

MINUTES

Standards Board (SB)

February 5, 2018 Teleconference

Members Present:

Steven Arndt (Chair), U.S. Nuclear Regulatory Commission Patricia Schroeder (Secretary), American Nuclear Society Russell Bell (Liaison), Nuclear Energy Institute Robert Budnitz, Lawrence Berkeley National Laboratory Gene Carpenter, U.S. Department of Energy George Flanagan, Oak Ridge National Laboratory David Hillyer, Energy Solutions N. Prasad Kadambi, Individual Mark Linn, Oak Ridge National Laboratory Carl Mazzola, Project Enhancement Corporation Charles (Chuck) Moseley, Jr., Individual James O'Brien, U.S. Department of Energy William Reuland (Observer), Individual Andrew Smetana, Savannah River National Laboratory Andrew Sowder, Electric Power Research Institute Donald Spellman (Liaison), IEEE/NPEC Liaison Steven Stamm, Individual William Turkowski, Westinghouse Electric Company, LLC Larry Wetzel, BWXT, Inc.

Members Absent:

Amir Afzali, Southern Company Donald Eggett (Vice Chair), Individual John Nakoski, U.S. Nuclear Regulatory Commission Edward Wallace, Individual

1. Roll Call

The teleconference was called to order by SB Chair Steven Arndt. Roll call was taken, and a quorum was achieved.

2. Approval of Agenda

Steven Arndt summarized the agenda. The agenda was approved as presented with the understanding that other items as requested would be discussed under 8, "Other Business and Emerging Issues," as time permitted.

3. Standards Board Chair Comments

Steven Arndt expressed his thought that by and large the program is going well and open items are moving forward. Some observations were shared. Arndt recognized that a few working groups have had

challenges, but we are effectively addressing these issues. A balance is needed to be inclusive of diverse comments while continuing to be productive. Arndt has been encouraged strongly by the ANS president to keep things moving forward. He also addressed the progress of incorporating risk-informed and performance-based (RIPB) methods in standards as another tension. There needs to provide actionable requirements in standards supported by RIPB methods. Arndt also recognizes tension between industry groups and ANS standards. Andrew Sowder said that the Electric Power Research Institute (EPRI) is developing advanced reactor guidance in concert with development of a standard as a supplement, not a replacement. Arndt appreciates this information and encourages working groups to support this type of work. William Reuland added that EPRI has a lot of existing guidance documents that likely could be referenced in ANS standards. The key is being aware that these documents exist.

4. Action Item Review

• Open Action Item Report

See the action item report following these minutes for a full report of action items discussed and assigned. New action items assigned during this discussion of open action items are provided below:

ACTION ITE 2/2018-01: Steven Arndt to check with the Planning Committee to confirm that the Planning Committee Assessment Form still needs to be updated. DUE DATE: March 1, 2018

ACTION ITEM 2/2018-02: Pat Schroeder to send Donald Eggett a reminder to contact the ANS Student Conference chair for the April 2018 Student Conference at the University of Florida-Gainesville about a possible standards presentation. (Relates to Action Item 10/2017-13) DUE DATE: February 5, 2018

ACTION ITEM 2/2018-03: Steven Arndt to follow up with Steven Stamm about possible suggestions for communicating standards opportunities to local sections. DUE DATE: March 1, 2018

ACTION ITEM 2/2018-04: Prasad Kadambi, on behalf of RP3C, to update the draft RP3C guidance document and provide to the Standards Board before the June 2018 meeting. Per Action Item 10/2017-19, consensus committee chair comments due by February 28, 2018. DUE DATE: June 1, 2018

ACTION ITEM 2/2018-05: Pat Schroeder to contact ANS Finance Director Staci Levy for the name of the Finance Committee member that researched a conformity assessment program. DUE DATE: February 2, 2018

ACTION ITEM 2/2018-06: Steven Arndt and Pat Schroeder to discuss improving the process of notifying the public, utilities, and industry organizations of ANS standards development activities; possibly expanding the distribution letters to other stakeholders. DUE DATE: March 1, 2018

• Closed Action Item Report (See Attachment 1)

The following motion was made:

MOTION: To close the action items listed on the Completed Action Item Report.

The motion was approved unanimously.

5. SMART Matrix Action Item Review (Attachment 2)

Past due and near term actions on the SMART Matrix were reviewed by Steven Stamm. Pat Schroeder provided an update on the development of the Standards Volunteer Database, Goal 3, B. Higher Logic, the same company that owns ANS Collaborate (used by ANS members), recently purchased Workspace from Kavi. Some, if not all, Workspace features are being added to ANS Collaborate. Higher Logic is currently making platform changes to Workspace to be compatible with Collaborate. Workspace features will be added to Collaborate in steps in the next few months. The ANS Information Technology Department is exploring whether the ANS Standards Workspace can be incorporated into ANS Collaborate to gain additional features including those needed to support the proposed Standards Volunteer Database without added cost. More will be known in the June/July timeframe.

The SMART Matrix will be updated as discussed and reissued.

ACTION ITEM 2/2018-07: Steven Stamm to update the SMART Matrix and issue to members. DUE DATE: March 1, 2018

6. Status of Industry Computer Based Training use of ANS-2.8

Pat Schroeder reported that all comments from the Standards Board ballot were incorporated into the contract granting use of ANS-2.8-1992 (W2002), "Determining Design Basis Flooding at Power Reactor Sites," for the industry computer based training program being developed by Exelon. The contract is currently with Exelon's attorney being finalized.

7. Status of Advanced Reactor Workshop Planning

George Flanagan provided members an update on the planning for the advanced reactor workshop for industry to develop a strategic vision on standards needs. The workshop has been scheduled for Wednesday, May 2, 2018, at the U.S. Nuclear Regulatory Commission's (NRC's) Three White Flint North building. Webinar participation will be available. A representative from each of the Nuclear Energy Institute (NEI) Technology Working Groups will make a presentation. Notices have already been issued to the industry to save the date. Two planning calls have been held. The agenda is being finalized. The next call is scheduled for Monday, February 12, 2018.

