U.S.NRC
United States Nuclear Regulatory Commission
*Protecting People and the Environment*

# THE VENDOR TIMES

**NRC/NRR/DRO The Vendor Times** **December 2025**

## The Director's Cut

**Philip McKenna**
**Acting Director, Division of Reactor Oversight**

In fiscal year (FY) 2025, the U.S. Nuclear Regulatory Commission (NRC) vendor inspection staff performed multiple domestic activities. These activities focused generally on performing inspections to verify that the licensees were providing effective oversight of the supply chain.

The vendor inspection staff conducted a total of 17 vendor activities. The vendor inspection staff performed 13 vendor inspections and three licensing audits. In addition, the vendor inspection staff observed one Nuclear Procurement Issues Corporation (NUPIC) audit. During these inspections and audits, the NRC evaluated the vendors' and licensees' compliance with the applicable requirements of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Title 10 of the Code of Federal Regulations (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," and 10 CFR Part 21, "Reporting of Defects and Noncompliance."

In 2025, the NRC has been working on implementing sections of the ADVANCE Act, "Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy Act of 2024'' and Executive Order (EO) 14300, "Ordering the Reform of the Nuclear Regulatory Commission." As required by the Act, the NRC updated its mission statement to "The NRC protects public health and safety and advances the nation's common defense and security by enabling the safe and secure use and deployment of civilian nuclear energy technologies and radioactive materials through efficient and reliable licensing, oversight, and regulation for the benefit of society and the environment." The NRC is and will remain the world's gold standard nuclear regulator. Nuclear safety and security will always come first! As discussed in this newsletter, the NRC is also working on providing regulatory correspondence on submitted technical reports from the Nuclear Energy Institute (NEI). This technical guidance will meet the requirements of the ADVANCE Act and EO 14300 as the NRC enables the safe and secure use and deployment of civilian nuclear energy technologies.

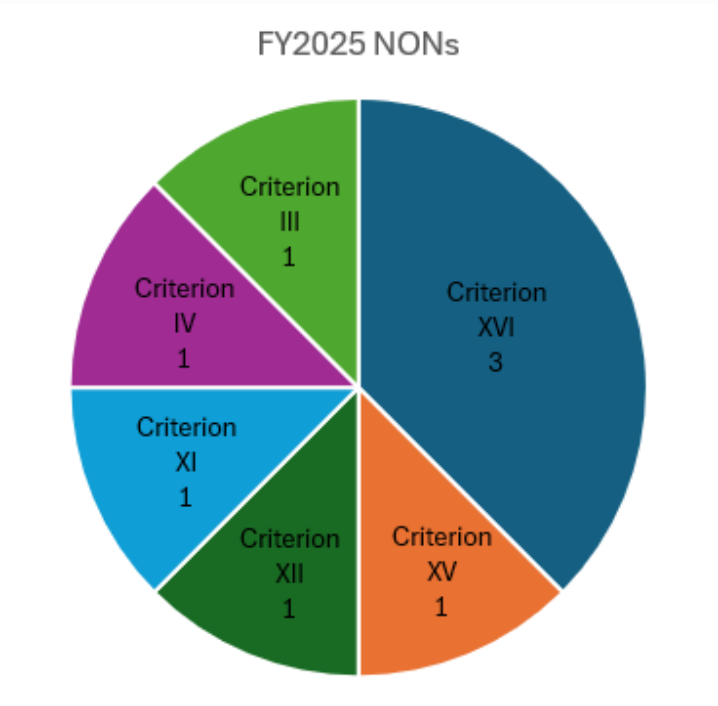
As the vendor inspection staff focuses their attention and work on the requirements of the ADVANCE Act and EO 14300, the vendor inspection staff will unfortunately be unable to hold the biennial NRC Workshop on Vendor Oversight that would have occurred in June 2026. The NRC will keep licensees and vendors updated on any opportunities to attend future NRC-led regulatory events.

