standards are an important piece of the Society. All of these efforts should increase ANS membership which should lead to more members interested in supporting standards. SB members particularly liked the idea of a video and orientation that would present members with all opportunities to get engaged including standards. Eggett added that ANS doesn't have a "canned" presentation to use for industry meetings. He mentioned this to Executive Director and Chief Executive Officer Craig Piercy last night and believes that one will be created. Mahoney agreed and said that he had the same conversation last week.



10B_FWDC_Chair_Report-2022_Annua

C. Joint Committee on Nuclear Risk Management (JCNRM)

JCNRM Chair Dennis Henneke reported on JCNRM activities. Much of the committee's focus since 2013 has been the revision of the Level 1 PRA Standard. With issuance last month, the committee is now working to harmonize its other standards in development with the 2022 edition of the Level 1 Standard. Several of these standards are expected to be ready for ballot within the next year. The JCNRM has International Working Groups (IWGs) with China and Japan.

Information is traded with the IWGS, but they are not full participants. The Koreans and Canadians expressed interest in forming an IWG. To finalize, JCNRM will ensure that these IWGs will be active participants. The JCNRM also has participation from IAEA. See the embedded JCNRM report for more details on each JCNRM project.



10C_JCNRM_Chair_Report-2022_Annua

D. Large Light Water Reactor Consensus Committee (LLWRCC)

LLWRCC Chair Michelle French provided a summary of her LLWRCC Chair report. She reiterated that they too struggle in recruiting new volunteers. LLWRCC Vice Chair Mark Linn is working on a proposal to “rebrand” the LLWRCC that should be ready soon. The thought is that the rebranding would help to attract more participants. A report of LLWRCC activities is embedded here for reference.



10D_LLWRCC_Chair_Report-2022_Annu

E. Nonreactor Nuclear Facilities Consensus Committee (NRNFCC)

NRNFCC Chair Chip Martin reported for NRNFCC. He is working on funding for proposed standard ANS-2.36, *Accident Analysis for Aircraft Crash into Reactor and Nonreactor Nuclear Facilities*. The funding is needed for software. Martin is considering options to create a subcommittee for standards in maintenance (current standards) and standards in development (new standards). Several new standards are in consideration. The NRNFCC Chair report is embedded here for more details.



10E_NRNFCC_Chair_Report-2022_Annu

F. Nuclear Criticality Safety Consensus Committee (NCSCC)

NCSCC Chair Larry Wetzel provided a brief report. The NCSCC has been very busy with balloting. Currently the committee does not have any staffing needs. The NCSCC did lose a member, but he shared a vote with another member that took over the voting responsibilities. The NCSCC Chair report is embedded here to provide more details.



10F_NCSCC-Chair_Report-2022_Annual-

G. Research and Advanced Reactors Consensus Committee (RARCC)

RARCC Chair George Flanagan reported that RARCC has a number of standards in development. RARCC has struggled to get advanced reactor designers to participate in standards, some because they don't want to share proprietary information. The committee is currently looking at standards to support the Versatile Test Reactor. John Nakoski reported that the National Aeronautics and Space Administration (NASA) is looking at how to move forward with space reactor standards. He thinks NASA may approach ANS about standards development. There are some nonproliferation issues that would come into play. All agreed that support from the Aerospace Nuclear Science & Technology Division would be needed to develop space reactor standards. The RARCC Chair report is embedded below with more details on RARCC activities.



10G_RARCC-Chair_Report-2022_Annua

H. Safety and Radiological Analyses Consensus Committee (SRACC)

SRACC Chair Andrew Smetana highlighted the status of SRACC projects listed on his chair report including staffing needs and changes. A suggestion was made that the YMG may be able to help recruit new members on their Slack channel. See the embedded SRACC Chair report for more details about the committee's projects.



10H_SRACC_Chair_Report-2022_Annua

ACTION ITEM 6/2022-15: Pat Schroeder to check with the YMG about recruiting members for standards through their Slack channel.

DUE DATE: August 8, 2022

11. Other Committee Reports

A. Standards Board Task Group (TG) Reports

The list of TGs with their charters and membership is embedded below for reference.