Flanagan informed members of an initiative by the American Society of Mechanical Engineers' (ASMEs') Board on Nuclear Codes and Standards for a collaborative effort to revive nuclear power in the United States. Arndt believes there is some overlap in ASME's effort with the advanced reactors workshop being planned by ANS. Arndt will be following up with Ralph Hill. He is constructing a note to Hill and expects to send it tomorrow.

ACTION ITEM 2/2018-08: Steven Arndt to contact Ralph Hill for more information on ASME's Board on Nuclear Codes and Standards collaborative effort to revive nuclear power in the United States. DUE DATE: February 15, 2018

ACTION ITEM 2/2018-09: Russell Bell to help spread the word to NEI Advanced Reactor Technology Working Group members about the May 2, 2018, Advanced Reactors Workshop. DUE DATE: February 15, 2018

ACTION ITEM 2/2018-10: Pat Schroeder to send Andrew Sowder call in details for the February 12, 2018, Advanced Reactors Workshop planning call and to include him on future planning call notices.

DUE DATE: On-going up to the workshop

8. Other Business and Emerging Issues

Steven Arndt stated that the Standards Service Award Selection Committee needs to be appointed. As it is typical for the Standards Board vice chair to head the committee, Arndt will ask Donald Eggett to support this role. Robert Budnitz, Charles Moseley, and Steven Stamm offered to serve as members.

ACTION ITEM 2/2018-11: Steven Arndt to ask Donald Eggett to chair the Standards Service Award Selection Committee. DUE DATE: February 15, 2018

ACTION ITEM 2/2018-12: Donald Eggett (selection committee chair), Robert Budnitz, Charles Moseley, and Steven Stamm to serve on the selection committee to recommend a candidate for the 2018 Standards Service Award. DUE DATE: May 1, 2018

Steven Arndt informed members that the North American Young Generation in Nuclear (NAYGN) has recommend that a presentation be made to their members to let them know of opportunities for their members to participate in ANS standards. A presentation was previously given by George Flanagan when he was the Standards Board chair. Arndt agreed to lead the presentation and could be available most any time in March with the exception of one week that he'll be out of the office. He asked Pat Schroeder to follow up with the NAYGN chair to make arrangements.

ACTION ITEM 2/2018-13: Pat Schroeder to follow up with the NAYGN chair to make arrangements for Standards Board Chair Steven Arndt to lead a presentation on standards opportunities to the NAYGN membership. DUE DATE: February 15, 2018

Robert Budnitz reminded members of a recent ballot issued to the Standards Board for approval of the JCNRM Supplemental Procedures. He added that Prasad Kadambi has chosen to maintain his negative. Steven Stamm currently has a negative vote but has not made a decision on whether he will maintain his negative or upgrade his vote to approve. Schroeder explained that the ballot on the supplemental procedures is an administrative ballot requiring comment resolution attempts but not a reconsideration ballot. A reconsideration ballot is a requirement of ANSI for standards action ballots. Once a decision is made by Stamm and attempts at comment resolution have been exhausted, procedures dictate that the ballot tally and comments be provided to Arndt as chair for review. A simple majority approval is required for official actions except consensus balloting on proposed standards (See Article 5.2 of the Standards Committee Rules and Procedures).

Stamm suggested that the Standards Board discuss how to make sure proper credit is given to ANS Standards Committee work on industry issues. This item relates to an industry notice about stakeholder meetings on the development of advanced reactor licensing framework that did not credit ANS's involvement. Arndt suggested that this discussion be tabled until the June 2018 meeting.

ACTION ITEM 2/2018-14: Pat Schroeder to add an item to the June 2018 Standards Board agenda for a discussion to insure that Standards Committee work on industry issues is recognized. DUE DATE: June 1, 2018

Prasad Kadambi updated members on events that occurred within NRC in the last two months opening the door for performance-based approaches. He believes these changes have huge implications for standards.

Arndt suggested that another teleconference be schedule in the middle of May, possibly Monday, May 14, or Tuesday, May 15, 2018, for an hour. Schroeder was asked to issue a poll to seek members' availability.

ACTION ITEM 2/2018-15: Pat Schroeder to issue a web poll to capture members' availability for a one-hour teleconference in the middle of May 2018. DUE DATE: February 5, 2018

9. Adjournment

The call was adjourned recognizing that the next physical meeting would be held Tuesday, June 19, 2018, at the Marriott Philadelphia Downtown.

	Standards Board Action Item Report As assigned and reported during the 2/5/18 Teleconference.						
Action Item	Description	Responsibility	Status/Comments /Reassignments				
2/2018-01	Steven Arndt to check with the Planning Committee to confirm that the Planning Committee Assessment Form still needs to be updated. DUE DATE: March 1, 2018	Steven Arndt	OPEN				
2/2018-02	Pat Schroeder to send Donald Eggett a reminder to contact the ANS Student Conference chair for the April 2018 Student Conference at the University of Florida-Gainesville about a possible standards presentation. (Relates to Action Item 10/2017-13) DUE DATE: February 5, 2018	OPEN					
2/2018-03	Steven Arndt to follow up with Steven Stamm about possible suggestions for communicating standards opportunities to local sections. DUE DATE: March 1, 2018	Steven Arndt, Steven Stamm	OPEN				
2/2018-04	Prasad Kadambi, on behalf of RP3C, to update the draft RP3C guidance document and provide to the Standards Board before the June 2018 meeting. Per Action Item 10/2017-19, consensus committee chair comments due by February 28, 2018. DUE DATE: June 1, 2018	OPEN					
2/2018-05	Pat Schroeder to contact ANS Finance Director Staci Levy for the name of the Finance Committee member that researched a conformity assessment program. DUE DATE: February 2, 2018	Pat Schroeder	OPEN				
2/2018-06	Steven Arndt and Pat Schroeder to discuss improving the process of notifying the public, utilities, and industry organizations of ANS standards development activities; possibly expanding the distribution letters to other stakeholders. DUE DATE: March 1, 2018	Steven Arndt, Pat Schroeder	OPEN				
2/2018-07	Steven Stamm to update the SMART Matrix and issue to members. DUE DATE: March 1, 2018	Steven Stamm	OPEN				
2/2018-08	2018-08Steven Arndt to contact Ralph Hill for more information on ASME's Board on Nuclear Codes and Standards collaborative effort to revive nuclear power in the United States. DUE DATE: February 15, 2018Steven Arndt						
2/2018-09	Russell Bell to help spread the word to NEI Advanced Reactor Technology Working Group members about the May 2, 2018, Advanced Reactors Workshop. DUE DATE: February 15, 2018	Russell Bell	OPEN				

