UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 29, 2024

ALL AGREEMENT STATES
CONNECTICUT, INDIANA, WEST VIRGINIA

NOTIFICATION OF THE U.S NUCLEAR REGULATORY COMMISSION SECY-24-0035, "ADVANCING THE USE OF ARTIFICIAL INTELLIGENCE AT THE U.S. NUCLEAR REGULATORY COMMISSION" (STC-24-029)

Purpose: To inform the States that the U.S Nuclear Regulatory Commission (NRC) has published SECY-24-0035, "Advancing the use of artificial intelligence at the U.S. Nuclear Regulatory Commission."

Background: In a memorandum dated October 30, 2023, the Chair directed the NRC staff to identify how artificial intelligence (AI) could streamline operations, optimize processes, and make well-informed decisions (Agencywide Documents Access and Management System (ADAMS) ML23303A143). The Executive Director for Operations (EDO) established a team (NRC AI Team) from several offices around the agency.

The staff developed a plan to engage the agency in developing AI uses as the first step of adoption. The NRC AI Team challenged the agency to think creatively and suggest use cases that would use AI to approach the agency's processes and procedures in new ways. The NRC AI Team then completed a review of all the cases to determine viability.

Discussion: SECY-24-0035, "Advancing the use of artificial intelligence at the U.S. Nuclear Regulatory Commission," summarizes potential AI applications and the staff's overall approach to effectively leverage AI to drive value for the agency and enhance how it meets its mission (ML24086A001). This paper offers a vision of how the NRC will continue to innovate and responsibly use the latest advances in AI technology to meet its safety and security mission.

The NRC staff used a structured approach to identify potential use cases and the necessary components to effectively implement AI. The staff has identified several potential use cases where AI can improve organizational efficiency and provide better experiences and services for agency stakeholders. Specifically, 23 NRC offices developed 61 potential use cases. From these 61 potential use cases, the staff identified 36 use cases that align with the capabilities of current AI tools, while the remaining 25 could be addressed using non-AI solutions.

The paper highlights two strategic next steps identified by NRC staff to best position the agency for sustainable success:

1. Develop an enterprise-wide AI strategy to advance the use of AI within the agency.
2. Invest in foundational tools to advance the use of AI by acquiring generative AI5 services that integrate with current applications and integrating the use of AI with the ADAMS cognitive search technology.

If you have any questions regarding this correspondence, please contact the individual listed below:

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Sincerely,


Signed by Giantelli, Adelaide
on 05/29/24

Adelaide Giantelli, Branch Chief
State Agreement and Liaison Programs
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and Tribal Programs
Office of Nuclear Material Safety
and Safeguards

STC-24-029 Notification of the NRC SECY-24-0035, "Advancing the Use of Artificial Intelligence at the U. S. Nuclear Regulatory Commission." DATE May 29, 2024

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