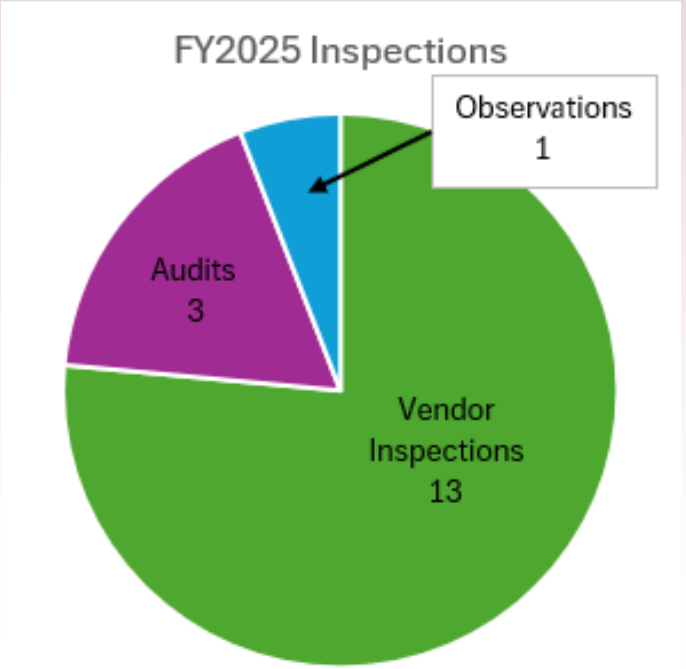
And lastly, I want to wish Kerri Kavanagh, the long-time Chief of the Quality Assurance and Vendor Inspection Branch (IQVB) the best of luck upon her retirement from the NRC after 33 years of Federal Government Service. Doug Bollock will be relieving her as IQVB Chief on December 28, 2025.

**In this Issue:**

## FY2025 Vendor Inspection Findings

The Vendor Inspection Program Plan (VIPP) verifies that reactor applicants and licensees are fulfilling their regulatory obligations with respect to providing effective oversight of the supply chain. It accomplishes this through a number of activities, including performing vendor inspections to verify the effective implementation of the vendor's quality assurance (QA) program, establishing a strategy for vendor identification and selection criteria, and ensuring vendor inspectors obtain the necessary knowledge and skills to perform inspections. From October 1, 2024, to September 30, 2025, the vendor inspection staff completed a total of 17 vendor activities. These vendor activities cover vendor inspections, licensing audits, and NUPIC observations to adequately implement the applicable requirements of Appendix B to 10 CFR Part 50. During these inspections, the NRC issued 8 nonconformances against vendors for their failure to adequately implement the applicable requirements of Appendix B to 10 CFR Part 50.

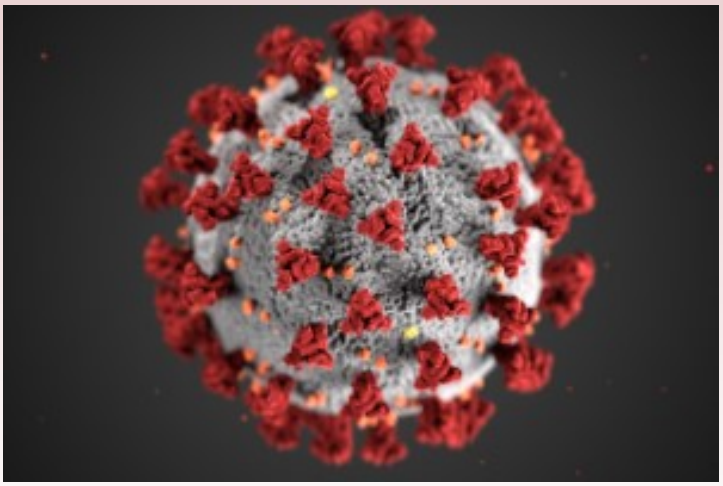



The nonconformances cited against vendors fell within various criteria of Appendix B to 10 CFR Part 50, including Criterion III, "Design Control," Criterion IV, "Procurement Document Control, Criterion XI, "Test Control," Criterion XII, "Control of Measurement and Test Equipment," Criterion XV, "Nonconforming Materials, Parts, or Components," and Criterion XVI, "Corrective Action." While the NRC does not consider this to be indicative of any industry trend, the vendor inspection staff will place increased focus in these areas during future vendor inspections to ensure vendors understand how to adequately implement these requirements. In addition, during future interactions with stakeholders (e.g., industry meetings), the vendor inspection staff will continue to highlight the importance of adequately implementing their corrective action, commercial-grade dedication and supplier oversight programs.

