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Protecting People and the Environment

2022-2023 Information Digest

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ABSTRACT

The U.S. Nuclear Regulatory Commission (NRC) has published the Information Digest annually since 1989. Beginning with this edition, the Digest will begin a 2-year publication cycle. The Digest provides information about agency activities and licensees from the various industries it regulates. It describes the agency's responsibilities and activities and provides general information on nuclear-related topics. It includes NRC and industry data in an easy-to-read format.

The 2022–2023 Information Digest includes NRC and non-NRC data (e.g., International Atomic Energy Agency, Energy Information Administration, and U.S. Department of Energy), which were updated as of September 30, 2022, including data in maps and graphics. Beginning with this edition, the Digest includes QR codes to direct users to the most current information. The next Information Digest containing updated data will be published in February 2025.

The NRC reviews the information from industry and international sources but does not independently verify it. The NRC is the source of all photographs, graphics, and tables unless otherwise noted. All information is final unless otherwise noted. Any corrections and updates will appear in the digital version on the NRC website at https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/.

The NRC welcomes comments or suggestions on the Information Digest. To submit comments, write to the Office of Public Affairs at U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or at opa.resource@nrc.gov.

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Mission Statement

The U.S. Nuclear Regulatory Commission (NRC) licenses and regulates the Nation's civilian use of radioactive materials to provide reasonable assurance of adequate protection of public health and safety, and to promote the common defense and security, and to protect the environment.

Commission

Chair Christopher T. Hanson	Term ends June 30, 2024
Commissioner Jeff Baran	Term ends June 30, 2023
Commissioner David A. Wright	Term ends June 30, 2025
Commissioner Annie Caputo	Term ends June 30, 2026
Commissioner Bradley R. Crowell	Term ends June 30, 2027

Locations

Headquarters:

U.S. Nuclear Regulatory Commission Rockville, MD	301-415-7000 800-368-5642

Regional Offices:

Region I—King of Prussia, PA	610-337-5000 800-432-1156
Region II—Atlanta, GA	404-997-4000 800-577-8510
Region III—Lisle, IL	630-829-9500 800-522-3025
Region IV—Arlington, TX	817-200-8100 800-952-9677

Headquarters Operations Center

Rockville, MD 301-816-5100

The NRC staffs a 24-hour Operations Center that coordinates incident response with Federal, State, Tribal, and local agencies.

Training and Professional Development

Technical Training Center Chattanooga, TN	423-855-6500
Professional Development Center Rockville, MD	301-287-0556

Resident Sites

At least two NRC resident inspectors, who report to the appropriate regional office, are assigned at each operating nuclear power plant site.

NRC Fiscal Year 2022 Budget

- *Total budget authority: $905.7 million ($887.7 million enacted budget, $2 million supplemental appropriation, and $16 million authorized carryover)*
- *Total authorized staff: 2,882 full-time equivalents*
- *Estimated fees to be recovered: $756.7 million*
- *Separate appropriation for the Office of the Inspector General: $13.8 million*
- *Total research budget: $81.4 million*
  - *Reactor Program: $56 million*
  - *New/Advanced Reactor Licensing: $20.1 million*
  - *Materials and Waste: $5.3 million*

What Does the NRC Do?

- *Regulation and guidance—rulemaking*
- *Policymaking*
- *Licensing, decommissioning, and certification*
- *Research*
- *Oversight and enforcement*
- *Incident response*
- *Emergency preparedness and response*

Nuclear Governing Legislation

The NRC was established by the Energy Reorganization Act of 1974. The most significant laws that govern the regulatory process of the agency are available on the NRC website at https://www.nrc.gov/about-nrc/governing-laws.html. The NRC's regulations are found in Title 10, "Energy," of the *Code of Federal Regulations* (10 CFR). The text of many laws can be found in NUREG-0980, "Nuclear Regulatory Legislation."

NRC BY THE NUMBERS

U.S. Electricity Generated by Commercial Nuclear Power

NRC-licensed nuclear reactors generate about 19 percent of U.S. gross electricity, or about 778 billion kilowatt-hours.

Nuclear Reactors

- *92 commercial nuclear power reactors operating in 28 States at 54 sites*
  - *Vogtle Unit 3 (Southern Nuclear Operating Co.) plans to enter service in 2023. Unit 4 is still under construction.*
- *61 pressurized-water reactors and 31 boiling-water reactors*
- *Three reactor fuel vendors*
- *21 parent operating companies*
- *About 80 different designs*
- *About 5,960 total inspection and assessment hours at each operating reactor in Fiscal Year (FY) 2021*

Reactor License Renewal

Commercial power reactor operating licenses are valid for 40 years and a renewed license of up to 20-years may be requested.

- *94 reactors have been issued initial renewed licenses, including 11 reactors now permanently shut down.*
- *Eight reactors operate under their original licenses.*

Subsequent License Renewal

This type of licensing allows a plant to operate for an additional 20-year term beyond its initial license renewal, allowing it to operate from 60 to 80 years.

