

WRITTEN STATEMENT  
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UNITED STATES NUCLEAR REGULATORY COMMISSION  
TO THE  
ENERGY AND COMMERCE COMMITTEE  
SUBCOMMITTEE ON ENERGY AND  
SUBCOMMITTEE ON ENVIRONMENT AND CLIMATE CHANGE  
JULY 14, 2021

Chairman Rush and Chairman Tonko, Ranking Members Upton and McKinley, and distinguished members of the subcommittees. My colleagues and I appreciate the opportunity to update you on the U.S. Nuclear Regulatory Commission's (NRC) licensing and oversight activities, as well as the Fiscal Year (FY) 2022 budget request.

The NRC is an independent Federal agency established to regulate commercial nuclear power plants; research, test, and training reactors; nuclear fuel cycle facilities; and civilian use of nuclear materials. Additionally, the agency regulates the transportation, storage, disposal, export and import of nuclear materials and waste; the export and import of nuclear reactors and production facilities; and the export of nuclear facility components. The NRC also works with agencies around the world to enhance nuclear safety and security.

The NRC's FY 2022 budget request is \$887.7 million, including 2,879 full-time equivalents (FTE). When compared to the FY 2021 enacted budget and authorized carryover, this represents an increase of \$24.4 million, primarily to support salaries and awards adjustments.

Before I discuss the specifics of the NRC's FY 2022 budget request, please allow me to briefly address the NRC's response to the COVID-19 public health emergency.

### **NRC'S RESPONSE TO THE COVID-19 PUBLIC HEALTH EMERGENCY**

In response to the Department of Health and Human Services' declaration of the COVID-19 public health emergency, the NRC took a number of actions to protect the safety of our workforce while continuing to perform our important safety and security mission. Our buildings remained open, although most staff performed their duties from home while remaining fully engaged. We stood up a COVID-19 Task Force—a dedicated team of employees focused on tracking and responding to COVID-19 issues pertinent to the NRC and its workforce.

Approximately 95 percent of our staff was able to telework successfully, and most remain in that status today. This success was due in part to actions the agency had taken earlier to provide laptops and train staff on technology for effective work in a virtual environment. The agency also expanded its bandwidth to accommodate the increase in virtual connections, which was made possible by a supplemental appropriation under the CARES Act.

Special attention was given to our inspection staff to protect both their own health and that of the licensees while continuing to carry out their important duties. Resident inspectors at nuclear power plants and Category I fuel cycle facilities employed a risk-informed strategy to provide oversight of these facilities through a routine, onsite presence supplemented by telework flexibilities, as appropriate, to remotely monitor plant data systems, meetings, and other information. Licensees worked with us to provide new mobile technology, which enabled NRC inspectors to remotely monitor plant data systems, attend meetings, and access other information during the public health emergency.

In keeping with our commitment to transparency, the NRC communicated regularly with Congress, the public, industry, and licensees on conditions at sites, plant activities, and plans, including staffing and work outages. In response to the public health emergency, the NRC instituted an expedited exemption process to enable licensees to request relief from certain NRC regulations, such as work-hour limits, subject to thorough NRC review to ensure that reasonable assurance of public health and safety was maintained. The NRC also issued several Enforcement Guidance Memoranda to provide guidance to inspection staff in exercising enforcement discretion for specific cases of noncompliance that may have occurred as a result of the public health emergency. Additionally, force-on-force (FOF) activities were briefly put on hold, but resumed in July 2020 after staff developed a new inspection procedure to provide for limited scope tactical drill exercise inspections that allowed for key elements of nuclear power plant physical protection strategies to be tested in a manner that mitigated the risk of COVID-19 transmission.

While some public meetings were postponed due to the public health emergency, the majority of our public meetings held over the last 15 months have taken full advantage of communications technology to effectively reach broad audiences.

### **NRC'S CURRENT REGULATORY ACTIVITIES**

I would also like to take this opportunity to update the Committee on the NRC's ongoing regulatory activities.