- **Yiu Law, Reactor Operations Engineer**

## Information Notice (IN) on Approved Quality Assurance Alternatives During Exigent Conditions



During the Coronavirus Disease 2019 (COVID-19) public health emergency, first declared on January 31, 2020, licensees and applicants could meet neither the requirements for inspection at the source or subcontractor source nor their quality assurance program description (QAPD) commitments for the frequency of these inspections. Because of national and international restrictions and recommendations to protect people during the public health emergency (e.g., travel restrictions and social distancing), the NRC approved several quality assurance (QA) alternatives for performing fully remote audits, fully remote commercial-grade surveys, and fully remote source verifications. The NRC also granted a 25 percent grace period extension for the performance of these activities during exigent conditions (i.e., the COVID-19 pandemic).

The QA alternatives were approved as reductions in commitment due to exigent conditions under 10 CFR 50.54(a)(4), which sets forth the NRC's regulatory requirements regarding changes to a QAPD. The NRC considered and granted these QA alternatives and certain temporary exemptions to allow the operating fleet to continue operating safely during the unprecedented global crisis caused by the COVID-19 pandemic.

On April 10, 2023, the President of the United States ended the national emergency declared because of the pandemic. The Federal public health emergency for COVID-19 expired on May 11, 2023. Due to the termination of the national emergency and the public health emergency, the ability to continue performing fully remote audits, fully remote commercial-grade surveys, and fully remote source verifications, and providing a 25 percent grace period extension, no longer applies. Licensees, applicants, and vendors that have these NRC-approved QA alternatives based on COVID-19 exigent conditions in their QAPDs or in an implementing procedure, or both, may no longer implement these QA alternatives unless a new exigent condition exists.

On August 6, 2025, the NRC issued Information Notice (IN) 2025-04, "Use of Approved Quality Assurance Alternatives During Exigent Conditions" (ADAMS Accession No. ML25121A1258). The purpose of IN 2025-04 is to inform addressees of the potential for inappropriate implementation of the QA alternatives approved by the NRC for use during exigent conditions. This potential includes: (1) using the NRC-approved QA alternatives to qualify new suppliers using fully remote audits; and (2) a licensee, applicant, or vendor incorrectly determining when an exigent condition exists. IN 2025-04 contains guidance on who can declare when an exigent condition exists in which the NRC-approved QA alternatives can be implemented.

- **Yamir Diaz-Castillo, Reactor Operations Engineer**

## CY25 Quality Assurance Program Description (QAPD) Reviews

The NRC staff reviews quality assurance program descriptions (QAPDs) for design applications, construction permits, early site permits, and operating licenses, of both power and non-power reactors. In addition, the NRC staff also reviews the QAPD for some engineering or architectural design entities.

During the 2025 calendar year, for advanced power reactors, the NRC staff reviewed ten QAPDs (NuScale SDA, TerraPower, General Atomics, Appalachian Power, Dow Long Mott, Dominion New Nuclear, Blue Energy, Hadron, Energy Northwest and Aalo Atomics). The NRC staff completed six of these reviews and the last four are still under review. Advanced power reactors utilize the American Society of Mechanical Engineers (ASME) standard NQA-1, "Quality Assurance Requirements for Nuclear Facility Applications," as the basis for meeting the requirements of Appendix B to 10 CFR Part 50. The NRC staff's endorsement of different editions and addenda of NQA-1 are documented in Regulatory Guide (RG) 1.28, "Quality Assurance Program Criteria (Design and Construction)." Any changes to advanced power reactor QAPDs are required to be submitted for review and approval.