- *Six reactors at three sites have been issued subsequent renewed licenses.*
- *Nine reactors at four sites have subsequent license renewal applications under review.*
- *Four licensees with a total of seven reactors have submitted letters of intent to request subsequent license renewals.*

Early Site Permits for New Reactors

- *Six early site permits have been issued:*
  - *System Energy Resources, Inc., for the Grand Gulf site in Mississippi*
  - *Exelon Generation Co., LLC, for the Clinton site in Illinois*
  - *Dominion Nuclear North Anna, LLC, for the North Anna site in Virginia*
  - *Southern Nuclear Operating Co., for the Vogtle site in Georgia*
  - *PSEG Power, LLC, and PSEG Nuclear, LLC, for a site in New Jersey*
  - *Tennessee Valley Authority for two or more small modular reactors at the Clinch River Nuclear Site in Tennessee*

Combined License—Construction and Operating License for New Reactors

- *Since June 2007, the NRC has received and docketed 18 combined license (COL) applications for 28 new, large light-water reactors. The NRC has received, docketed, and rejected a COL application for the Oklo advanced reactor.*
- *The NRC suspended or canceled 10 COL application reviews at the request of the applicants for Bell Bend, Pennsylvania; Bellefonte, Alabama; Callaway, Missouri; Calvert Cliffs, Maryland; Comanche Peak, Texas; Grand Gulf, Mississippi; Nine Mile Point, New York; River Bend, Louisiana; Shearon Harris, North Carolina; and Victoria County Station, Texas.*
- *The NRC has issued COLs for 14 reactors at Fermi, Michigan; Levy County, Florida; North Anna, Virginia; South Texas Project, Texas; Turkey Point, Florida; V.C. Summer, South Carolina; Vogtle, Georgia; and W.S. Lee, South Carolina.*
- *At the licensee's request, six COLs have been terminated at three sites: Levy County Units 1 and 2 (terminated on April 26, 2018); South Texas Project Units 3 and 4 (terminated on July 12, 2018); and V.C. Summer Units 2 and 3 (terminated on March 6, 2019).*

Reactor Design Certification

- *Seven reactor design certifications (DCs) and one amendment have been issued:*
  - *General Electric-Hitachi Nuclear Energy's Advanced Boiling-Water Reactor (ABWR)*
  - *Westinghouse Electric Company's System 80+*
  - *Westinghouse Electric Company's Advanced Passive 600 (AP600)*
  - *Westinghouse Electric Company's Advanced Passive 1000 (AP1000)*
  - *South Texas Project Nuclear Operating Company's ABWR amendment*
  - *General Electric-Hitachi Nuclear Energy's Economic Simplified Boiling-Water Reactor (ESBWR)*
  - *Korea Electric Power Corporation's Advanced Power Reactor 1400 (APR1400)*
  - *The Commission has directed the staff to issue the design certification for the NuScale small modular reactor.*
- *Two DC applications for the Evolutionary Pressurized-Water Reactor (U.S. EPR) and Advanced Pressurized-Water Reactor (US-APWR) are suspended at the request of the applicants.*

Nonpower Production and Utilization Facilities

- *Research and test reactors*
  - *31 licensed research and test (nonpower) reactors operate in 21 States.*
  - *Two applications are under review for the Kairos Hermes advanced test reactor and for the Abilene Christian University Molten Salt Research Reactor.*
- *Medical radioisotope facilities*
  - *Two construction permits have been issued to SHINE Medical Technologies, LLC, in Janesville, Wisconsin, and Northwest Medical Isotopes, LLC, in Columbia, Missouri. At the company's request, the Northwest Medical Isotopes construction permit was terminated on July 11, 2022.*
  - *One operating license application is under review (SHINE).*

NUCLEAR MATERIALS

Materials Licensing

- *The NRC and the Agreement States have more than 18,000 licensees for medical, academic, industrial, and general users of nuclear materials.*
  - *The NRC regulates more than 2,100 licenses.*
  - *The 39 Agreement States regulate nearly 16,000 licenses.*
- *Connecticut and Indiana submitted letters of intent to become Agreement States and are on track to become Agreement States by 2025 and 2026, respectively.*
- *The agency issues approximately 1,400 new licenses, renewals, or amendments for existing materials licenses annually. The NRC conducts approximately 600 to 800 safety and security inspections of materials licensees each year.*

Nuclear Fuel Cycle

- *Three uranium recovery sites are licensed by the NRC.*
- *The NRC licenses nine active fuel cycle facilities:*
  - *One uranium hexafluoride conversion facility ("ready-idle" status)*
  - *Five uranium fuel fabrication facilities*
  - *Two gas centrifuge uranium enrichment facilities (one operating and one under construction)*
  - *One depleted uranium deconversion facility (construction decision pending)*
- *The NRC issues about 40 fuel cycle facility licensing actions per year, including amendments; renewals; new licenses; and safety, environmental, and safeguards reviews.*

National Source Tracking System

The National Source Tracking System, also known as NSTS, tracks more than 80,000 sources held by about 1,100 NRC and Agreement State licensees. Of those sources, about 53 percent are Category 1 sources and 47 percent are Category 2. The majority are cobalt-60, the most widely used isotope in large sources.