11A_SB_TG_Charter
s&Members_6-4-22.i

- Policy Task Group (PTG) Report
Don Eggett reported that the PTG has held two to three meetings since last December on a variety of issues including the EAC, SMART Matrix, standards priority, areas of need/assignments, and, of course, policies and procedures. The group has been very active.
- External Communications Task Group (ECTG) Report
Eggett stated that he is looking for someone to take over as ECTG Chair. Donald Spellman was not able to continue in this role due to an overload of responsibilities. The ECTG has several members and has completed a few actions. The purpose of the ECTG is to maintain contact with industry.
- Internal Communications Task Group (ICTG) Report



11A-ICTG Action
Plan682022.pdf



11A_Interface Report
ETWDD-Standards-5-

Robert Becse reported on ICTG activities. He will formally take over the role of ICTG Chair at the close of the annual meeting. Becse is not aware that any ICTG actions are delinquent. One responsibility of the ICTG is to oversee the liaison program with ANS professional divisions. The TG is addressing volunteer needs with the Professional Divisions Committee (PDC). A presentation will be made to the PDC next month. The ICTG action plan has just been developed. A copy is embedded above.

Steven Stamm has provided two reports to the Education, Training, and Workforce Development Division (ETWDD). He includes information in the report that he feels they can use, mostly taken from *Nuclear Standards News*. The report will be used at their meeting on Thursday. Stamm has asked the ETWDD for feedback. A copy of Stamm's ETWDD report is embedded above.

- Priority Task Group (PriTG) Report
All positions on the PriTG need to be filled. Eggett encouraged members to consider joining this TG. It serves an important role in setting priorities for our work.
- Sales Task Group (STG) Report
Jennifer Call reported that the STG has held several meetings to discuss recommendations to increase sales revenue. She summarized their seven recommendations and proposed individuals to take the lead. The TG suggested a cadence of three years for the next review to allow time to get data on the recommendations. The seven recommendations can be found in the embedded report on page 2.



11A_STG_Recommen
dationspdf.pdf

**ACTION ITEMS 6/2022-16: Pat Schroeder to check with management and TechStreet on STG recommendations #6 and #7.
DUE DATE: August 1, 2022**

B. Liaison reports (External Liaisons to the Standards Board)

- American Concrete Institute (ACI): Open
NA
- American National Standards Institute (ANSI): Prasad Kadambi
No report provided.
- American Society for Civil Engineers (ASCE): Carl Mazzola (for ESCC)
No report provided.
- American Society of Mechanical Engineers/Nuclear Quality Assurance (ASME/NQA-1): Chip Martin
Chip Martin reported that ASME NQA-1 has dropped the initiative to develop a risk-informed, nonnuclear quality assurance standard. He also noted that the NQA-1 Committee is still concerned about communication with the ANS-3.2 Working Group (managerial, administrative, and quality assurance controls). Eggett sees this as an open issue that needs attention.
- Electric Power Research Institute (EPRI): Andrew Sowder
Andrew Sowder presented the report embedded below. In discussing a proposed project on natural language searching in ASME standards, John Nakoski mentioned an NRC project to capture requirements in JCNRM standards in a database to track and aid in endorsing.



11B_EPRI_2022 June
EPRI liaison report f

- Health Physics Society (HPS): Ali Simpkins (for the Shielding Subcommittee/ANS-6)
Ali Simpkins provided the embedded report in advance of the SB meeting.



11B_HPS_June2022J
uneLiaisonReport.p

- Institute of Electrical and Electronics Engineers/Nuclear Power Engineering Committee (IEEE/NPEC): Open
NA
- Institute of Nuclear Power Operations (INPO): Sudesh Gambhir
Sudesh Gambhir presented the report embedded below. Gambhir is retiring from INPO this August but would like to remain engaged.



11B_INPO_Update
to ANS Standards Bc

- International Organization of Standardization (ISO)/Technical Committee (TC) 85/Subcommittee (SC) 6 and the U.S. Nuclear Technical Advisory Group (NTAG): Open
NA
- National Council on Radiation Protection (NCRP): Open
NA
- Nuclear Energy Institute (NEI): Frances Pimentel
Frances Pimentel provided the embedded report for NEI.



11B_NEI Report to
ANS Standards Boar

- National Fire Protection Association (NFPA): Open
NA

12. Other Business

¹ ANS President Steve Nesbit thanked everyone in the room and those participating remotely for the great work in what he calls the foundational work of the Society for the industry. In his year as President, he has tried to expand and formalize the role of ANS in the emerging area of advanced reactors. Nesbit acknowledged that the 90 operating plants are providing 20% of clean energy, but the excitement in the industry is advanced reactor work. The SB has jurisdiction and control over standards to enable deployment of advanced reactors. Nesbit recognized this key role that the Standards Committee plays.