The NRC staff did not review any QAPDs for non-power utilization facilities (NPUF) nor advanced research or test reactors (AR&TR) for the 2025 calendar year. NPUFs and AR&TRs are not required to meet the requirements of Appendix B to 10 CFR Part 50. Typically, these facilities utilize American National Standards Institute (ANSI) and the American Nuclear Society (ANS) standard ANSI/ANS-15.8-1995, "Quality Assurance Program Requirements for Research Reactors." The NRC staff's endorsement of ANSI/ANS 15.8-1995-is documented in RG 2.5, "Quality Assurance Program Requirements for Research and Test Reactors," Revision 1, dated June 2010.

For operating reactors, licensees can evaluate changes to the approved quality assurance program in accordance with 10 CFR 50.54(a)(3). This provision allows licensees to make changes to the NRC-approved quality assurance program without NRC approval, provided the change(s) does not reduce the commitments in the program description as accepted by the NRC. Changes to the QAPD that do not reduce the commitments must still be submitted to the NRC in accordance with 10 CFR 50.71. The NRC staff reviews these submittals to verify that the changes did not reduce the commitments. If the NRC staff finds the changes constitute a reduction in commitment, the licensee would be required to submit the QAPD for NRC review and approval. The staff performed eight 50.54(a)(3) reviews to verify that the changes did not reduce the commitments (SNC, Palo Verde, Entergy, Cooper, TVA, Dominion, Callaway and Prairie Island/Monticello). In accordance with 50.54(a)(4), changes to a licensee's QAPD that do reduce the commitments must be submitted to the NRC and receive NRC approval prior to implementation. The NRC reviewed three submittals in 2025 (Dominion, TVA, SNC).

NRC regulation 10 CFR 50.4(b)(7)(ii) requires the submittal of changes to an NRC-accepted quality assurance topical report from non-licensees (i.e., architect/engineers, NSSS suppliers, fuel suppliers, constructors, etc.) be submitted to the NRC's Document Control Desk. The staff completed a review for one engineering firm in 2025 (Sargent and Lundy).

- **Andrea Keim, Reactor Operations Engineer**

## 2025 Vendor Inspection Program Self-Assessment

The Vendor Inspection Program (VIP) verifies that reactor applicants and licensees are fulfilling their regulatory obligations with respect to providing effective oversight of the supply chain. It accomplishes this through a number of activities, including performing vendor inspections that will verify the effective implementation of the vendor's quality assurance program, establishing a strategy for vendor identification and selection criteria, and ensuring vendor inspectors obtain necessary knowledge and skills to perform inspections. In addition, the VIP addresses interactions with nuclear consensus standards organizations, industry and external stakeholders, and international constituents.

The VIP also includes objectives and associated performance metrics to demonstrate that the overarching goals are being supported. The VIP performance metrics are assessed to ensure successful implementation and continuous improvement of the VIP. The performance metrics are based on input from various sources, including but not limited to inspection reports, stakeholder surveys, and vendor inspection staff's comments. The vendor inspection staff collects data quarterly and uses pre-established success criteria to analyze the data. The self-assessment of the VIP performance metrics is performed annually and is documented in a publicly available report.

The performance metrics include: (1) number of inspections completed; (2) vendor feedback; (3) timeliness of inspection notification, inspection plans, inspection reports, and acknowledgement letters; (4) inspection results accepted by the stakeholders; (5) allegation support; (6) and assessment of trainees and inspector proficiency. For FY 2025, the vendor inspection staff found that the VIP met 9 out of the 10 performance metrics (one metric was not applicable for FY 2025). For FY 2025, the VIP self-assessment report can be found in ADAMS under Accession No. ML25324A381.

