AGENDA

**Remote Option to Physical Meeting via ZOOM:**

[**https://us02web.zoom.us/j/89023227537?pwd=RxRykIavuDMuB9oWBqACELXzYRRm7r.1**](https://us02web.zoom.us/j/89023227537?pwd=RxRykIavuDMuB9oWBqACELXzYRRm7r.1)

**Meeting ID: 890 2322 7537 / Passcode: 012306 / Dial in: + 1(309)205-3325 US**

# Research and Advanced Reactors Consensus Committee (RARCC) Hybrid Meeting

## June 18, 2025

## 3:00 p.m. – 5:00 p.m. CENTRAL (Local time in Chicago)

**Chicago Marriott Downtown**

**ROOM: McHenry (3rd Floor)**

**[Meeting Room Floor Plans](https://www.marriott.com/en-us/hotels/chidt-chicago-marriott-downtown-magnificent-mile/events/)**

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| **Time** | **Subject** | **Discussion**  **Lead** |
| 3:00–3:04 | 1. **Welcome, Roll Call & Introductions** | G. Hauck |
| 3:04–3:05 | 1. **Approval of Agenda** | G. Hauck |
| 3:05–3:20 | 1. **RARCC Chair Report** 2. RARCC Chair Report to the Standards Board (Report embedded)      * Highlight of significant activities * Membership changes * Volunteer staffing needs  1. Standards Board Items  * The Standards Board approved [ANS Standards Committee Strategic Plan](https://www.ans.org/file/18417/SC_StrategicPlan_2025-2030__App%27d_11-19-24.pdf) (2025-2030) * Update on the reorganization of the Research and Advanced Reactor Consensus Committee (RARCC) and the Large Light Water Reactor Consensus Committee (LLWRCC) * Update on the formation of a committee dedicated to artificial intelligence  1. Recognition of Recent Standards Actions Completed Since November 2024 Meeting  * ANS-15.11-202x, *Radiation Protection & Research Reactors* (revision of ANSI/ANS-15.11-2016; R2021)—PINS submitted to ANSI 2/28/2025 * ANSI/ANS-15.16-2015 (R2024), Emergency Planning for Research Reactors (reaffirmation)—approved 12/4/2024 * ANS-20.3-202x, *Standard for Oxygen Concentration Measurement in Molten Salt by Inert Gas Fusion Analysis* (new standard)—PINS submitted to ANSI 5/30/25 * ANS-31.1-202x, *Standard for Testing and Facilities for Space Nuclear Power and Propulsion Reactors* (new standard)—PINS submitted to ANSI 4/8/25 * ANSI/ANS-54.1-2020 (R2025), Nuclear Safety Criteria and Design Process for Sodium Fast Reactor Nuclear Power Plant (reaffirmation)—approved 4/15/2025  1. Other Remarks | G. Hauck |
| 3:20-3:25  3:25-3:50 | 1. **Delinquent Standards & Maintenance Actions**   The RARCC has 0 delinquent standards! The following standards are due for maintenance within the next year:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Designation** | **Title** | **Working Group Chair** | **ANSI Approval** | **Action Needed By** | | ANS-15.2-1999 (R2021) | Quality Control for Plate-Type Uranium-Aluminum Fuel Elements | B. Curnutt | 1/28/21 | Maintenance to be completed by 1/28/26 | | ANS-15.4-2016 (R2021) | Selection and Training of Personnel for Research Reactors | J. Jenkins | 7/23/2021 | Maintenance to be completed by 1/28/26 | | ANS-53.1-2011 (R2021) | Nuclear Safety Design Process for Modular Helium-Cooled Reactor Plants | J. August | 10/7/21 | Maintenance to be completed by 10/7/26 |  1. **Open Ballots and/or Comment Resolution**  * ANS-GS-30.1-202x, *Integrating Risk and Performance Objectives into New Reactor Nuclear Safety Designs* (new guidance standard)—SubC: J. Andrus / WGC: Mark Linn   Ballot status: The ballot closed 10/10/2024 with 12 affirmative, 8 negative, 3 abstain, and 3 non responses. Comment responses were issued 2/24/2025 resulting in the upgrade of 2 negative votes to affirmative. Approval is as follows:  14/26 affirmative = 53.85% (w/o removing abstentions)  14/23 affirmative = 60.87% (w/abstentions removed)  Two-thirds (66.67%) approval is the minimum that requires consensus to be declared; however, procedures permit consideration of approvals between 51%-66% to declare consensus. When all compromise efforts have been exhausted, a decision on the next step will need to be made. If moving forward, a reconsideration ballot is needed. This reconsideration ballot provides all members the objectors’ comments and the opportunity to change their vote. A decision to seek approval of the Standards Board is made on the final ballot tally.   * ANS-54.8-202x, *Liquid Metal Fire Protection in LMR Plants* (new standard/resurrection of ANS-54.8-1988)—SubC: J. Andrus / WGC: M. Bucknor   Ballot status: The RARCC ballot for Step 1 (minor update) was issued 5/21/25 and is scheduled to close 6/20/25. The minor update will retain the original title. The next revision (full update using RIPB) will be titled *Liquid Metal Fire Protection* ([LINK to Ballot](https://collaborate.ans.org/higherlogic/ws/groups/29c7aef9-f4c7-473a-85d9-4c3a97b9c8fc/ballots/ballot?id=1783)). | G. Hauck  J. Andrus  M. Linn  M. Bucknor |