Amir Afzali took the opportunity to ask for clarification on the ARWG and its membership. As far as Nesbit is concerned, the ARWG is open to any ANS member that wants to participate. Prasad Kadambi is the chair and was selected by Nesbit. Nesbit encourages anyone with an interest to join in. He intends to be more involved in the ARWG once he steps down as President. Afzali reiterated his concerns with the draft letter to be issued to the NRC as outlined in 7A above. Nesbit will be reviewing the letter with Steven Arndt and Craig Piercy before finalizing.

Arndt echoed Nesbit's comments on the value of standards. He added that there is a need to recognize what is necessary and establish priorities. It is important that this conversation be had at all **standards committee levels, particularly at the SB level to make sure we are using resources wisely. Arndt expects a member survey to be issued later this year to include a number of different things including ANS products. The survey needs to limit questions, but the Standards Board may submit questions to him for consideration. [bolded for emphasis]**

¹ ANS President Steve Nesbit and ANS Vice President/President Elect stopped into the SB meeting in the morning. Since the reports from Nesbit and Arndt were not on the agenda, their reports have been included under "Other Business."

Dennis Henneke mentioned that he was in the United Kingdom (UK) last week to attend a regulatory meeting. They have been talking about harmonization for years. Next week IAEA kicks off an activity from their Director General to look at harmonization for small modular reactor (SMR) licensing. General Electric's Chief Nuclear Officer (CNO) and the CNOs from other organizations will be in attendance to kick off the initiative to harmonize how SMRs will be build. One-third of the area on harmonization is related to standards. Henneke sees fast moving work ahead from IAEA along with Nuclear Energy Agency (NEA), the UK's Office for Nuclear Regulation (ONR), and the Canadians. Nesbit was aware; however, he is not sure how big of a role we should play but feels that we should be engaged. Henneke added that in the area of probabilistic risk assessment (PRA) we are relatively harmonized but have less success on the safety analysis side. Arndt stated that we are teaming with industry colleagues. We have Memorandums of Understanding (MOUs) with other countries and will be implementing actions under these MOUs. The reality is that we can only do so much.

13. Review of Action Items from This Meeting

Action items assigned during the meeting were reviewed.

14. Future Meetings

The next two ANS national meetings scheduled are as follows:

- ANS Winter Meeting in Phoenix, Arizona, Arizona Grand Resort from November 13-17, 2022
- ANS Annual Meeting in Indianapolis, Indiana, at the Marriott Indianapolis Downtown from June 11-14, 2023

The SB plans to hold meetings on Tuesday of the above national meetings.

15. Adjournment

The meeting was adjourned with no further business.

Standards Board OPEN (or Unresolved) Action Item Status Report

Action Item	Description	Responsibility	Status/Comments /Reassignments
6/2022-01	Pat Schroeder to review the respectful behavior policy and recommend how the SB should address. DUE DATE: November 1, 2022	Schroeder	OPEN
6/2022-02	Andrew Sowder to highlight those specific items on the SMART Matrix to be discussed before each Standards Board meeting. DUE DATE: Before each SB meeting.	Sowder	OPEN
6/2022-03	Pat Schroeder to provide SB members a copy of the Standards Committee Strategic Plan and the link to the ballot to determine and verify if SB approval of the EAC was received. DUE DATE: July 1, 2022	Schroeder	OPEN
6/2022-04	Don Eggett to inform Douglas Bowen on his selection for the 2022 Standards Service Award. DUE DATE: July 1, 2022	Eggett	OPEN
6/2022-05	Andrew Sowder to chair the 2023 Standards Service Award Selection Committee with support from Dennis Henneke, John Nakoski, and Larry Wetzel. DUE DATE: May 1, 2023	Sowder, Henneke, Nakoski, Wetzel	OPEN
6/2022-06	Pat Schroeder to inform working group chairs of the availability of the Standards Committee Volunteer Database. DUE DATE: July 15, 2022	Schroeder	OPEN
6/2022-07	Pat Schroeder to check with Engineering Village to see if ANS will be provided reports on subscriber searches that net ANS standards results. DUE DATE: August 1, 2022	Schroeder	OPEN
6/2022-08	Pat Schroeder to add an item to the next agenda for members to express appreciation or provide positive feedback. DUE DATE: November 1, 2022	Schroeder	OPEN
6/2022-09	Pat Schroeder to distribute the ARWG charter and roster to the SB. DUE DATE: July 1, 2022	Schroeder	OPEN
6/2022-10	Andrew Sowder to follow up with Richard Wood on efforts to harmonize IEEE standards with ISO, IEC, IAEA, and CORDEL standards and guidance documents. DUE DATE: September 1, 2022	Sowder	OPEN
6/2022-11	Pat Schroeder to revise the boilerplate material in the frontend of ANS standards to be applicable to ANS guidance documents and provide to SB leadership for review. A copy of the revised frontend should be provided to John Mahoney after reviewed by SB leadership. DUE DATE: August 1, 2022	Schroeder	OPEN
6/2022-12	Don Eggett to setup an ad hoc committee to propose a process for consensus committee assignments on future standards and products that involve dual consensus committees. DUE DATE: November 1, 2022	Eggett	OPEN
6/2022-13	Robert Youngblood [for Prasad Kadambi] to request James O'Brien and Prasad Kadambi to establish a mechanism to collect feedback on the use of the Guidance Document. DUE DATE: July 1, 2022	Kadambi	OPEN
6/2022-14	Consensus committee chairs to work on succession planning for leadership terms ending in 2023. DUE DATE: November 1, 2022	Consensus Committee Chairs	OPEN

