

## PUBLIC MEETING ANNOUNCEMENT

**Title:** NRC/Industry Advanced Reactor Materials Technical Exchange Public Meeting

**Date(s) and Time(s):** October 29, 2025, 09:00 AM to 05:00 PM ET

**Location:** NRC Headquarters  
11555 Rockville Pike  
Rockville, MD

**Category:** This is an Observation Meeting. This is a meeting in which attendees will have an opportunity to observe the NRC performing its regulatory function or discussing regulatory issues. Attendees will have an opportunity to ask questions of the NRC staff or make comments about the issues discussed following the business portion of the meeting; however, the NRC is not actively soliciting comments towards regulatory decisions at this meeting.

**Purpose:** The purpose of this technical exchange is to share information and discuss structural materials in advanced reactors topics such as material qualification, through-life design parameters, construction rules, materials management programs and the licensing process with the nuclear industry. This meeting will be a hybrid meeting and use Microsoft Teams

**Contact:** Meg Audrain                      Ryann Bass  
301-415-2133                      301-415-0206  
[margaret.audrain@nrc.gov](mailto:margaret.audrain@nrc.gov)                      [Ryann.Bass@nrc.gov](mailto:Ryann.Bass@nrc.gov)

**Participants:** NRC  
Office of Nuclear Reactor Regulation  
Office of Nuclear Regulatory Research

**Comments:** Registration for this technical exchange (in-person or virtual attendance) is available at <https://forms.office.com/g/5kJe60gHGT>. Please register if you plan to attend in person by September 15.

Please note the following changes to visitor access to the NRC:

Mandatory Pre-registration for non-federal employee visitors: Effective September 1, 2025, NRC sponsors must pre-register all visitors who do not have PIV cards (and/or who need parking). Security Officers will not be able to register visitors upon arrival.

If you need a reasonable accommodation due to a disability to participate in this meeting or need meeting materials in another format (e.g. braille, large print), please email [Reasonable\\_Accommodations.Resource@nrc.gov](mailto:Reasonable_Accommodations.Resource@nrc.gov). Determinations on requests for reasonable accommodation will be made on a case-by-case basis and the agency may choose between which effective accommodations to provide. At least ten (10) days advance notice is recommended in order for a request to be processed and implemented if approved. However, every effort will be made to address any reasonable accommodations requests received with less notice.

If you have difficulty understanding and/or communicating in English, free language assistance or other aids and services may be available, upon request. Please email [lepresources@nrc.gov](mailto:lepresources@nrc.gov). Determinations on requests will be made on a case-by-case basis. At least ten (10) days advance notice is recommended in order for a request to be processed and implemented if approved. However, every effort will be made to address any reasonable accommodations requests received with less notice.