- **Yamir Diaz-Castillo, Reactor Operations Engineer, and Ada Bowie, Program Analyst**


***Photo from the 2024 Workshop on Vendor Oversight in Baltimore, Maryland.***

## NRC's Regulatory Information Conference (RIC) 2025

The U.S. Nuclear Regulatory Commission (NRC) held its 37th Annual Regulatory Information Conference (RIC) - the largest annual gathering sponsored by NRC - on March 11 - 13, 2025, at the Bethesda North Marriott Hotel & Conference Center in North Bethesda, MD. This year's RIC was conducted as a hybrid event, which allowed attendees to participate both in person and virtually, allowing NRC to reach a wider audience.

*Photo from the opening ceremony of the RIC.*

The NRC's Quality Assurance and Vendor Inspection Branch hosted a technical session titled: "Quality Assurance: The Foundation for the Safe Operation of Nuclear Power Plants." This session covered the following topics: (1) the application of graded QA for the regulatory treatment of nonsafety systems, and systems classified as non-safety related with special treatment, including risk and procurement requirements; (2) Canadian Nuclear Safety Commission's (CNSC) classification and clarification of important to safety and safety-related systems; (3) current challenges faced by the industry when implementing QA requirements and the truths and myths when implementing the NQA-1 QA standard; and (4) the role of Appendix B to 10 CFR Part 50 in the licensing process and pathways for meeting Appendix B to 10 CFR Part 50.

*Honorable Chairman David Wright delivering the opening speech at the RIC.*

The speakers included two members of the NRC staff, as well as Ms. Taunia Sandquist, Chair of the NQA-1 Committee, and Mr. Brandon Johnston, Director of the Management Division for CNSC. Session attendees gained insights in how to successfully continue to implement their QA programs to provide adequate confidence that structures, systems, and components continue to perform satisfactorily in service.


*Brandon Johnston, Director of the Management System Division for the Canadian Nuclear Safety Commission (CNSC) discussing supply chain experience in Canada.*

- **Yamir Diaz-Castillo, Reactor Operations Engineer**

## NEI 22-04, “Utilization of ISO 9001 and Other Non-nuclear Suppliers for Safety-related Applications

On May 22nd, 2025, the Nuclear Energy Institute (NEI) submitted for the Nuclear Regulatory Commission’s (NRC) review and endorsement NEI technical report (TR) No. 22-04, “Utilization of International Organization for Standardization (ISO) 9001 and other non-nuclear suppliers for Safety-Related Applications,” Revision 0, dated May 2025 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML25162A176). The purpose of this TR is to provide guidance for entities with a quality assurance (QA) program meeting the requirements of Appendix B, “Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants,” to 10 Code of Federal Regulations (CFR) Part 50, “Domestic Licensing of Production and Utilization Facilities,” to use ISO 9001:2015, “Quality Management System – Requirements,” as the basis for meeting the requirements of Appendix B to 10 CFR Part 50. This guidance is intended to apply to the procurement of safety-related structures, systems, and components by licensees and other entities (e.g., vendors, etc.) that have a QA program that meets the requirements of Appendix B to 10 CFR Part 50.

Following the submission of NEI’s TR, the NRC received four letters from stakeholders with their feedback on NEI 22-04. These letters, sent by the Nuclear Procurement Issues Corporation, the American Society of Mechanical Engineers (ASME) Nuclear Quality Assurance (NQA-1) Standards Committee, Radiant, and a member of the public, are publicly available and can be found under the following ADAMS Accession Nos: ML2517A185, ML25246C400, ML25323A024, and ML25323A082, respectively.

On September 18th, 2025, the NRC held a public meeting with NEI to discuss NEI 22-04. The meeting summary can be found under the following ADAMS Accession No.: ML25330A003. On November 14th, 2025, the NRC issued a letter to NEI providing initial comments on NEI 22-04. This letter can be found under the following ADAMS Accession No.: ML25260A045. The NRC staff continues to review NEI 22-04.