## Operating Reactors

In March, the NRC issued annual performance letters to the operators of the nation's 94 operating commercial nuclear reactors. Eighty-nine reactors reached the highest performance category and fully met our safety and security performance objectives. Four reactors were in the second performance category, needing to resolve items of low safety significance. For these four plants, regulatory oversight includes additional inspection and follow-up of corrective actions. One reactor was in the third performance category with a degraded, but still acceptably safe, level of performance. For this plant, regulatory oversight includes increased NRC inspections, senior management attention, and oversight focused on the causes of the degraded performance. There were no reactors in the fourth performance category. The NRC hosted virtual public meetings and will continue to host public meetings near each plant to discuss the details of the annual assessment results.

Additionally, since December of 2019, the NRC renewed reactor licenses for three nuclear power plants for a period from 60 to 80 years: Turkey Point Nuclear Generating Units 3 and 4 in Florida; Peach Bottom Atomic Power Station, Units 2 and 3 in Pennsylvania; and most recently, Surry Power Station, Units 1 and 2 in Virginia. The NRC is currently reviewing two applications for subsequent license renewal for Point Beach Nuclear Plant, Units 1 and 2 in Wisconsin and North Anna Power Station, Units 1 and 2 in Virginia, and is currently performing an acceptance review of the application for Oconee Nuclear Station, Units 1, 2, and 3 in South Carolina.

## New Reactors

The staff is actively preparing for the completion of construction and anticipated transition to operation of the Vogtle reactor units in Georgia, and inspections are proceeding in accordance with the licensee's continued work at the site.

Interest in small modular reactors (SMRs) and advanced (non-light-water) reactors has continued to grow, and we are committed to developing a regulatory infrastructure to review these new technologies. The new 10 CFR Part 53 will define technology-inclusive, performance-based requirements for advanced nuclear reactors. The performance-based requirements will support a risk-informed approach that will acknowledge features designed to prevent adverse consequences. We anticipate publication of the final rule in October 2024, well ahead of the schedule required by the Nuclear Energy Innovation and Modernization Act (NEIMA).

#### Environmental Justice

In addition, the NRC is committed to engaging with a broad range of stakeholders on environmental justice. On April 23, 2021, the Commission directed the NRC staff to systematically review how environmental justice is addressed in the NRC's programs, policies, and activities, and as part of that review, consider the adequacy of the 2004 Policy Statement on the Treatment of Environmental Justice in Regulatory and Licensing Actions. The first public meetings for this effort are scheduled to take place July 15, 2021.

#### International Activities

The NRC is engaged in a wide range of bilateral and multilateral activities that enhance the safety and security of nuclear activities worldwide. We have bilateral agreements with over 45 regulatory counterparts, including almost every country with a power reactor program. These agreements facilitate technical exchanges, regulatory information sharing, personnel exchanges, and regulatory assistance. The NRC's regulatory approach has long been considered a model for countries operating or considering a nuclear program, and both new and

established regulators routinely seek the NRC's assistance and cooperation. As activities associated with SMRs and advanced reactors continue to increase, the NRC is maintaining an open dialogue with all interested stakeholders, including reactor designers, operators, financiers, and our international regulatory counterparts.

### Transformation and Innovation

The NRC has continued its efforts to become a more modern, risk-informed regulator by embracing the use of new technology and diverse ideas in a changing regulatory environment. Advances in innovation include the launch of IdeaScale, which is the NRC's new idea-generating platform to share successful innovations and crowdsource solutions for streamlining and improving our business and regulatory processes. As part of enhancing our use of technology and risk-informing the NRC's regulatory framework, the agency has made significant progress in creating a set of powerful, centrally located, data visualization tools designed to enable the NRC staff to better incorporate data insights into our regulatory decision making and business processes.

### NRC Workforce

The agency recognizes the importance of having a highly skilled staff and the need to maintain our unique expertise. Strategic workforce planning is vital to helping the NRC identify the knowledge, skills, and abilities necessary to perform our mission now and into the future. We have looked at skill adequacy and gaps through a modern, enhanced Strategic Workforce Planning process with a 5-year workload planning horizon. We are instituting increased entry-level hiring to ensure a pipeline of talent and advance a 21<sup>st</sup> century workforce. Finally, we created the Nuclear Regulator Apprenticeship Network (NRAN) program, a full-time, 2-year

training program designed to develop well-rounded regulators by focusing on skill development in multiple program areas across the agency.