# PUBLIC MEETING AGENDA

## NRC/Industry Advanced Reactor Materials Technical Exchange Public Meeting

October 29, 2025, 09:00 AM to 05:00 PM ET

NRC Headquarters  
11555 Rockville Pike  
Rockville, MD

TENTATIVE AGENDA	
Time	Topic
<b>Wednesday, Oct 29</b>	
9:00	Introductions/Opening Remarks Presentation (NRC) <ul style="list-style-type: none"><li>Define the objective of this effort: to identify technical issues and explore potential solutions for resolving them.</li><li>Establish the format of this effort: perspectives will be presented by the NRC and industry through presentations, followed by open technical discussions for all attendees to participate in.</li></ul>
9:05	Deployment Overview Session objective: Open discussion on the stages of deployment. Presentation (NRC) <ul style="list-style-type: none"><li>NRC perspective on the stages of deployment:<ul style="list-style-type: none"><li>Test package requirements to qualify a new material into the Code</li><li>End of life properties and environmental supplemental testing to support design and verification</li><li>Construction rules (nuclear codes, non-nuclear codes and non-codified materials)</li><li>Reliability and Integrity Management (RIM)/Monitoring and maintenance examinations (MANDE)</li></ul></li></ul> Open discussion
10:35	Break
10:50	Data Package for Material Qualification Session objective: Discussion on purposes of developing data packages and Code qualification. <b>Metallurgy: American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section III, Division 5 (HLS), Nonmandatory Appendix HBB-Y for Class A components and ASME BPVC Section II, Part D Mandatory Appendix 5</b> Open discussion via survey <ul style="list-style-type: none"><li>Industry use of Nonmandatory Appendix HBB-Y.</li><li>Industry challenges with these appendices in the Code as written and solutions for improvement.</li></ul> <b>Graphite</b> Open discussion via survey <ul style="list-style-type: none"><li>Industry's implementation of the Code requirements for the material data sheet.</li><li>Industry challenges with the Code as written and solutions for improvement.</li></ul>
12:30	Lunch
1:30	Through-Life Design Parameters Session objective: Discussion on how end-of-life properties are determined and can be incorporated into III.5 design and design check. Open discussion via survey <ul style="list-style-type: none"><li>Industry perspective on the determination of end-of-life properties and their incorporation into III.5 design and design check.</li></ul>
3:00	Break
3:15	Construction Rules (including design parameters and allowances) Session objective: Overview of ongoing nuclear codes and standards work, including utilization of Class B rules. Discussion on the content of non-nuclear codes and standards and leveraging them for reactor deployment. <b>Commercial/ non-nuclear codes</b> Presentation (NRC) <ul style="list-style-type: none"><li>NRC perspective on non-nuclear construction rules and non-codified materials (e.g., Section VIII).</li></ul> Presentation (Mark Messner) <ul style="list-style-type: none"><li>NRC Office of Nuclear Regulatory Research issued reports on the use of ASME Section VII design rules</li></ul> Open discussion via survey <ul style="list-style-type: none"><li>Industry perspective on using commercial/ non-nuclear codes for safety-related and non-safety related with special treatment components.</li></ul> <b>Nuclear Codes</b> Open discussion via survey <ul style="list-style-type: none"><li>Industry perspective on Class B? Does industry plan to implement these rules? Why or why not? Is Class B needed?</li><li>Status of the ASME BPVC Section III Task Group to Investigate Creation of Division 6.</li></ul>
4:30	Accelerating the Code process Session objective: Discussion on strategies to enable faster Code processes and NRC approval Presentation (NRC) <ul style="list-style-type: none"><li>Accelerating NRC processes to accept approved Code actions.</li></ul> Open discussion via survey <ul style="list-style-type: none"><li>Methods for accelerating material qualification such as staged qualification.</li><li>Methods for accelerating Code development such as the use of Code Cases.</li><li>Optimizing safety classification and the use of Class B.</li></ul>
<b>Thursday, Oct 30</b>	
9:00	Materials Management Programs Session objective: Discussion on materials management and operational programs throughout the life of the facility. Presentation (NRC) <ul style="list-style-type: none"><li>NRC perspective on what needs to be surveilled and associated challenges.</li></ul> Presentation (Mark Messner) <ul style="list-style-type: none"><li>Development of surveillance test articles for materials degradation management</li></ul> Open discussion via survey <ul style="list-style-type: none"><li>Industry perspectives on the development, implementation, and challenges of materials surveillance programs.</li></ul> Presentation (Tom Roberts) <ul style="list-style-type: none"><li>ASME Section XI, Division 2: Requirements for RIM Programs for Nuclear Reactor Facilities</li></ul> Presentation (Ablene Christian University) <ul style="list-style-type: none"><li>To be determined</li></ul> Presentation (Robert (Bob) Youngblood) <ul style="list-style-type: none"><li>Reliability Target Allocation</li></ul> Open discussion via survey <ul style="list-style-type: none"><li>RIM/MANDE/MANDE technology development<ul style="list-style-type: none"><li>Operational challenges with:<ul style="list-style-type: none"><li>Degradation mechanism assessment</li><li>Test plan</li><li>Focus on reliability targets</li></ul></li><li>Safety related/non-safety related with special treatment versus asset management in RIM program scope</li><li>Allocation of reliability targets</li><li>Approaches other than RIM.</li></ul></li></ul>
12:00	Lunch
1:00	Licensing Process Session objective: Discussion on licensing lessons learned, content of applications and treatment of structures, systems, and components (SSCs) using the Licensing Modernization Project (LMP) methodology. Presentation (NRC) <ul style="list-style-type: none"><li>Licensing lessons learned<ul style="list-style-type: none"><li>Content of application</li><li>Treatment of SSCs using the LMP methodology</li></ul></li></ul> Open discussion via survey <i>Licensing lessons learned</i> <ul style="list-style-type: none"><li>Industry perspective</li></ul> <i>Content of application</i> <ul style="list-style-type: none"><li>Information necessary at different application stages (pre-application, construction permit, operating license, combined license).</li><li>Industry perspective on the licensing process and review expectations.</li></ul> <i>Treatment of SSCs using LMP</i> <ul style="list-style-type: none"><li>Industry perspectives on determination of appropriate construction Code based on SSC classification.</li><li>Application of probability risk assessment (PRA) to passive SSCs.</li><li>Class A versus Class B and how it fits into the LMP.</li></ul>

ADAMS Accession Number: ML25273A255

Distribution:

OFFICIAL RECORD COPY

Link to meeting details: <https://www.nrc.gov/pmns/mtg?do=details&Code=20251038>