Domestic Safeguards

The NRC and the U.S. Department of Energy (DOE) use the Nuclear Materials Management and Safeguards System (NMMSS) to track transfers and inventories of source and special nuclear material. Licensees must report their inventories, transfers, purchases, and sales (including import and export of these materials) to the NMMSS. More than 300 licensees report to the NMMSS database, verifying their inventories at least annually by reconciling their transactions against the previous year's inventory. The database supports U.S. participation in the Treaty on the Non-Proliferation of Nuclear Weapons.

RADIOACTIVE WASTE

Low-Level Radioactive Waste

- *10 regional compacts*
- *Four State-licensed disposal facilities*

HIGH-LEVEL RADIOACTIVE WASTE MANAGEMENT

Spent Nuclear Fuel Storage

- *The NRC has issued 84 licenses for independent spent fuel storage installations in 36 States:*
  - *16 site-specific licenses (two of these facilities are licensed but were never built or operated)*
  - *68 general licenses*
- *An application is under review for a consolidated interim storage facility for spent fuel in Lea County, New Mexico.*
- *A license was issued on September 13, 2021, for a CISF in Andrews County, Texas*

Transportation—Principal Licensing and Inspection Activities

- *Approximately 1,000 safety inspections of fuel, reactor, and materials licensees are conducted annually.*
- *Annually, 50–70 new, renewed, or amended container-design applications for the transport of nuclear materials are reviewed.*
- *Approximately 150 license applications for the import and export of nuclear materials from the United States are reviewed annually.*
- *More than 3 million packages of radioactive materials are shipped each year in the United States by road, rail, air, or water. This represents less than 1 percent of the Nation's yearly hazardous material shipments.*

Decommissioning

- *Approximately 100 materials licenses are terminated each year. The NRC's materials decommissioning program focuses on the termination of licenses that are not routine and that require complex activities.*
- *26 nuclear power reactors are in various stages of decommissioning (DECON or SAFSTOR).*
- *Four research and test reactors are permanently shut down and in various stages of decommissioning.*
- *Eight complex materials sites are in various stages of decommissioning.*
- *One fuel cycle facility is in partial decommissioning, and one is undergoing decommissioning.*
- *Five NRC-licensed uranium recovery facilities are in various stages of decommissioning.*

SECURITY AND EMERGENCY PREPAREDNESS

- *Every 2 years, each operating nuclear power plant performs a full-scale emergency preparedness exercise inspected by the NRC and evaluated by the Federal Emergency Management Agency.*
- *Plants conduct additional emergency drills between full-scale exercises to maintain their preparedness and proficiency in responding to emergencies.*
- *The NRC spends about 15,000 hours a year scrutinizing security at nuclear power plants, including 8,000 hours of force-on-force inspections. These inspections include simulated terrorist attacks using a mock adversary force, which are conducted at each site every 3 years.*
- *The NRC has implemented a comprehensive cybersecurity oversight program for power reactors, which includes routine inspections and requires licensees to isolate critical systems from the Internet.*

ACCOMPLISHMENTS AND HIGHLIGHTS FY 2022

Power Reactors

- *Found that the acceptance criteria in the combined license for Vogtle Unit 3 in Georgia were met, allowing the licensee to begin operation and marking the first time the NRC authorized a reactor's initial startup through the 10 CFR Part 52 licensing process.*
- *Transitioned Vogtle Unit 3 from construction to the operating reactor oversight process.*
- *Obtained Commission approval to issue a final rule that certifies NuScale's small modular reactor design for use in the United States.*
- *Completed more than 940 licensing actions and other licensing tasks that support operating, new, and advanced reactors, including numerous actions related to the adoption of risk-informed initiatives, topical reports, and the safe transition of operating plants to decommissioning.*
- *Continued to add functionality to MAP-X, a modern web-based portal, which allows licensee submission of proposed alternatives to codes and standards in accordance with 10 CFR 50.55a(z) and the submission of event notification data by licensees.*
- *Completed several key activities related to accident tolerant fuel, including issuance of Research Information Letter 2021-13 on fuel fragmentation, relocation, and dispersal of higher burnup fuel; initiation of an increased enrichment rulemaking effort, per SRM-SECY-21-0109, "Staff Requirements-SECY-21-0109-Rulemaking Plan on Use of Increased Enrichment of Conventional and Accident Tolerant Fuel Designs for Light-Water Reactors" and hosting of several widely attended workshops and conferences on licensing higher burnup and increased enrichment fuel.*
- *Proposed to the Commission a revised policy to review applications for risk-informed digital instrumentation and control (I&C) and endorsed new guidance concerning third-party commercial-grade dedication of digital I&C equipment.*
- *Continued implementation of the Commission's direction to assess how the NRC conducts subsequent license renewal environmental reviews in accordance with the National Environmental Policy Act. The staff began rulemaking to update the license renewal generic environmental impact statement.*
- *Completed 100 percent of calendar year 2021 required inspection and assessment activities of the Reactor Oversight Process (ROP), despite continuing challenges due to COVID-19.*
- *Completed several SECY papers focused on ROP enhancement, including finalizing a change in the periodicity of engineering inspections, a proposed change to incentivize timely closure of white findings and performance indicators, and a recommendation to maintain biennial frequency for Problem Identification and Resolution team inspections.*
- *Issued order approving the transfer of the Palisades license for the purpose of decommissioning.*
- *Approved multiple applications for the adoption of advanced risk management programs, including 10 related to risk-informed completion times (TSTF-505) and 12 related to risk-informed categorization and treatment of structures, systems, and components (10 CFR 50.69), as well as the last application for the risk-informed surveillance frequency program (TSTF-425).*
- *Published for trial use regulatory guidance on probabilistic risk assessment for advanced, non-light water reactors.*
- *Released for discussion in multiple public meetings draft preliminary rule text for the 10 CFR Part 53, "Risk Informed, Technology-Inclusive Regulatory Framework for Commercial Nuclear Plants." This rulemaking would create a rulemaking regulatory framework for commercial nuclear plants, including advanced reactors, and has a proposed rule publication target of October 2024.*
- *Issued a comprehensive technical report on fuel qualification criteria for advanced, non-light water reactors.*