## NEI 25-05, “Fabrication of ASME Code Items Prior to the Identification of an Owner/Licensee”

On July 11th, 2025, the Nuclear Energy Institute (NEI) submitted for the Nuclear Regulatory Commission’s (NRC) review and endorsement NEI technical report (TR) No. 25-05, “Fabrication of ASME Code Items Prior to the Identification of an Owner/Licensee,” Revision 0, dated July 2025 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML25192A124). The purpose of this TR is to propose a process for a licensee or applicant for a license to accept for use safety-related American Society of Mechanical Engineers (ASME) Code items that were fabricated by an ASME Certificate Holder prior to the identification of an Owner. The NRC is planning a public meeting with NEI in the 1st quarter of 2026 to discuss NEI 25-05. The details of the meeting will be posted on the NRC’s public website. Please check often for updates.

- **Liam O’Donoghue, General Engineer (NRAN), and Yamir Diaz-Castillo, Reactor Operations Engineer**

## Retirement of Kerri Kavanagh, Chief of the Quality Assurance and Vendor Inspection Branch

Ms. Kerri Kavanagh, Chief of the Quality Assurance and Vendor Inspection Branch, will be retiring December 2025, after 33 years of service with the NRC. Ms. Kavanagh joined the NRC in 1992 as an intern and has served multiple roles in the agency. Before taking on the role of Chief of the Quality Assurance and Vendor Inspection Branch in 2011, Ms. Kavanagh served in the Division of Systems Safety and Analysis, the Division of Regulatory Improvement Programs, and in the Division of Construction Inspection and Operational Programs.

Ms. Kavanagh has represented the NRC and collaborated with the Electric Power Research Institute (EPRI)'s Procurement Engineering and Related Topics Symposium (PeARTS, formerly JUTG) and the Nuclear Procurement Issues Corporation (NUPIC) on technical procurement issues affecting the industry. These organizations provide the nuclear energy industry with development of guidance in topics such as commercial-grade dedication, counterfeit and fraudulent item prevention, and reverse engineering. "Continuous communication and collaboration… were essential to successful development of guidance in [these areas]," Marc Tannenbaum, Principal Technical Executive of EPRI said. "These successes and others are in large part due to Kerri's vision and that of her staff."

Ms. Kavanagh has also served as one of the NRC representatives supporting the development of the American Society of Mechanical Engineers (ASME) Codes and Standards Sections III, XI, and NQA-1. Ms. Kavanagh has served on the Committee of Nuclear Regulatory Activities Working Group Supply Chain and has been the chair of the Small Modular Reactors Regulator's Forum Manufacturing, Construction, Commissioning, and Operations Working Group. For her extensive knowledge and expertise in these areas, Ms. Kavanagh was awarded NQA-1 Honors from the American Society of Mechanical Engineers on October 23, 2025.

Ms. Kavanagh has had a tremendous impact professionally and interpersonally within the nuclear energy industry. "I have worked with Kerri on various [Code Committees] for almost twenty years," Annemarie Appleton, ASME and ASTM Fellow and President of Appleton Quality Concepts, LLC, said. "During this time, I have found her to be very dedicated to both the industry and the mission of the NRC. Her clear and level-headed approach to both Code and regulatory requirements has been a benefit to ASME, the NRC, and the industry as a whole."

*(see next page for continuation of article)*

## Retirement of Kerri Kavanagh, Chief of the Quality Assurance and Vendor Inspection Branch (continued)

"Kerri has an amazing gift," Taunia Sandquist, NQA-1 Committee member and Executive Advisor of Los Alamos National Laboratory said. "Whenever NQA committee debates went off the rails, she would patiently wait… then calmly drop a one-liner that made us laugh and solved everything — and made us wonder why we ever argued in the first place."

"Kerri was able to effectively balance the utmost need for oversight while also realizing the challenges the industry faced," James McIntyre, Vice President and Quality Assurance Director of Sargent and Lundy said. "[She] was never one to shy away from providing a well-thought-out opinion that was [both] fair and sensible. Her presence will be missed."

Ms. Kavanagh has demonstrated an excellent leadership role with both senior and junior staff members alike. She has been a valuable resource to the NRC and to the public that she serves. "While Kerri's leadership and vision will be missed, PeARTS wishes Kerri all the best in her future endeavors," Marc Tannenbaum stated involving Kerri's retirement.