6/2022-15	Pat Schroeder to check with the YMG about recruiting members for standards through their Slack channel. DUE DATE: August 8, 2022	Schroeder	OPEN
6/2022-16	Pat Schroeder to check with management and TechStreet on STG recommendations #6 and #7. DUE DATE: August 1, 2022	Schroeder	OPEN
12/2021-04	Robert Becse with support of Prasad Kadambi to make a presentation on the RP3C Guidance Document at a Professional Divisions Committee meeting. DUE DATE: August 1, 2022	Becse Kadambi	OPEN In development R. Becse has taken over as ICTG Chair. Turkowski will support Becse in the transition.
12/2021-06	Policy Task Group to evaluate the need for the Executive Advisory Committee (EAC) and to ensure there is no duplication with the External Communications Task Group, the proposed joint ANS/ASME Nuclear Standards Collaborative (once formed), or the Priority Task Group.	Policy Task Group	CLOSED PTG meeting held 6/6/22 to discuss. The PTG supports the EAC.
6/2021-04	Policy Task Group to contact Standards Board members on possible changes to priorities for ANS standards development. NOTE: This action is a reassignment from Action Item 6/2018-02. DUE DATE: November 1, 2022	Policy Task Group	OPEN
6/2021-10	Don Eggett and Donald Spellman to contact ASME and IEEE, respectively, to see if they have a volunteer database.	Eggett Spellman	CLOSED Contact initiated 8/29/21. Due to privacy/confidentiality issues, it is not possible for IEEE to share.
6/2021-11	Chip Martin to share the database used by ASME NQA-1 (with their permission).	Martin	CLOSED Inquiry made. ASME not able to share database.
6/2021-12	Andrew Sowder to share information about EPRI's support of volunteers for SDOs.	Sowder	CLOSED A. Sowder shared information on the advanced reactor roadmap.
6/2021-14	Carl Mazzola to consider whether the SMART Matrix should be incorporated into the action item list.	Mazzola	CLOSED Keeping the simplified SMART Matrix separate was deemed appropriate.
6/2021-15	SMART Matrix assignees to review the SMART Matrix and let Don Eggett and Andrew Sowder know how many new members they need to complete assigned actions. DUE DATE: September 1, 2022	SMART Matrix Assignees	OPEN ECTG is believed to have sufficient members but does need a new chair due to D. Spellman's resignation. ICTG could use additional members.
6/2021-16	Don Eggett and Andrew Sowder to assign Standards Board members and observers to task groups. DUE DATE: September 1, 2022	Eggett Sowder	OPEN
6/2021-17	Policy Task Group to develop guidance for working groups on copyright and plagiarism for inclusion in the toolkit. DUE DATE: November 1, 2022	Policy Task Group/Eggett	OPEN
6/2021-19	William Turkowski to finalize the ICTG Action Plan inclusive of SMART Matrix tasks.	Turkowski	CLOSED B. Turkowski provided the action plan 6/8/22.