- *Completed 21 force-on-force inspections, testing licensees' abilities to protect against the design-basis threat.*
- *Reviewed and accepted revisions to two industry cybersecurity guidance documents related to the identification and protection of critical digital assets associated with safety, security, and emergency preparedness functions.*
- *Conducted 190 baseline security inspections at operating power reactors and Category I fuel cycle facilities.*

Nonpower Reactors

- *Accepted for review the construction permit application for the Abilene Christian University Molten Salt Research Reactor.*
- *Issued a draft environmental impact statement for the Kairos Hermes advanced test reactor construction permit application in September 2022 and also completed review of several related topical reports.*
- *Issued a special inspection team report for a 2021 event that damaged fuel in the reactor at the National Institute of Standards and Technology Center for Neutron Research.*
- *Issued a renewed license for the University of Massachusetts Lowell research reactor.*
- *Terminated the construction permit for Northwest Medical Isotopes, LLC, on July 11, 2022.*

Nuclear Materials and Waste

- *Completed approximately 1,400 radioactive materials licensing actions.*
- *Completed nearly 800 safety and security inspections of materials licensees and issued 10 updated inspection procedures.*
- *Completed 14 Integrated Materials Performance Evaluation Program reviews of Agreement State licensing and oversight programs.*
- *Issued licensing guidance for Alpha DaRT™ manual brachytherapy sources, which use radium-224 and are inserted into tumors to kill cancer cells.*
- *Issued revisions to 10 State Agreement and State Liaison procedures to support NRC Agreement States and enhance joint oversight of the National Materials Program.*
- *Issued the second revision to NUREG-2155, "Implementation Guidance for 10 CFR Part 37 Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material."*
- *Issued five certificates of compliance for spent fuel storage casks.*
- *Issued Amendment 19 to Centrus Energy Corp./American Centrifuge Operating, extending its authorization for the High-Assay Low-Enriched Uranium Demonstration Program.*
- *Held the first field Commission meeting in more than 40 years for the Discussion of the Ten-Year Plan to Address Impacts of Uranium Contamination on the Navajo Nation and Lessons Learned from the Remediation of Former Uranium Mill Sites, in Gallup, New Mexico, and a community meeting at the Red Water Pond Shade House in April 2022.*
- *Issued reports for the fuel cycle smarter inspection program and the independent spent fuel storage installation oversight enhancement initiatives to ensure safety as well as provide for a comprehensive and consistent inspection program.*
- *Issued NUREG-1757, Volume 2, Revision 2, "Consolidated Decommissioning Guidance: Characterization, Survey, and Determination of Radiological Criteria," in July 2022 to further risk-inform the NRC's guidance and provide alternative approaches to decommissioning strategies.*
- *Terminated the materials license for Sigma Aldrich located in Missouri in November 2021.*
- *Terminated the license for the decommissioned Humboldt Bay nuclear power plant in California in November 2021.*