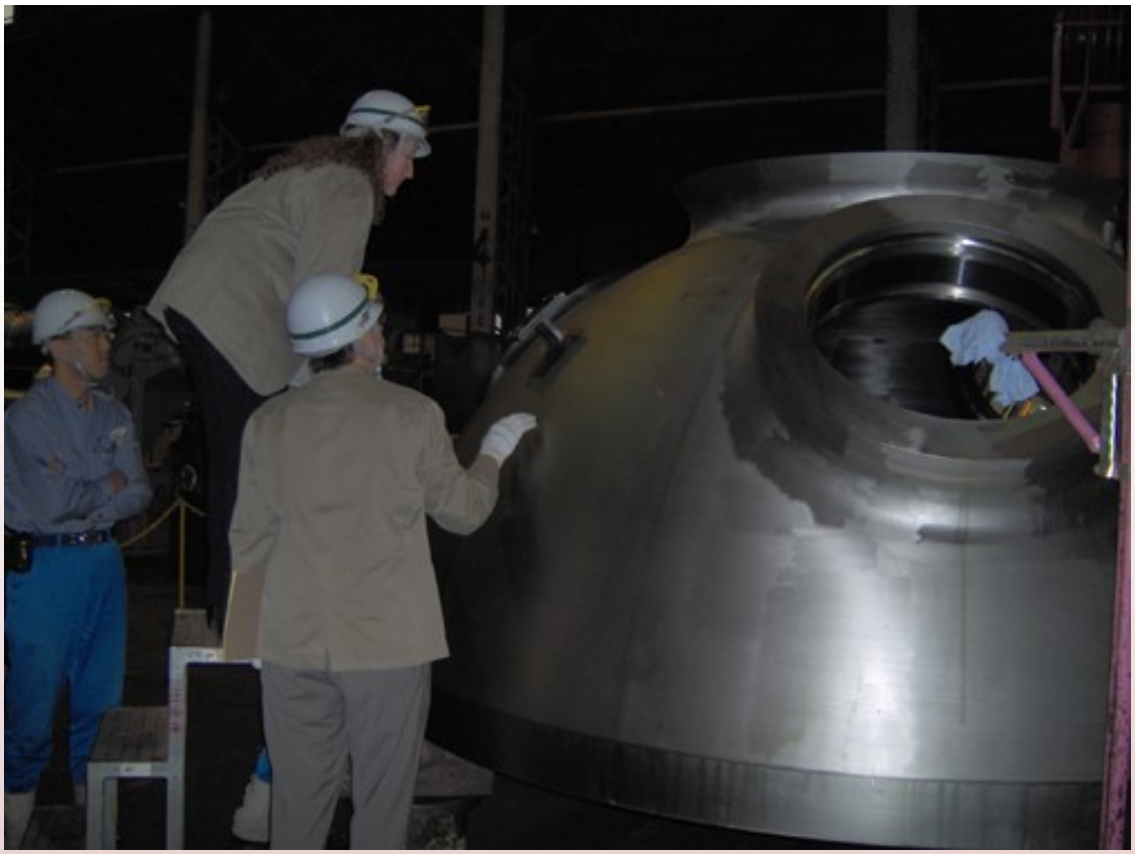
We at the NRC are sad to see Kerri go but are excited for the next chapter she has in store. Please view the next few pages of this newsletter for some highlights of Kerri's time at the NRC.

- **Tiffany Lee, Reactor Systems Engineer**


*Photos from Kerri Kavanagh's retirement party, December 2025*
*Photo credits: Toni Sakadales*

**Would you like to be added to the newsletter distribution or suggest topics for next year's newsletter?**

**We welcome useful and informative feedback on the content of this newsletter. Please contact Tiffany Lee, Reactor Systems Engineer, by email at tiffany.lee@nrc.gov**



*Ms. Kavanagh on an inspection of Mitsubishi Heavy Industries in Kobe, Japan, July 2008*
*Photo credits: Toni Sakadales*