	Standards Board Action Item Report As assigned and reported during the 2/5/18 Teleconference.					
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2/2018-10	Pat Schroeder to send Andrew Sowder call in details for the February 12, 2018, Advanced Reactors Workshop planning call and to include him on future planning call notices. DUE DATE: On-going up to the workshop	Pat Schroeder	OPEN			
2/2018-11	Steven Arndt to ask Donald Eggett to chair the Standards Service Award Selection Committee. DUE DATE: February 15, 2018	Steven Arndt	OPEN			
2/2018-12	Donald Eggett (selection committee chair), Robert Budnitz, Charles Moseley, and Steven Stamm to serve on the selection committee to recommend a candidate for the 2018 Standards Service Award. DUE DATE: May 1, 2018	OPEN				
2/2018-13	Pat Schroeder to follow up with the NAYGN chair to make arrangements for Standards Board Chair Steven Arndt to lead a presentation on standards opportunities to the NAYGN membership. DUE DATE: February 15, 2018	OPEN				
2/2018-14	Pat Schroeder to add an item to the June 2018 Standards Board agenda for a discussion to insure that Standards Committee work on industry issues is recognized. DUE DATE: June 1, 2018	Pat Schroeder	OPEN			
2/2018-15	Pat Schroeder to issue a web poll to capture members' availability for a one-hour teleconference in the middle of May 2018. DUE DATE: February 2, 2018	Pat Schroeder	OPEN			
10/2017-01			OPEN S. Arndt was not sure if the Planning Committee was continuing use of the assessment form. Action Item 2/2018-01 was opened for Arndt to check with the PC chair.			
10/2017-07	Consensus committee chairs to participate or select a representative to support the industry workshop to create a strategic vision for development of advanced reactor standards. Consensus committee chairs should provide the name of their representative to George Flanagan and Pat Schroeder. DUE DATE: March 1, 2018	Consensus committee chairs	OPEN for FWDCC & SRACC FWDCC: ? SRACC: ? JCNRM : R. Budnitz LLWRCC: G. Carpenter NCSCC: N/A per L. Wetzel NRNFCC: J. O'Brien RARCC: G. Flanagan ESCC: C. Mazzola			

	Standards Board Action Item Report				
Action	As assigned and reported during the 2/5/18 Description	Responsibility	Status/Comments		
Item			/Reassignments		
10/2017-08	Steven Arndt, Amir Afzali, Gene Carpenter, Prasad Kadambi, John Nakoski, James O'Brien, Andrew Sowder, and Pat Schroeder to assist George Flanagan in working with NRC and DOE to organize the workshop to create a strategic vision for development of advanced reactor standards. DUE DATE: Ongoing until 5/2/18 workshop	George Flanagan Steven Arndt Amir Afzali Gene Carpenter Prasad Kadambi John Nakoski James O'Brien Andrew Sowder Pat Schroeder	OPEN Planning call held 11/30/17 & 1/10/18. Next call to be held on 2/12/18. Workshop scheduled for 5/2/18. A. Sowder asked to be included in the planning discussions during the 2/5/18 call and was added to this action item.		
10/2017-09	Robert Budnitz, Prasad Kadambi, and Larry Wetzel to send William Turkowski and Pat Schroeder updates to the PD Liaison List. DUE DATE: March 1, 2018	Robert Budnitz Prasad Kadambi Larry Wetzel	In progress Liaison list updated and sent to PD Chairs & CC Chairs on 1/29/18 to confirm appointments.		
10/2017-10	Steven Arndt to talk with PD Committee Chair Hans Gouger to insure appointments of PD liaisons are provided to William Turkowski and Pat Schroeder to update the list. DUE DATE: March 1, 2018	Steven Arndt	In progress Request sent 1/29/18 to PD Chairs to confirm their appointee.		
10/2017-11	William Turkowski and Pat Schroeder to update the PD/SC Liaisons List and distribute to consensus committee chairs. DUE DATE: March 15, 2018	William Turkowski Pat Schroeder	OPEN Waiting for confirmations.		
10/2017-12	Consensus committee chairs to follow up with new liaisons when updated list available. DUE DATE: April 1, 2018	Consensus committee chairs	OPEN		
10/2017-13	Donald Eggett to contact the ANS Student Conference chair for the upcoming Student Conference next April at the University of Florida-Gainesville to explore their interest and opportunity for a standards presentation. (see <u>http://www.ansstudentconference2018.com/contact.html</u>) DUE DATE: February 15, 2018	Donald Eggett	OPEN In progress per D. Eggett. L. Wetzel informed members on the 2/5/18 call that he had heard that one session had not been finalized and could likely accommodate a standards presentation.		
10/2017-14	Steven Arndt to work with consensus committee chairs to establish an annual process to identify opportunities and representatives to make presentations at topical meetings, conferences, and local sections to encourage standards participation. DUE DATE: April 1, 2018	Steven Arndt & consensus committee chairs	OPEN S. Arndt explained that he is giving this consideration. S. Stamm had a few suggestions for local sections. AI 2/2018- 03 was opened for Arndt & Stamm to talk offline.		

