

Standards Board (SB) Interim Virtual Meeting February 20, 2023

Attended	Voting Member Name	Role	Company
x	Amir Afzali	At-Large (2023)	Individual
x	Robert Becse	At-Large (2025)	Westinghouse Electric Company LLC
	Jennifer Call	At-Large (2024)	Tennessee Valley Authority
x	Donald "Don" Eggett	Chair (2023) At-Large (2023)	Eggett Consulting LLC
x	Michelle French	Ex-Officio	WECTEC
	Gale Hauck	Ex-Officio	Oak Ridge National Laboratory
x	Dennis Henneke	Ex-Officio	GE Hitachi
	Robert Kalantari	At-Large (2025)	Engineering Planning & Management, Inc.
x	Mark Linn	At-Large (2023)	Individual
	Jean-Francois "Jef" Lucchini	Ex-Officio	Los Alamos National Laboratory
	Charles "Chip" Martin	Ex-Officio	Longenecker and Associates
x	Carl Mazzola	At-Large (2023) Ex-Officio	Los Alamos National Laboratory
x	Mehdi Reisi-Fard	At-Large (2023)	U.S. Nuclear Regulatory Commission
	Andrew Smetana	Ex-Officio	Individual
x	Andrew Sowder	Vice Chair (2023) At-Large (2024)	Electric Power Research Institute
x	Larry Wetzel	Ex-Officio	BWX Technologies, Inc.
10	10/16 Votes = 62.5% Participation		
Attended	Nonvoting Member Name	Role	Company
x	Steven Arndt	ANS President	Oak Ridge National Laboratory
x	Robert Budnitz	Observer	Lawrence Berkeley National Laboratory (retired)
x	George Flanagan	Observer	Individual
x	Peter Hastings	Guest	Kairos Power
x	Matthew Hertel	Guest	X-energy
x	N. Prasad Kadambi	RP3C Chair/Observer	Kadambi Engineering Consultants

1. Welcome and Roll Call

Members, observers, and guests were welcomed, and roll call was taken. A quorum was established. No objections were voiced to record the meeting and provide a password, protected link to members upon their request to view the presentations.

2. Approval of Agenda

The agenda was approved with the flexibility to move agenda items around to accommodate schedules.

3. Advanced Reactor Developer Presentations

A. Kairos Power

Peter Hastings presented the embedded presentation.



Kairos Power Feb
2023.pdf

When questioned, Hastings explained that Kairos is working very fast. Needs are measured in weeks, not years. There would be no way for a standard to be developed in time to meet these needs. Kairos does have a need for materials data but is working on this now. The following standardization suggestions were provided:

- development of a standard similar to ANSI/ANS-15.8-1995 (R2018), *Quality Assurance Program Requirements for Research Reactors*, for advanced reactors to simplify methods
- standardizing the licensing effort
- follow legislation for standardization ideas
- harmonize internationally

Hastings expressed interest in brainstorming ways for standards development organizations (SDOs) and developers to collaborate. Andrew Sowder added that one of the North American Advanced Reactor Roadmap's (NAARR) purposes is to bring developers and SDOs together. This latter initiative was a "fallout" from the ANS Standards Board 2021 approved initiative to form a Nuclear Standards Collaborative (NSC) SDO-led Group with support from Nuclear Energy Institute (NEI) and Electric Power Research Institute (EPRI) and engagement from developers and industry stakeholders.

ACTION 2/2023-01: Don Eggett to follow up with Peter Hastings to brainstorm ways for SDOs and developers to collaborate.

DUE DATE: June 1, 2023

B. GE Hitachi

Dennis Henneke presented the embedded presentation.



GEH-SMR-2023-Henneke.pdf

Following the presentation, Robert Budnitz commented that ANS should not develop standards that apply to one specific developer although he acknowledged that historically ANS developed standards for boiling water reactors that were built by only one vendor.

C. X-Energy

Matthew Hertel presented the embedded presentation. He focused on slides 4, 12, 16, 19, 21, 26, 33-35, 38, and 48.



Xe-100 Overview - 2023.pdf

The following suggestions were made on possible standardization needs:

- a standard that describes control function with operator oversight
- standards on spent fuel storage and transportation
- standards for new material
- performance-based emergency planning for advanced reactors

4. SMART Matrix Review



SMART_MATRIX_Up
date_1-27-23.xlsx

See the SMART Matrix embedded for reference. Credit was given to Steven Stamm for developing the SMART Matrix to provide measurable actions. The SMART Matrix is a living document. A new column was added to the matrix to archive comments and status. Completed actions have been crossed out and changes have been made using green font. The name of a responsible individual was added to Column B. Eggett confirmed that he is moving forward with forming the Executive Advisory Committee (EAC). An invite letter and charter have been drafted. Eggett sent the draft charter to Sowder for review.

ACTION 2/2023-02: Andrew Sowder to review the EAC draft charter and provide comments to Don Eggett.
DUE DATE: March 1, 2023

Sowder sees the NAARR playing into the SMART Matrix and a need to ensure efforts are not duplicated. The draft NAARR was recently released for comment. Consensus committee chairs will be provided the draft NAARR for comment. Eggett recommended any comments received should support a March 10, 2023, date, the date members of the NAARR Advisory Committee have been asked to provide comments. The SMART Matrix will be issued to the full Standards Board for review and comment.

ACTION 2/2023-03: Pat Schroeder to provide consensus committee chairs the draft North American Advanced Reactor Roadmap for review and comment with a deadline of March 6, 2023, a few days before the comment due date to NEI/EPRI.
DUE DATE: March 6, 2023

ACTION 2/2023-04: Pat Schroeder to issue the SMART Matrix to the full Standards Board for their feedback with a due date of May 1, 2023.
DUE DATE: May 1, 2023

15. Other Business (as time permits)

- Comment responses and the revised draft of ANS-GS-30.1, *Integrating Risk and Performance Objectives into New Reactor Nuclear Safety Designs*, should be to commenters by the end of the month (February)¹.
- The ANS/ASME Joint Committee on Nuclear Risk Management will hold a 4-day meeting at the end of February/March in Albuquerque, New Mexico.
- Recap of 12/1/22 NEI/EPRI/SDO Advanced Reactor C&S Workshop and Status of Activities
This topic was not discussed to any detail as highlights of current progress was provided during the Q & A sessions following the presentations.
- Status of the Risk-informed, Performance-based Principles and Policy Committee (RP3C) Guidance Document Training
Not discussed.

6. Review of Action Items from This Meeting

Action items captured during the meeting were reviewed.

7. Future Meetings

Future meeting dates are provided below for reference:

¹ Comment responses and the revised draft were issued to comments on 3/15/23.

- ANS Annual Meeting in Indianapolis, Indiana, at the Marriott Indianapolis Downtown from June 11-14, 2023
- ANS Winter Meeting in Washington, D.C., at the Washington Hilton from November 5-8, 2023

8. Adjournment

The meeting was adjourned.