- *Terminated the General Atomics licenses for the Mark I (R-37) and Mark F (R-67) TRIGA research reactors located in California in December 2021.*
- *Issued the safety evaluation report and environmental assessment for the long-term surveillance plan and the long-term care fee for the transfer of the Western Nuclear Incorporated-Split Rock site to the U.S. Department of Energy, the first of its kind in more than 10 years.*
- *Participated as the U.S. delegation to the 7th Review Meeting of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management in Vienna, Austria, in June 2022.*
- *Issued a technical evaluation report providing an independent evaluation of the U.S. Department of Energy's draft waste determination that the vitrified low-activity waste at the Hanford Nuclear Reservation could be disposed in the near surface.*
- *Issued the draft environmental impact statement for the Holtec consolidated interim storage facility for spent nuclear fuel in Lea County, New Mexico.*
- *Issued NUREG-2159, "Acceptable Standard Format and Content for the Fundamental Nuclear Material Control Plan Required for Special Nuclear Material of Moderate Strategic Significance," which provides information to facilitate compliance with material control and accounting regulations for such facilities that are authorized to possess special nuclear material of moderate strategic significance, such as some proposed Category II fuel facilities.*
- *Submitted a report to Congress on the Preparedness for High-Assay Low-Enriched Uranium Availability.*
- *Renewed the license for the Westinghouse Columbia Fuel Fabrication Facility for an additional 40 years.*
- *Issued Revision 3 of Regulatory Guide 3.54, "Spent Fuel Heat Generation in an Independent Spent Fuel Storage Installation," which provides revised methodology for determining heat generation rates for both pressurized-water reactor and boiling-water reactor fuel.*
- *Issued a renewed special nuclear material (SNM) license to Oregon State University for an additional 10 years to allow continued research on fuel rods for research and test reactors that contain greater than critical mass amounts of SNM.*
- *Issued the certificate of compliance for the model MAGNATRAN (Amendment 3) transportation package. This was the first time a moderator exclusion was approved pursuant to 10 CFR 71.55(c).*
- *Provided to the Commission the staff's review of the NRC's regulatory readiness for the oversight of large-scale commercial transportation of spent nuclear fuel in the United States.*
- *Issued Enforcement Guidance Memorandum 22-001, "Enforcement Discretion for Noncompliance of Tornado Hazards Protection Requirements at Independent Spent Fuel Storage Installations."*
- *Completed updates to the agency's cost-benefit guidance:*
  - *Completed Revision 5 of NUREG/BR-0058, "Regulatory Analysis Guidelines of the U.S. Nuclear Regulatory Commission," which standardizes methods for agencywide use in preparation and presentation of regulatory and cost-benefit analyses.*
  - *Issued NUREG-2242, "Replacement Energy Cost Estimates for Nuclear Power Plants: 2020–2030—Final Report," which provides current replacement energy cost estimates for both short- and long-term outages and updates information provided in previous evaluations.*
  - *Issued Revision 1 of NUREG-1530, "Reassessment of NRC's Dollar Per Person-Rem Conversion Factor Policy, Final Report," which incorporates updates to the dollar per person-rem conversion factor and establishes a method for keeping this factor up to date.*
- *Supported the agency's Principles of Good Regulation through openness and transparency in the petition for rulemaking process by managing petitions submitted by members of the public in areas such as of licensing, physical protection, and medical use of byproduct materials; promoting public confidence in the agency's rulemaking efforts; and increasing responsiveness to the public.*

Agencywide

- *Continued to oversee the safe and secure operation of nuclear power plants and fuel cycle facilities, as well as the possession and use of radioactive materials.*
- *Made significant progress toward the transformation vision of being a modern, risk-informed regulator, particularly in the areas of innovation; employee retention, recruitment, and development; use of risk insights; and technology adoption.*
- *Used its "innovation platform," called IdeaScale, to collect more than 48 agency innovation success stories and hosted approximately 36 total innovation challenge campaigns, including 11 agencywide campaigns and 25 office-specific campaigns.*
- *Deployed the NRC Ambassador program to support the on-boarding of new hires.*
- *Launched the second cohort of the Nuclear Regulator Apprenticeship Network training program, which supports entry-level hiring, with a diverse group of 25 new staff.*
- *Continued implementing the agency's culture improvement strategy with a focus on coaching and empowerment, recognizing and sharing different viewpoints, taking innovative approaches and discussing risk, showing mutual support and shared responsibility, and bringing one's whole self to work.*
- *Held quarterly Executive Director for Operations Town Hall meetings to broadly share information with staff about emergent topics of wide interest. More than 1,600 staff members participated in each town hall.*
- *Achieved 70 percent participation on the 2022 Federal Employee Viewpoint Survey with an employee engagement index score of 76 percent positive.*
- *Continued implementing innovative solutions via EMBARK Venture Studio to enable and promote a risk-informed mindset within the nuclear reactor safety program and other business lines.*
- *Pursued substantial rulemaking activities on topics including licensing of advanced reactors, alignment of licensing processes and lessons learned from new reactor licensing, categorical exclusions from environmental reviews, American Society of Mechanical Engineers codes and code cases, and petitions for rulemaking submitted by members of the public.*
- *Issued escalated enforcement actions in 68 cases, including 17 notices of violation that involved civil penalties (one of which involved a subsequent order imposing the civil penalty) totaling $427,100; seven enforcement orders without a proposed civil penalty; and 44 escalated notices of violation without a proposed civil penalty.*
- *Published research results on a variety of topics related to operating facility safety, including analysis of high burnup fuel performance, probabilistic flood hazard modeling, risk-informed and performance-based seismic design, risk evaluations for fire events, and design-basis and severe accident analysis for advanced reactor designs.*
- *Continued collaboration with the DOE under the Nuclear Energy Innovation Capabilities Act, including the signing of a technical addendum on technologies for advanced fuels and fuel cycle applications. This collaboration supports technical readiness and facilitates sharing of technical expertise and knowledge on advanced nuclear reactor technologies and nuclear energy innovation related to research, development, and demonstration.*
- *Received 88 educational proposals and 100 research and development proposals under the University Nuclear Leadership Program notice of funding opportunity. Awarded 25 educational grants and 12 research and development grants totaling $14.6 million to 27 academic institutions.* ***>>See Appendix Q for States with NRC grant award recipients in FY 2022.<<***