	Standards Board Action Item Report As assigned and reported during the 2/5/18 Teleconference.					
Action Item	Description	Responsibility	Status/Comments			
nem			/Reassignments			
10/2017-19	Consensus committee chairs to review the RP3C categorization spreadsheet of standards and projects recommended to incorporate RIPB methods and develop a path forward with priorities. Consensus committee plans (including variances from the recommendations) to be reported back to the SB and RP3C. (The list includes projects under ESCC, FWDCC, LLWRCC, NRNFCC, and RARCC.) DUE DATE: April 1, 2018	ESCC, FWDCC, LLWRCC, and RARCC chairs NA for NRNFCC as NRNFCC standards part of operating plan and working w/RP3C.	OPEN P. Kadambi recognized communications with LLWRCC & NCSCC. Response needed from the following: • ESCC • FWDCC • RARCC			
10/2017-20	Consensus committee chairs to review the draft RP3C guidance document and submit any comments to Prasad Kadambi and Pat Schroeder. DUE DATE: February 28, 2018	Consensus committee chairs NA for NRNFCC as chair is helping to write guidance.	OPEN P. Kadambi confirmed that comments were provided from the JCNRM. Response needed from the following: • ESCC • FWDCC • LLWRCC • NCSCC • RARCC • SRACC AI 2/2018-04 was opened for RP3C to provide the SB a revised guidance document by the June 2018 meeting.			
10/2017-21	Carl Mazzola to work with Jennifer Call (Siting: Atmospheric Subcommittee Chair) to determine the direction and need of proposed new standard ANS-3.16, "Meteorological Aspects of Wildland Fire Response." DUE DATE: April 1, 2018	Carl Mazzola	In progress A questionnaire was prepared and sent to the Nuclear Utility Meteorological Data Users Group and DOE Meteorological Coordinating Council members for feedback on the need for proposed new standard ANS-3.16, "Meteorological Aspects of Wildland Fire Response." The questionnaire and its analysis are available in Workspace <u>here</u> . The ESCC will discuss the evaluation and make a determination on their upcoming teleconference scheduled 3/19/18. Mazzola added that the industry is not convinced that a standard is needed.			

	Standards Board Action Item R As assigned and reported during the 2/5/18		ce.	
Action Item	Description		Status/Comments /Reassignments	
10/2017-25	Gene Carpenter to contact DOE staff member to follow up on the review of ANS-3.8.7, "Criteria for Planning, Development, Conduct and Evaluation of Drills and Exercises for Emergency Preparedness." DUE DATE: March 1, 2018	Gene Carpenter	OPEN G. Carpenter sent email 2/3/18 to DOE contacts following up on their review.	
10/2017-27	 Gene Carpenter to solicit the following for the ANS-3.15 Working Group on cybersecurity: 1) NRC representative 2) DOD representative 3) Additional leadership DUE DATE: April 1, 2018 	Gene Carpenter	OPEN G. Carpenter reported that he contacted J. Nakoski for help soliciting a NRC rep. S. Arndt suggested that Carpenter contact him off line to discuss.	
10/2017-28	Steven Arndt to set up a meeting with Russ Bell and senior NEI leaders. DUE DATE: April 1, 2018	Steven Arndt	OPEN	
06/2017-04	 Steven Arndt to review the chair and members for all of the TGs and solicit/adjust as appropriate (scopes/member lists – Attachment 3 of 6/13/17 minutes). Specific actions discussed include the following: Solicitation of new External Communications TG Chair Add Amir Afzali as a member of the External Communications TG DUE DATE: April 1, 2018 	Steven Arndt	OPEN The action item was reassigned to S. Arndt as the new SB chair. The third bullet regarding a chair for the Sales TG was deleted because the Sales TG was dissolved by motion at the 10/31/17. New action Item assigned for P. Schroeder to provide S. Arndt a copy of the TG Scope & Member list – file provided.	
06/2017-16	 RP3C to issue their operating plan with inclusion of the following: RP3C action item to categorize all ANS standards and projects (i.e., current, withdrawn, active, inactive) into one of three categories RIPB, PB, or not applicable. Implementation of RIPB principles in ANS-3.14, "Process for Aging Management and Life Extension of Nonreactor Nuclear Facilities," and ANS-58.14, "Safety and Pressure Integrity Classification Criteria for Light Water Reactors." SB decisions on ANS Executive Committee inputs DUE DATE: June 1, 2018 	RP3C Prasad Kadambi, Ed Wallace	OPEN P. Kadambi confirmed that the bulleted items either were or will be incorporated into the operating plan.	
06/2017-18	The Policy TG to determine how the statement on standards development drafted by Robert Busch is addressed. DUE DATE: March 1, 2018	Steven Arndt/ Policy TG	OPEN The statement and SB comments on the statement are accessible <u>here</u> .	

	Standards Board Action Item Report As assigned and reported during the 2/5/18 Teleconference.				
Action Item	Description	Responsibility	Status/Comments /Reassignments		
11/2016-08	Prasad Kadambi to work with Steven Arndt on preparing a conformity assessment business case. DUE DATE: June 1, 2018		OPEN Kadambi has invited Ms. Roberta Telles to address the SB on conformity assessment and hopes that she'll be able to attend a future meeting in the DC area. New AI 2/2018-05 was opened for P. Schroeder to check with S. Levy for the name of a Finance Committee member that researched a conformity assessment program.		
6/2016-03	Russell Bell to help coordinate ANS work on advanced reactor standards with other SDOs and industry. Due Date: On-going	NEI Liaison	On-going R. Bell confirmed that he is providing this service. He looks forward to the AR Workshop scheduled for 5/2/18.		
6/2016-14	External Communications Task Group to evaluate and improve the process of notifying the public and NEI/utilities of standards development activities. Due Date: April 1, 2018	ECTG & Steven Arndt	OPEN New AI 2/2018-06 was assigned for S. Arndt & P. Schroeder to discuss expanding the distribution letters to stakeholders.		
6/2016-18	Gene Carpenter to discuss the needed action on standards ranked 11-20 on the standards priority survey with the LLWRCC and provide input at the SB at the next call/meeting. Due Date: June 1, 2018	Gene Carpenter	OPEN G. Carpenter confirmed that the LLWRCC has reviewed the standards ranked 11-20 and will continue to review.		
11/2015-21	The LLWRCC to approve a PINS for a cybersecurity standard and forward to the standards manager. DUE DATE: June 1, 2018	Gene Carpenter	OPEN Leadership is being replaced for this project.		