| 3:50-4:10  4:10-4:20 | 1. **Current Issues and Needed Actions** 2. Prioritization of Standards Projects 3. Potential New Standards  * Standard on defense in depth (Added per Action Item 06/2024-09) * Other new standards  1. Other Current Issues 2. **Status of Action Items**   (Action Item Report embedded) | G. Hauck  G. Hauck/  P.Schroeder/  K. Murdoch |
| 4:20-4:40 | 1. **Subcommittee Activities Not Addressed Under Other Topics**   (RARCC Standards & Projects Status Report embedded)     1. Status of drafts in development (open PINS forms) 2. Operation of Research Reactor Reactors Subcommittee  * ANS-1, *Conduct of Critical Experiments* (revision)—WGC: David Hayes   STATUS: David Hayes took over as working group chair in October 2023.   * ANS-15.8, *Quality Assurance Program Requirements for Research Reactors* (revision)---WGC: Michelle Dudley   STATUS: Group reformed; draft in development. May need new PINS.  ANS-15.11, Radiation Protection at Research Reactors (revision)—WGC: Steven Reese  STATUS: Draft issued to SubC/NDCC. Several comments and two negative votes from the subcommittee are being addressed.   * ANS-15.22, *Classification of Structures, Systems and Components for Research Reactors* (proposed new standard)—WGC: Andrew Smolinski   STATUS: Andrew Smolinski took over as working group chair 10/3/24. Consideration may be given to the possibility of incorporating in ANS-15.8.   1. Advanced Initiatives Subcommittee/Coordination of Standards in Development  * ANS-20.3, Standard for Oxygen Concentration Measurement in Molten Salt by Inert Gas Fusion Analysis (proposed new standard)—WGC: Amanda Leong   STATUS: PINS approved and submitted to ANSI 5/30/25.   * ANS-GS-30.1, *Integrating Risk and Performance Objectives into New Reactor Nuclear Safety Designs* (proposed new guidance standard)—WGC: Mark Linn   STATUS: Converted to guidance standard (GS) at the direction of the Standards Board. Draft issued to RARCC for ballot recognizing NDCC maintained objection. Ballot closed 10/10/24 with 12 affirmative, 8 negative, 3 abstain votes. Comments being resolved.   * ANS-30.2, *Categorization and Classification of Structures, Systems, and Components for New Nuclear Power Plants* (proposed new standard)—WGC: Mihai Diaconeasa   STATUS: The working group is meeting regularly. Although the draft is 90% complete, the estimate for WG approval of the draft is June 2026 to resolve a few technical ambiguities related to the differences between 10 Part 50.69, RG 1.201, NEI 18-04, and 10 CFR Part 53. In parallel, the WG has kick-started a preliminary piloting effort of the standard on the MHTGR plant to identify potential gaps in our approach.   * ANS-31.1, Standard for Testing and Facilities for Space Nuclear Power and Propulsion Reactors (proposed new standard)—WGC: Joe Halackna   STATUS: PINS submitted to ANSI 4/8/25.   * ANS-53.1, *Nuclear Safety Design Process for Modular Helium-Cooled Reactor Plants* (revision)—WGC: James August   STATUS: The working group is meeting bi-weekly. Draft anticipated to be completed by end of 2025.  ANS-54.8, *Liquid Metal Fire Protection* (new standard, revision of withdrawn standard ANS-54.8-1988)—WGC: M. Bucknor  STATUS: PINS submitted to ANSI 6/12/24. The working group will revise ANS-54.8 in a 2-step process. The first step will be a minor revision so that a current version is available for use. The second step will be a more thorough revision with RIPB methods. The draft for step 1 was issued to the RARCC for approval with a close date of 6/20/2025.   1. Other subcommittee issues, concerns, and needs | T. Newton/  J. Andrus  T. Newton  J. Andrus  J. Andrus/  T. Newton |
| 4:40-4:57 | 1. **Other Business** | All |
| 4:57-4:58 | 1. **Next Meeting**   Potential RARCC meetings at upcoming ANS meetings:   * 2025 ANS Winter Conference and Expo in Washington, D.C., at the   Washington Hilton, November 9–12, 2025   * 2026 ANS Annual Conference in Denver, Colorado, at the Sheraton Denver,   May 31-June 3, 2026 | G. Hauck |
| 4:58-5:00 | 1. **Review of Action Items from this Meeting** | K. Murdoch / P. Schroeder |
| 5:00 | 1. **Adjournment** | G. Hauck |