International Activities

- *Continued international technical leadership through research engagement and technical cooperation, including participation in international experimental safety programs, leadership of technical computer code user groups, leadership of and engagement in Nuclear Energy Agency-sponsored multinational research programs, and bilateral cooperation with countries worldwide on research activities of mutual interest.*
- *Represented the NRC as part of U.S. delegations, negotiating agreements for civil nuclear cooperation (Section 123 agreements) and participating in activities such as meetings of the Nuclear Suppliers Group, International Atomic Energy Agency Board of Governors, and Group of Seven Nuclear Safety and Security Group.*
- *Issued 61 licenses to export nuclear materials and equipment.*
- *Supported the development of enhanced regulatory infrastructure for radiological sources, research reactors, and nuclear power plant safety and security around the world through the provision of technical expertise and assistance funding, reinforcing U.S. Government national security and foreign policy objectives.*
- *Participated in a U.S. Government delegation to international meetings addressing the implementation of treaties and conventions, including the Review Conference of the Parties to the Amendment to the Physical Protection of Nuclear Material (CPPNM), meetings of the Preparatory Committee for the Conference of the Parties to the Amended CPPNM, and the Technical Meeting of Representatives to the CPPNM and Its Amendment.*
- *Participated in numerous virtual, hybrid, and in-person meetings with regulatory counterparts as international travel started to return to normal after being suspended due to COVID-19.*
- *Continued work under a first-of-a-kind memorandum of cooperation with the Canadian Nuclear Safety Commission to increase regulatory effectiveness through collaboration on the technical reviews of advanced reactors and small modular reactors.*
- *Coordinated the NRC's response, in support of broader U.S. Government efforts, to Russia's invasion of Ukraine by leveraging relationships across the U.S. Government and coordinating with international counterparts to facilitate information sharing and address urgent technical nuclear safety and security questions in support of Ukrainian regulatory counterparts.*
- *Signed multiple bilateral agreements for cooperation and assistance with international counterparts to facilitate the agency's engagement to support the NRC's International Strategy goals.*

Administration

- *Processed 219 Freedom of Information Act (FOIA) requests and nine appeals in FY 2022, with 91 FOIA requests and one FOIA appeal pending by the end of FY 2022.*
- *Conducted 104 cases by the Office of Investigations for FY 2022, including 68 investigations, 26 of which were carried over from FY 2021, and 36 assists to staff, eight of which were carried over from FY 2021.*
- *Conducted agency outreach to audiences interested in NRC activities.*
- *Awarded and administered the agency's acquisition portfolio, with obligations estimated over $265 million in FY 2022.*

Public Meetings and Involvement

- *During FY 2022, conducted approximately 775 open public meetings addressing a full range of NRC issues to support transparency with agency stakeholders. Conducted 116 closed meetings to discuss information not publicly available.*
- *Conducted 10 full committee meetings of the Advisory Committee on Reactor Safeguards and 50 subcommittee meetings in FY 2022; all meetings were hybrid to support re-entry to the agency's facilities.*
- *Held three virtual public meetings of the Advisory Committee on the Medical Uses of Isotopes in FY 2022.*
- *Hosted an all-virtual Regulatory Information Conference, bringing together thousands of participants from around the world and featuring 30 technical sessions, plenaries by agency senior leaders, as well as widely-attended special sessions highlighting women in the nuclear field and decommissioning efforts at the Fukushima Dai-ichi nuclear power plant in Japan.*

News and Information

- *Maintained the NRC website and free listserv subscription services at* https://www.nrc.gov/public-involve/listserver.html#lyris *to post and distribute NRC news releases.*
- *Shared information with the public using social media through platforms that address the major categories of social communication, with a focus on social networking and microblogging (Facebook, LinkedIn, and Twitter).*
- *In FY 2022, gained approximately 2,700 followers on Twitter and sent 500 tweets; gained more than 455 page followers and published approximately 270 posts on Facebook; added 4,900+ followers and published approximately 235 posts on LinkedIn; launched a new social media page on Instagram in October 2022.*
- *Issued 134 news releases in FY 2022.*

Scan QR code to see the latest information on the agency's accomplishments on NRC's website

REPORT A CONCERN TO THE NRC

Emergency

Report an emergency involving a nuclear facility or radioactive materials, including the following:

- *any accident involving a nuclear reactor, nuclear fuel facility, or radioactive materials*
- *lost or damaged radioactive materials*
- *any threat, theft, smuggling, vandalism, or terrorist activity involving a nuclear facility or radioactive materials*

The NRC accepts collect calls. The agency records all calls to this number.