Standards Board COMPLETED Ac	tion Item Report	
Updated 1/30/18	-	
Description	Responsibility	Status/Comme

Action Item	Description	Responsibility	Status/Comments		
item			/Reassignments		
10/2017-02	Robert Budnitz and Andrew Sowder to send Steven Stamm their sentiments on why it is not appropriate to quantify the number of RIPB standards to be developed for use in a letter to the ANS Executive Committee. DUE DATE: November 15, 2017	Robert Budnitz Andrew Sowder Steven Stamm	Completed Sentiments provided		
10/2017-03	Steven Arndt to send a letter to the ANS Executive Committee to explain SB member sentiments on why it is not appropriate to set a numerical metric for the development of RIBP standards in the next five years. DUE DATE: November 30, 2017	Steven Arndt	Completed Letter sent to ExC 11/14/17		
10/2017-04	Steven Stamm to update the Standards Committee Strategic Plan and accompanying SMART Matrix per discussions and to remove a numerical metric for development of RIPB standards. DUE DATE: December 15, 2017	Steven Stamm	Completed Revised plan approved via ballot. Access ballot <u>here</u> .		
10/2017-05	Robert Budnitz to check with the JCNRM Executive Committee on a way to poll JCNRM members for input on conditions that have led to active industry involved in JCNRM standards that do not apply to other ANS standards. DUE DATE: November 30, 2017	Robert Budnitz	Completed JCNRM members felt that the greatest reason for significant volunteer interest is the fact that the PRA standards are widely used and endorsed by the NRC.		
10/2017-06	Robert Budnitz to provide George Flanagan contact information for ASCE representatives to be invited to the industry workshop to create a strategic vision for development of advanced reactor standards. DUE DATE: November 15, 2017	entatives to be invited to the a strategic vision for actor standards.			
10/2017-15	George Flanagan to provide members his standards informational presentation for use as a template. DUE DATE: December 1, 2017	George Flanagan	Completed Links to files posted on Workspace provided 11/17/17 (access here)		
10/2017-16	Members to review the SMART Matrix and provide the status of open actions to Steven Stamm. DUE DATE: December 1, 2017	SB members	Completed		
10/2017-17	Pat Schroeder to separate the open and completed action items on reports for review at subsequent meetings. DUE DATE: June 1, 2018	Pat Schroeder	Completed Done for 2/6/18 teleconference and will continue to do for subsequent meetings.		
10/2017-18	Pat Schroeder to send Steven Arndt a copy of the TG Scope and Member list so that he can update as directed by Action Item 6/2017-04. DUE DATE: November 15, 2017	Pat Schroeder	Completed Sent 10/31/17 with a corrected list resent 11/17/17.		

	Standards Board <u>COMPLETED</u> Action Item Report Updated 1/30/18					
Action Item	Description	Responsibility	Status/Comments /Reassignments			
10/2017-22	Robert Budnitz to provide Carl Mazzola the high winds PRA and Larry Twisdale's contact information. DUE DATE: November 15, 2017	Robert Budnitz	Completed File/info provided during SB 10/31/17 meeting.			
10/2017-23	Pat Schroeder to check the files and provide David Hillyer names of past ANS-3.12.X working group members and a copy of any drafts found. DUE DATE: November 15, 2017	Pat Schroeder	Completed All provided 10/31/17			
10/2017-24	Pat Schroeder to provide Gene Carpenter the contact information for the DOE staff member requested to review ANS-3.8.7, "Criteria for Planning, Development, Conduct and Evaluation of Drills and Exercises for Emergency Preparedness." DUE DATE: November 15, 2017	Pat Schroeder	Completed Contact info emails Jose.maisonet@nnsa.doe .gov and Jose.Berrios@NNSA.Doe .Gov			
10/2017-26	Pat Schroeder to add ANS-58.8, "Time Response Design Criteria for Safety-Related Operator Actions," to the list of ANS standards in development and using RIPB methods. DUE DATE: November 15, 2017	Pat Schroeder	Completed Revised scheduled provided to SB 11/17/17			
10/2017-29	 Pat Schroeder to update the external liaison list as follows: 1) Carl Mazzola is the liaison for ASCE, not AIC or AISC. 2) Russ Bell is the NEI liaison. 3) Add the acronym for WENRA to the list. DUE DATE: December 15, 2017 	Pat Schroeder	Completed Revised list provided to SB 11/17/17			
10/2017-30	Pat Schroeder to issue a poll to seek members' availability for a teleconference in February of 2018. DUE DATE: November 15, 2017	Pat Schroeder	Completed Poll issued 11/17/17; call scheduled for 2/5/18.			
10/2017-31	Steven Arndt and Donald Eggett to draft a letter of appreciation to Michaele Brady Raap on behalf of the SB.	Steven Arndt & Donald Eggett	Completed Letter sent 11/8/17			
11/2016-35	Donald Eggett to solicit a liaison from IEEE; Steven Arndt to assist. DUE DATE: March 31, 2018	Donald Eggett Steven Arndt	Completed IEEE/NPEC has designated Dr. Richard Wood to serve as their liaison to the SB. Donald Spellman has agreed to serve as the SB liaison to the IEEE/NPEC.			

