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# **Strategic Vision for Advanced Reactor Standards Workshop**

**May 2, 2018**

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ANS Standards Board Chair





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**A special thanks to  
representatives of  
standards  
development  
organizations (SDO)  
and the NEI  
Technology Working  
Groups (TWGs).**



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**Welcome &  
Introductions**



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## Meeting Logistics

- The morning session from now until 10:30 a.m. EDT will be in these rooms.
- The breakout sessions will begin at 10:45 a.m. EDT in rooms
  - High Temperature TWG: 1C03
  - Fast Reactor TWG: 2A39
  - Molten Salt Reactor TWG: 1C05
- We will reassemble in this room at 2:45 p.m. EDT for breakout group reports and discussion.
- The first floor is public, but you need a NRC escort to get to the Fast Reactor TWG breakout room on the second floor.
- There are a number of NRC staff that are part of the workshop. If you have any questions about the logistics or the building, please ask one of them.



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## Meeting Logistics—webinar

- About 40 individuals are expected to participate by webinar and/or teleconference.
- Webinar participants will be on mute during the presentations and are asked to use the chat feature for questions.
- Access to participate in the breakout sessions has been arranged by teleconference with no restrictions.



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## Background, Purpose & Goal

- Need for this workshop identified at NRC Standards Forum held September 26, 2017.
- Platform provides designers, vendors, owners, regulators, and representatives of standards development organizations (SDOs) to discuss standards needs to support advanced reactors.
- Goal set to develop a strategic vision for a path forward and priorities for development of standards across all SDOs.
- Today is the first step.



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## Workshop Agenda

Time (EDT)	Agenda Item
8:30 a.m.	Introductions
9:00 a.m. to 10:30 a.m.	Presentations of Needs by Nuclear Energy Institute (NEI) Technology Working Groups <ul style="list-style-type: none"> <li>High Temperature Reactors</li> <li>Fast Reactors</li> <li>Molten Salt Reactors</li> </ul>
10:30 a.m. to 10:45 a.m.	Break
10:45 a.m. to 12:00 p.m.	Breakout Sessions (by Technology)
12:00 p.m. to 1:00 p.m.	Lunch – On Your Own
1:00 p.m. to 2:00 p.m.	Breakout Sessions (Cont'd)
2:00 p.m. to 2:30 p.m.	Breakout Session Summary Preparation
2:30 p.m. to 2:45 p.m.	Break
2:45 p.m. to 4:00 p.m.	Presentations on Breakout Session Results
4:00 p.m. to 4:30 p.m.	Meeting Summary and Actions
4:30 p.m.	Adjournment



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## Breakout Questions for Each Technology Group

- 1) For your technology, what would you say is the current status of standards to support the development, design, and licensing of advanced reactors? Are most of the needed standards available up to date? Do they cover the issues that have the most significant impact on the design? On the schedule?
- 2) List the five most current important standards (from any SDO) to your area that are in need of updating to support development, design, and licensing. Why are they your top five?
- 3) List the five most important technical areas that need standards development (where they currently don't have standards). Why are they your top five?
- 4) Provide some prioritization of the two lists, both in overall need (must have to move forward) and in timing (need by a certain date). If possible, provide insights as to why the standard has priority and what aspect of the issues are driving the priority.
- 5a) What cross-cutting issues do you believe need to be included in the development of new standards for advanced reactors or the updating of current standards? These could include analysis methods (like probabilistic risk assessment, thermal hydraulics, human factors, etc.) or other cross-cutting issues like staffing, emergency management, advanced instrumentation and control, security, etc.
- 5b) Is there a preference across the advanced reactor industry that future advanced reactor standards be more performance based and use high-level, risk-informed principles compared to current standards? What should drive this decision?

Question responses to be summarized and presented to group under "Breakout Session Results" scheduled from 2:45 p.m. – 4:00 p.m. EDT.



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## NEI Technology Working Group Presentations

NEI Technology Working Groups (TWGs) will provide a short summary of their technology including any design features outside current LWR technology that make current standards not applicable. Each TWG has been asked to provide their standards needs with priorities.

Presenters include the following:

- High Temperature TWG—Matt Miller
- Fast Reactor TWG—Jacob DeWitte
- Molten Salt Reactor TWG—Jason Redd



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## Teleconference Details for Breakout Sessions

Parallel Breakout Sessions (10:45 a.m. to 2:30 p.m. EDT)	Teleconference Details
High Temperature Reactors Breakout Session Teleconference	Call in #: 888-324-7512 Participant passcode: 61172
Fast Reactors Breakout Session Teleconference	Call in #: 888-469-1550 Participant passcode: 22236
Molten Salt Reactors Breakout Session Teleconference	Call in #: 877-918-1353 Participant passcode: 31015



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## Results and Actions

- Most important technical areas that need standards development?
- Cross-cutting issues?
- Need for High-level, risk-informed principles?
- Do we need follow up workshops to refine recommendations?
- How do we best communicate recommendations to SDOs and other stakeholders?



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# Questions?