Call the NRC's 24-Hour Headquarters Operations Center: 301-816-5100

Non-Emergency

This includes any concern involving a nuclear reactor, nuclear fuel facility, or radioactive materials. You may send an email to allegations@nrc.gov. However, because email transmission may not be completely secure, if you are concerned about protecting your identity, it is preferable that you contact us by telephone or in person. You may contact any NRC employee (including a resident inspector) or call:

The NRC's Toll-Free Safety Hotline: 800-695-7403

Calls to this number are not recorded between the hours of 7 a.m. and 5 p.m. eastern time. However, calls received outside these hours are answered by the Headquarters Operations Center on a recorded line. Some materials and activities are regulated by Agreement States, and concerns should be directed to the appropriate State radiation control program, a list of which can be found on the NRC website at https://scp.nrc.gov/allegations.html.

THE NRC'S OFFICE OF THE INSPECTOR GENERAL

The Office of the Inspector General (OIG) for the U.S. Nuclear Regulatory Commission and the Defense Nuclear Facilities Safety Board established the hotline program to provide agency employees, other government employees, licensee/utility employees, contractors, and the public a way to report questionable activity to the OIG concerning potential fraud, waste, abuse, and employee or management misconduct. You may also report mismanagement of agency programs or danger to public health and safety through the hotline program. You may contact the OIG Hotline program by telephone, through the online form, or by mail.

You may make an allegation anonymously or request that your identity be kept confidential. If you choose to identify yourself, consistent with the terms of the Inspector General Act of 1978, as amended, we will not reveal your identity unless disclosure is unavoidable.

Please be aware, while you may submit complaints anonymously, providing your name, address, and phone number allows us to follow up with you and address your matter more expeditiously. Unless the reporting is knowingly false, no action may be taken against you for having complained or disclosed information to the OIG. Reprisal and retaliation for reporting wrongdoing are prohibited by Federal law and regulations.

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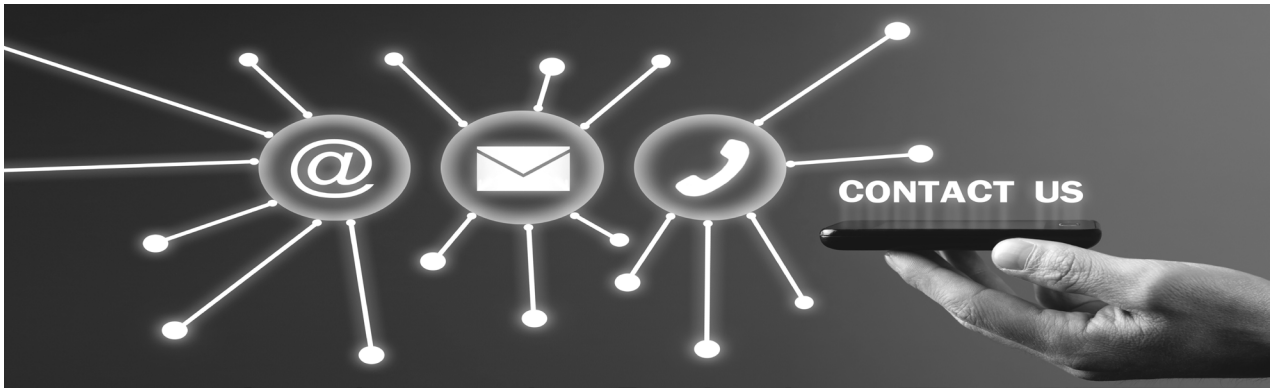
SCAN QR CODE

***Call the OIG Hotline:* 800-233-3497**
7 a.m.–4 p.m. (eastern time)
After hours, please leave a message.



CONTACT US

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Rockville, MD 20852

NRC inspectors keep a close eye on construction activities to ensure NRC regulations are being met at Vogtle Units 3 and 4 in Georgia.

NRC Office of Nuclear Security and Incident Response Director Mirela Gavrilas observes new construction activities at Vogtle Units 3 and 4 in Georgia.

PHOTOS: THE NRC ON THE JOB

NRC inspectors (left to right) Katherine Warner, Liz Andrews and Mark Henrion observe workers preparing and pouring concrete for a dry cask storage pad on the Three Mile Island plant site in Pennsylvania.

Region IV Health Physicist Linda Gersey (right) conducts radiological surveys and collects soil samples at the Sequoyah Fuels plant near Gore, Oklahoma. This site is undergoing decommissioning.

NRC Executive Director for Operations Dan Dorman (right), visits Arizona's Palo Verde Nuclear Generating Station and tours an offsite national response center full of equipment that can be rapidly dispatched to nuclear plants during an emergency. Photo courtesy of Arizona Public Service Co.

At the Susquehanna Unit 1 nuclear power plant, Senior Resident Inspector Chris Highley enters the Pennsylvania facility's containment during a refueling and maintenance outage to evaluate material conditions in this protective structure that surrounds the reactor.