	Standards Board <u>COMPLETED</u> Action Item Report Updated 1/30/18					
Action Item	Description	Responsibility	Status/Comments /Reassignments			
02/2016-07 #0119	John Nakoski to check with the NRC to see if they have reviewed ANSI/ANS-5.1-2014 and are considering replacing the reference of the ANS-5.1 1971 draft in 10CFR50, Appendix K. DUE DATE: January 31, 2018	John Nakoski	Completed The NRC does not plan to update Appendix K to 10 CFR Part 50 to adopt an updated version of ANS-5.1. Appendix I is one acceptable means defining a LOCA evaluation model. It dictates ANS-5.1-197 decay heat + 20% be used. It is a very conservative assumption. But, on the other hand, this 1971 decay heat +20% approach is used to compensate for other portions of the Appendix K model which are not conservative. 10 CFR 50.46 allows the use of Appendix K or a realistic mode An applicant can elect to use a realistic model with the latest and updated ANS decay heat model. Appendix K serves a purpose as is and the staff has decided not to revise it.			

A SMART strategic plan consists of goals that are **S**trategic, **M**easurable, **A**ttainable, **R**ealistic and **T**ime-related. This matrix takes each of the Initiatives in the ANS SB Strategic Plan and defines the specific activities that need to be done for each Goal and Objective along with its proposed schedule and responsibility. This is a living document. Updates and comments from Standards Board Members will be solicited and the plan adjusted.

Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
Completed Near Term	Overd				
Goal #1 Align Standards Development Prior	es with Current ar	nd Emerging Needs			
A. Evaluate the results of the initial industry priority survey	Standards Mgr	Executive summary issued.		1/2016	1/2016
 Assign responsibilities to the appropriate consensus committees to address the top ten survey identified high priority standards 	Standards Mgr	Issue list of high priority standards with assigned responsibilities. List discussed during 2/12/2016 conference call and published in minutes.		2/29/2016	2/29/2016
C. Develop and implement an approach to collect industry priority needs on an ongoing basis and integrate them into standards committee priorities.	Chair External Communications TG	ANS SC Policy drafted to specify this approach and approved by SB.	1/25/17: With no External TG Chair, there has been no action	2/1/2017	
 D. Incorporate risk-informed and performance-based methods in ANS standards, where appropriate, by: 1. Develop the Risk-Informed Performance-Based Principles and Policy Committee Operating Plan 	RP3C Chair	Provide draft of Risk-Informed Performance-Based Principles and Policy Committee Operating Plan for SB approval.	Plan provided for info 11/2017.	9/30/2017	
 Develop a Risk-Informed Performance-Based Principles training package for training of ANS Standards Committee members. Conduct training of appropriate committees and 	RP3C Chair	Provide resolution of SB comments and issue plan CC ballot.		12/1/2017	
 Conduct training of consensus committees and working groups. The RP3C will work with each consensus 	RP3C Chair	Develop priority list of standards and schedule for incorporation of RP3C principles.		9/30/2017	
committee to develop a prioritized list and schedule for incorporating risk-informed and performance-based principles into its standards. Collaboratively, they will Identify and define any new standards that are related to risk-informed	RP3C Chair	<i>Nuclear News (NN</i>) article drafted, approved by SB Chair, and forwarded to <i>NN</i> editor.		11/1/2017	
and performance-based principles. Some of such work may already have been assigned to other standards working groups, and so it is important to work with the SB and CCs to identify an appropriate WG lead (and CC) for	RP3C Chair	Develop Risk-Informed and Performance-Based Training Package for SC members and provide to SB for review.	To be developed in parallel with plan finalization	12/1/2017	

	Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
	 the standards development with the objective of avoiding duplication. Publishing a Nuclear News Article to inform other members of the Society of the benefits of the information of the information of the society of the benefits of the benefits of the benefits of the society of the benefits of the	RP3C Chair	Develop presentation package for use with other industry groups and submit to SB for approval.	To be developed in parallel with plan finalization	3/1/2018	
	 this risk-informed and performance-based effort Developing presentation materials that can be used to inform other industry groups as to the benefits and use of the ANS Standards Committee risk-informed and performance based standards activities 	RP3C Chair	Contact appropriate organizations to make presentations at NRC RIC, ANS UWC, and owners' groups.		7/1/2018	
		RP3C Chair	Make presentations at a minimum of 2 groups.		10/1/2018	
Go	oal #2: Develop and Maintain High Quality S	Standards		1		
А.	Enhance the relationships with the ANS Professional Divisions and Technical Groups to assist in populating WGs with expert individuals. (also supports Goal 5)	Internal Communications TG Manager	Issue interface liaisons table between applicable divisions and group and the standards consensus committees.		8/1/2016	6/1/2016
		CC Chairs	Send requests for staffing assistance to ANS Professional Divisions and Technical Groups as needed.	11/2017: ESCC - Done FWDCC - Done LLWRCC - Done NCSCC - Done NRNFCC - Done RARCC - None identified SRACC - Done	Initial requests sent prior to Oct. 2017 meeting. Ongoing	11/1/2017
		Internal Communications TG Manager	Tabulate the summary of the requests made and the results and present to SB.	This item has been replaced by having the CC Chair report the results in their SB reports	NA	
В.	Develop and Implement a standards training program for all Standards Committee members to ensure that standards development is consistent with current policies and procedures, thus,	Internal Communications TG Manager	Develop initial presentations and post on Workspace.		3/1/2016	3/1/2016
	producing consistently better quality products in a	SB VChair	Assign training instructors.		3/1/2016	3/1/2016

Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
timelier manner.					
	SB VChair	Prepare training plan.		2/1/2016	2/1/2016
	Standards Mgr	Send out training notices.		3/15/2016	3/15/2016
	Standards Mgr	Complete the initial rounds of training presentations.		6/2/2016	6/2/2016
	SB VChair	Select videos for use in future training presentations.		6/2/2016	6/2/2016
C. Assign a mentor to each new standards working group that is experienced in the use of ANS standard's procedures, policies, glossary and tool kit	CC Chair	Evaluate SubC Chairs for familiarity with toolkit/standards development.	11/2017: ESCC – Done FWDCC - ?? LLWRCC - ?? NCSCC - Done NRNFCC - ?? RARCC - Done SRACC - Done	5/1/17	
	CC Chair	Select SubC Chairs and other CC members with respect to their being well versed in toolkit contents and capable of being mentors. Provide mentor list to SB VChair.	11/2017: ESCC – Done FWDCC - ?? LLWRCC - ?? NCSCC - Done NRNFCC - ?? RARCC - Done SRACC - Open	5/1/17	
	CC Chair	In cases where additional assistance is required beyond the SubC Chair, CC should request mentor from SB VChair.	None identified yet	Chairs have been advised.	11/1/2017
Goal #3: Improve Standards Development Pr	oduction and Effic	ciency	L		

	Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
Α.	A. Expedite development of high-priority standards by improving Standards Board and consensus committee oversight using achievable project plans and definitive schedules with assigned milestones throughout the standards development cycle.	SB VChair	Draft project plan development policy.		10/1/2016	Approved by SB 9/6/16.
		SB VChair	Project plan development policy approved by SB.		12/1/2016	Project plan w/b added to CC procedures as Appendix K.
		CC Chairs	Develop project plans for 6 total standards from all	1/25/17:	6/1/2017	
			CCs and submit to consensus committees. This is the total goal for all CCs not 6 by each CC.	3 plans have been developed to date.		
В.	Complete the Standards Volunteer Database to facilitate recruiting personnel for Standards Committee activities (also supports Goal #5)	ANS IT Dept.	ANS IT complete ANS SC Volunteer Database in accordance with the SB specification.	12/1/2017-Pat querried ANS IT.	11/1/2017	
		ANS IT Dept.	SB approves database submitted by ANS IT department.		2/1/2018	
C.	Assist the consensus committees in obtaining required human resources using outreach initiatives	Standards Mgr	Develop staffing approach guideline and post to website toolkit.		12/1/2016	Completed by S. Stamm and posted to the toolkit on 8/22/16 <u>here</u> .
D.	Maximize use of the ANS Standards Workspace and other communications vehicles to eliminate the need for travel and face-to-face meetings to the maximum extent possible	CC Chairs	Encourage WGs and SubCs to use Workspace and other online and electronic tools to eliminate face-to- face meetings	Procedure issued. CCs have discussed with SubC /Chairs	Done	April 2017
		CC Chairs	CC chairs to submit a confirmation email that this has been discussed with SubCs and WGs.	11/2017: ESCC – Done FWDCC - ?? LL\WRCC?? NCSCC - ?? NRNCC - ?? RARCC - ?? SRACC - Done	5/1/2017	

	Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
	E. Acquire funding (e.g., grants) to support the development of high-priority standards on an expedited basis.	CC Chairs/ Priority TG Chair	High priority standards list submitted by all CCs which identify high priority standards planned for near future. Priorities should be based on expected government and industry need.	11/2017: ESCC – ANS- 2.8(12/31/17) FWDCC - ?? LWRCC - ?? NCSCC - None NRNFCC - ?? RARCC - ANS 20.1, 20.2, 30.1 and 30.2 SRACC - None	Ongoing	
		SB VChair	Work with CCs to assess each effort, select most appropriate standards, prepare and submit proposals. Submit 1 st proposal.	Nov 2017- Agreed to proactively coordinate with NRC and DOE for early identification of potential opportunities.	6/1/2017 Ongoing	
	 F. Streamline the reaffirmation process to reduce the number of delinquent standards by establishing a systematic review of delinquent standards to start no later than the 4-year mark. This can be accomplished through the following mechanisms: 1. Automatically sending out a Reaffirmation Form to the WG chair with copies to subcommittee chair and consensus committee chair 2. Automate subcommittee and consensus committee approvals of reaffirmation, withdrawal, and revision recommendations 3. Establishing an ANS Professional Division and Technical Group sponsorship program to aid in review of associated delinquent standards with and without active working groups 	Standards Mgr	Submit Reaffirmation Forms to WG/SubC Chairs for all standards approaching the 4-year mark.		Ongoing Starting 4/1/2016	Ongpoing
		Standards Mgr	Issue list of all standards over 4 year since issuance showing the issuance of Reaffirmation Forms to the WG chairs.		11/1/2016	Ongoing
3.		Standards Mgr	Action items for reaffirmation setup in Workspace with automatic reminders.		11/1/2016	The report was sent 9/15/16 and will be updated and resent 12/15/16
		Internal	Send list of delinquent standards to PDs.		12/1/2016	Completed

Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
	Communications Group Manager				
	Internal Communications Group Manager	Issue plan and approach to each Professional Division and Technical Group as applicable and obtain indication of acceptance.	COMPLETE	5/1/2017	11/2017
G. Develop subcommittee/consensus committee metrics to identify opportunities for improvements	Policy TG Chair	Identify CC metrics, review with CC Chairs.		10/1/2016	Changed to done!
	CC Chairs	Each CC fill in annual tabulated metric performance.	COMPLETE	5/1/2017	4/1/2017
	Policy TG Chair	Evaluate metric results.		3/1/2018	
	CC Chair & Policy TG Chair	Provide recommendations for changes to improve performance.	11/2017: ESCC- None	6/1/2018	
Goal #4: Expand ANS Awareness and Exte	rnal Outreach				
A. Use periodic survey methods to gain feedback from industry, federal and state agencies; provide feedback to survey responders	SB VChair	Submit draft of survey comment responses to SB Chair for approval.		8/1/2016	7/26/16
	SB Chair	Send responses to commenters.		10/1/2016	Done
	SB Chair	Determine survey frequency for future ANS and industry surveys.	1/25/17: Members recognized that the EC TG Chair position was open and no action has been taken.	10/1/2016	

	Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
В.	Establish periodic leadership meetings with regulatory agencies, owner's groups and industry executives to align needs, and build support for development and greater use	Chair External Communications TG	Discuss communications approach with each of the applicable organizations (industry, federal. and state agencies). Setup regular schedule for discussions.		11/1/2018	
		Chair External Communications TG	Develop and issue master SC external communications plan.		5/1/2017	
C.	Establish an ANS Professional Division sponsorship program to broaden input in setting standards priority	Chair Internal Communications TG	Issue plan and approach to each Professional Division and Technical Group as applicable and obtain indication of acceptance.	"Plan" was provided to liaisons. Confirmation pending	10/1/2016	
D.	Seek liaison arrangements with relevant SDOs, where needed, to improve efficiency, effectiveness and consistency of standards across the industry where overlapping or interlocutory standards arise	Chair External Communications TG	Prepare a liaison list identifying each desired liaison interface, the liaison approach, and the implementation status.	1/25/17: Members recognized that the EC TG Chair position was open and no action has been taken.	10/1/2016	3/1/2017
		Chair External Communications TG	Implement all liaisons on the Liaison Interface List.	1/25/17: Members recognized that the EC TG Chair position was open and no action has been taken	10/1/2016	
E.	Establish an approach to keep industry and trade groups advised of approved standards and in- progress standards in their areas of interest	Chair External Communications TG	Issue an Industry and Trade Group Interface Plan.	1/25/17: Members recognized that the EC TG Chair position was open and no action has been taken.	10/1/2016	
		Chair External Communications TG	Complete plan implementation.		6/1/2018	
F.	Identify key international organizations that can contribute to specific ANS standards development projects, including work group participation, review	Chair External Communications	Develop listing of key international organization, key contacts, and the desired interfaces we would like to		6/1/2017	

Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
of draft standards, and providing input into	TG	develop.			
standards prioritization.	Chair External Communications TG	Send invitation letter to each of the interface contacts. Follow-up as needed		10/1/2017	
	Chair External Communications TG	Provide completion report to SB.		10/1/2018	
 G. Establish a standards educational program for non-Standards Committee members to increase their knowledge of: 1. what consensus standards are, and are not; 	Chair External Communications TG	Develop presentation package.		6/1/2016	6/1/2016
 benefit of consensus standards to the industry; advantages to companies, federal and state agencies, and individuals of supporting standards development 	s to companies, federal and state ind individuals of supporting	Develop invitation list for indoctrination sessions.		8/1/2016	All ANS members
	Chair External Communications TG	Send indoctrination session invitations.		10/1/2016	sent via Jan 2017 N&D, member blast, and ANS home page.
	Chair External Communications TG	Conduct 1 st indoctrination session.		2/1/2017	1/31/2017
	Chair External Communications TG	Complete sessions.		11/1/2017	
 H. Contact leading nuclear companies to determine if they issue regular newsletters and offer to provide standards updates for inclusion. 	Chair External Communications TG	Develop list of companies and contacts.	1/25/17: Members recognized that the EC TG Chair position was open and no action has been taken.	11/1/2016	

Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
	Chair External Communications TG	Develop short form newsletter.	1/25/17: Members recognized that the EC TG Chair position was open and no action has been taken.	11/1/2016	
	Chair External Communications TG	Make contact with 30% and report to SB.	1/25/17: Members recognized that the EC TG Chair position was open and no action has been taken.	4/1/2017	
	Chair External Communications TG	Make contact with 100% and report to SB.		11/1/2017	
 Evaluate the cost effectiveness of a fee based training program for newly issued/ revised standards. 	SB VChair	Prepare draft evaluation plan.		8/1/2016	7/26/2106
	SB VChair	Meet with ANS Membership & Marketing Director and revise plan as appropriate.		8/3/2016	Several calls held; last one on 10/5/16.
	SB VChair	Complete evaluation and send report to SB Chair for discussion with BOD.		3/1/2017	Completed Jan 2017 – Recommende d ANS-2.8 & ANS-3.5 once approved.

	Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
(Goal #5: Improve Industry Representation a	and Sustainability	of Working Groups, Subcommittees, and Co	nsensus Committees		
	Approach owners' groups and industry organizations soliciting member participation in ANS standards	Standards Mgr	Send owners' groups semi-annual updates on applicable standards activities	Industry newsletter created and provided to Jim Riley as POC for utilities on 10/18/16. Industry newsletter posted <u>here</u> .	Ongoing	
		Standards Mgr	Request staffing assistance for select standards.	An updated list of volunteer needs was prepared and posted to the ANS website 8-11/16, announced in Sept. 2016 N&D and distributed through ANS Collaborate to PDs.	Ongoing	
А.	Send notices to ANS Student Section members, Young Member Group, Professional Division					
	members, and North American-Young Generation Nuclear members to provide opportunities to participate in ANS standards	Standards Mgr	Send notices biannually.	Broadcast sent to ANS Student Section 9/15/16.	Ongoing Biannually	
B.	Enhance the relationships with the ANS Professional Divisions and Technical Groups to assist in populating WGs with expert individuals.(See Goal #1)		.(See Goal #1)			
C.	Advertise upcoming standards efforts with requests for support using <i>Nuclear News</i> , Nuclear Café, and ANS Linked-In Group	Standards Mgr	Advertise upcoming standards efforts with requests for support using <i>Nuclear News</i> , Nuclear Café, and ANS Linked-In Group.	Volunteer needs section added to <i>Nuclear News</i> . List of volunteer needs updated and posted to web and announced in N&D.	Ongoing	
D.	ANS IT Department to complete the Standards Volunteer Database, and make it available to subcommittee and consensus committee chairs (See Goal #3)		(See Goal #3)			
E.	Monitor consensus committee and working group success in staffing and recruitment and share best practices across all consensus committees	SB VChair	Develop standard report and provide to CC Chairs.	1/25/17: Stamm confirmed that this action will be completed shortly.	6/11/17	6/11/17

Initiative	Assigned Responsibility (Functional Title)	Specific Action Items Needed to Accomplish the Initiative	Status/ Comments	Scheduled Completion Date	Actual Completion Date
		Changed to annual report based on performance data provided to the CC Chairs.		4/1/2018	Ongoing
	SB VChair	Evaluate results of CC reports at SB meeting		6/30/2018+ Ongoing	