

PUBLIC MEETING ANNOUNCEMENT

Title: Sixth Annual Artificial Intelligence Workshop - AI on the Horizon: Aligning Progress with Purpose

Date(s) and Time(s): September 24, 2025, 09:00 AM to 05:00 PM ET

Location: Hybrid, TWFN Auditorium

Category: This is an Information Meeting with a Question and Answer Session. The purpose of this meeting is for the NRC staff to meet directly with individuals to discuss regulatory and technical issues. Attendees will have an opportunity to ask questions of the NRC staff or make comments about the issues discussed throughout the meeting; however, the NRC is not actively soliciting comments towards regulatory decisions at this meeting.

Purpose: The sixth workshop in the Artificial Intelligence Workshop series, AI on the Horizon: Aligning Progress with Purpose, will offer NRC staff and stakeholders a forum to explore advancements in AI technologies and their intersection with nuclear safety and regulation. This year's workshop will feature updates on the AI Project Plan, insights into the agency's internal use of AI, and presentations from industry leaders and academic experts on the development and application of AI in nuclear contexts. Building on the foundation established in prior workshops, this meeting will continue the dialogue around regulatory and technical considerations for AI use in nuclear applications. The workshop aims to support shared understanding and solicit feedback to inform future regulatory approaches as AI continues to evolve within the nuclear landscape

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Participants: NRC
NRC Staff

Webinar: Interested members of the public can participate in this meeting via Webinar.
For details, please call the NRC meeting contact.

Comments: Registration for the workshop (in-person or virtual attendance) will be available on the workshop webpage: <https://www.nrc.gov/public-involve/conference-symposia/data-science-ai-reg-workshops.html>. The agenda for the workshop can be found on the workshop webpage at a later date. For additional details, email NRCAIWorkshop@nrc.gov or call the NRC's toll-free number, 1-800-368-5642, and ask the operator to be connected to the meeting contact, Taylor Lamb. Slides will be made available online at the workshop webpage: <https://www.nrc.gov/public-involve/conference-symposia/data-science-ai-reg-workshops.html>. NRC will not provide

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. 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. 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.

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<i>Time</i>	<i>Topic</i>	<i>Speaker</i>
9:00 - 9:15 a.m.	Workshop Orientation and Opening Remarks	Andrey Korsack (NRC) Russ Felts (NRC)
9:15 - 9:45 a.m.	Fireside Chat with NRC Chairman and NEI President/CEO	Vic Hall (Moderator, NRC) Chairman David Wright (NRC) Maria Korsnick (NEI)
9:45 - 10:00 a.m.	AI for Power Uprates	Tony Nakanishi (NRC)
10:00 - 10:15 a.m.	NEI Update on the State of Industry Use of AI	Jim Slider (NEI)
10:15 - 10:30 a.m.	International RegLab Project	Faiza Sefta (NEA) David Smeatham (Ennuvo)
10:30 - 10:45 a.m.	Break	
10:45 - 11:00 a.m.	OECD/NEA Benchmark on Artificial Intelligence and Machine Learning for Critical Heat Flux Predictions – Summary of Phase 1 Results	Jean-Marie Le Corre (Westinghouse)
11:00 - 11:15 a.m.	Advancing NRC Event Analysis: Machine Learning Approaches for Classification of Human Performance-Related Events in Licensee Event Reports	Matt Homiack (NRC)
11:15 - 11:30 a.m.	AI Regulatory Gaps Working Group	Matt Dennis (NRC)
11:30 - 11:45 a.m.	AI Tabletop Research Project: Preliminary Safety Analysis and Evaluation of Machine Learning-Based Condition Monitoring	Rick Vilim (ANL) Art Munson (SNL) Matt Dennis (NRC)
11:45 a.m. - 1:00 p.m.	Lunch	
1:00 - 1:15 p.m.	AI-Powered Permit Application Builder	Ann Miracle (PNNL)
1:15 - 1:30 p.m.	Accelerating Nuclear Licensing with AI: Insights from INL & Microsoft's collaboration	Nelli Babayan (Microsoft) Peter Suyderhoud (INL)
1:30 - 1:45 p.m.	Dual-Role Agents for Improved Physical Security Design	Nathan Shoman (SNL)
1:45 - 2:00 p.m.	Autonomous Operation of Advanced Reactors	Vivek Agarwal (INL)
2:00 - 2:30 p.m.	Increasing NRC's AI Maturity and Internal NRC AI Activities	Scott Flanders, Chief AI Officer (NRC) Basia Sall, Chief Data Officer (NRC)
2:30 - 2:45 p.m.	Break	
2:45 - 3:00 p.m.	How AI is Transforming 50.59 Applicability, Licensing, and Engineering Documentation in Nuclear	Brad Fox (Nuclear)
3:00 - 3:15 p.m.	Sustainable AI for Nuclear: Operationalizing AI Governance for Auditability and Regulatory Trust	Pravallika Devineni (Duke Energy)
3:15 - 3:30 p.m.	From Buzzword to Bottom Line: Bridging the AI Implementation Divide	Andrew Miller (Jenson Hughes)
3:30 - 4:00 p.m.	AI Flash Talks	
	AI, Talent Intelligence, and Strategic Foresight — The UAE's Blueprint for the Next-Generation Nuclear Workforce	Shaima Al Mansoori (FANR), Virtual
	Building an AI Platform for Nuclear Research and Education (Alxpertise)	Oliver Buss (OECD), Virtual
	Artificial Intelligence Guardrails for Human Use: Important Implications for the High Safety Consequence Industries like the Nuclear Industry	Mica Endsley (S.A. Technologies), Virtual
	Evaluation of Automated Data Analysis Systems for In-Service Inspections in Nuclear Power Plants	Muthu Elen (PNNL), Virtual
	On-line monitoring coupled with AI for automated process control and real-time MC&A	Amanda Lines (PNNL), Virtual
4:00 - 5:00 p.m.	Open Discussion and Closing Remarks	

ADAMS Accession Number: ML25255A027

Office	RES
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Link to meeting details: <https://www.nrc.gov/pmns/mtg?do=details&Code=20250993>