The NRC Commission listens to a briefing on the developments of regulatory approaches for fusion energy devices and industry progress in commercializing fusion energy devices.

NRC Senior Instructor Jeff Griffis teaches a virtual class from the agency's Technical Training Center in Chattanooga, Tennessee.

NRC Division Director Chris Miller observes new construction activities at Vogtle Units 3 and 4 in Georgia.

Nuclear Regulator Apprenticeship Network participant Hayden Page visits the plant's condenser containment system at the Sequoyah nuclear power plant in Tennessee.

NRC Commissioner David Wright (purple shirt) tours Arkansas Nuclear One in Russellville, Arkansas, with Entergy and NRC staff before observing a security exercise. Photo courtesy of Entergy.

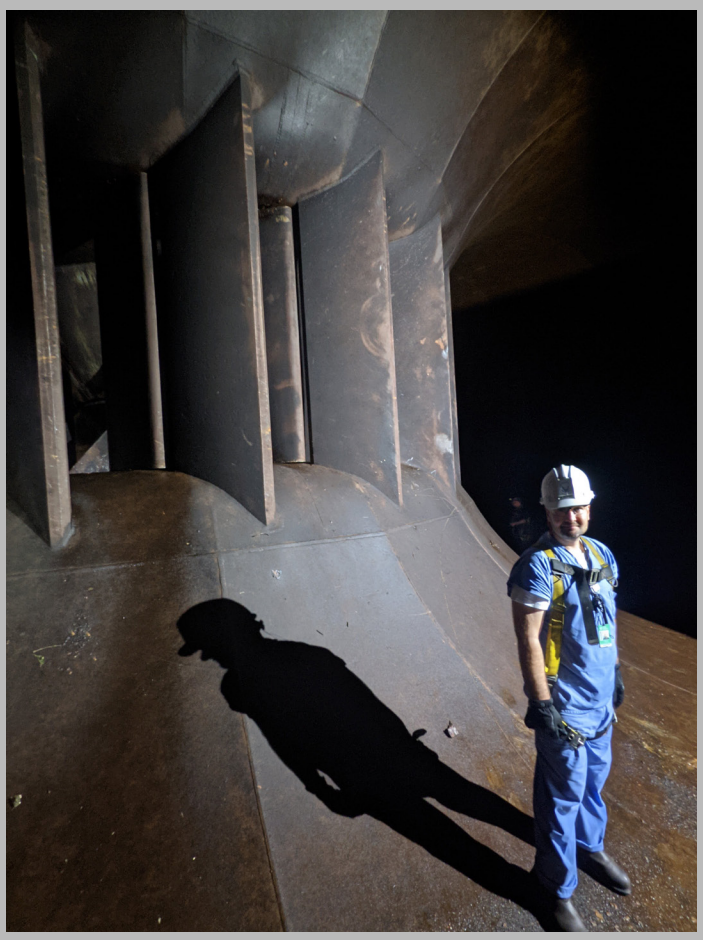
NRC Region I Inspector Juan Ayala in Wilmington, Delaware, conducts an inspection to ensure a nuclear gauge is being properly handled and secured.

Region IV health physicist Rob Evans completes his inspection at the 600-acre site in Gore, Oklahoma, where the Sequoyah Fuels Corporation operated a uranium conversion facility.

Indian Point nuclear power plant control room operators prepare for the final insertion of control rods in the Unit 3 reactor, part of the permanent shutdown of the site in New York. Not pictured: NRC inspectors watching operations.

NRC inspectors James Thompson and Kyle Bischoff take a boat from Prudhoe Bay to Artificial Island to perform an inspection on the use of radioactive materials for various purposes at Hilcorp, which operates an oil and gas facility. Not pictured: Mary Muessle, Director of Region IV's Division of Radiological Safety and Security.

NRC Office of Nuclear Reactor Regulation Director Andrea Veil observes new construction activities at Vogtle Units 3 and 4 in Georgia.



NRC Region II Inspector Nick Peterka pauses for a moment during an inspection of the Keowee Hydro Station near the Oconee Nuclear Station in South Carolina.

Edison Fernandez (left), a Region III specialist in refueling outage activities and welding, makes an unannounced inspection at the Palisades nuclear power plant to observe some emergent repair work and conduct final examinations on a nozzle weld during a refueling outage. The plant permanently ceased operations in May 2022.

NRC staff members participate in a "hybrid" incident response exercise with some staff online and others working from the Headquarters Operations Center in Rockville, Maryland.

Mary Muessle, Director of Region IV's Division of Radiological Safety and Security, and inspectors James Thompson and Kyle Bischoff at Alaska's North Slope inspect the facilities of five different companies for the use of radioactive materials at or around oil processing plants.

NRC summer and co-op students attend a technical session on emergency planning in the NRC Headquarters Operations Center.

NRC staff members participate in the Purdue University Engineering Industrial Roundtable career fair, sharing information about the agency, their jobs and their experiences working at the NRC.