### Diversity and Inclusion

The agency's "Inclusive Diversity Strategic Plan for Fiscal Years 2021–2026" serves as our blueprint for employees at all levels of the agency, with varying perspectives, education levels, skills, life experiences, and backgrounds to work together to achieve excellence and realize individual and organizational potential. Shortly after becoming Chairman, I issued an all-employees announcement emphasizing my strongly held view that all employees at the NRC must consider diversity and inclusion in agency operations and maintain a work environment free from discrimination, harassment, and intimidation. The goal is to foster an open, inclusive, and collaborative work environment where members of our workforce feel comfortable raising questions or concerns without fear of reprisal or retaliation.

### **FY 2022 BUDGET REQUEST**

I would like to now highlight specific elements of the NRC's FY 2022 budget request.

#### **Nuclear Reactor Safety**

The NRC's Nuclear Reactor Safety Program encompasses licensing and oversight of civilian nuclear power reactors, research and test reactors, and other nonpower production and utilization facilities (e.g., medical isotope production facilities) in a manner that adequately protects public health and safety and promotes the common defense and security. This program also oversees the security at these facilities, including evaluating how the facilities provide protection against radiological sabotage. This program contributes to the NRC's safety and

security strategic goals through the activities of the Operating Reactors and New Reactors Business Lines.

Overall resources requested in FY 2022 for the Nuclear Reactor Safety Program are \$477.4 million, including 1,783 FTE. This funding level represents an increase of \$24.6 million, including 28 additional FTE, when compared to the FY 2021 enacted budget and authorized carryover. The budget request also includes \$23 million for the continued development of a regulatory infrastructure for advanced nuclear reactor technologies.

### Operating Reactors

The Operating Reactors Business Line for FY 2022 supports the regulation of 94 operating civilian nuclear power reactors and 31 research and test reactors. The NRC is requesting \$388.2 million for operating reactors, including 1,474 FTE, which represents an increase of \$13.8 million and three additional FTE when compared to the FY 2021 enacted budget and authorized carryover. Funding increases primarily support work related to: the construction permit and operating license application reviews for medical isotope production facilities; the Oconee Nuclear Station, Units 1, 2, and 3 subsequent license renewal application; the anticipated St. Lucie Plant, Units 1 and 2 subsequent license renewal application; an increase in licensing actions related to Accident Tolerant Fuel (ATF); digital instrumentation and control regulatory improvements for assessing cybersecurity threats and protective measures at NRC-licensed facilities; implementation of the requirements of the Foundations for Evidence-Based Policymaking Act of 2018 and Federal Data Strategy Action Plan; and an increase in information technology (IT) resources and other related activities to enhance and transform the agency's approach to workload planning and analysis, budgeting, communication and outreach, and decision-making.



## New Reactors

The New Reactors Business Line portion of the Nuclear Reactor Safety Program is responsible for licensing and oversight of the design, siting, and construction of new nuclear power reactors, including SMRs and advanced reactors. The New Reactors activities provide the regulatory framework to ensure that new civilian nuclear power reactor facilities are developed and regulated in a manner that adequately protects public health and safety and promotes the common defense and security.

The FY 2022 budget request for new reactors is \$89.3 million, including 309 FTE, a funding increase of \$10.7 million and 25 additional FTE compared to the FY 2021 enacted budget and authorized carryover. Resources increase primarily due to technical reviews of three advanced reactor applications; preapplication activities for two combined license applications; one standard design approval for an SMR for NuScale Power, LLC; nine advanced reactor applications; and continued progress on the technology-inclusive 10 CFR Part 53 rulemaking for advanced reactors.

## **Nuclear Materials and Waste Safety**

The Nuclear Materials and Waste Safety Program is responsible for licensing, regulating, and overseeing nuclear materials in a manner that adequately protects public health and safety and promotes the common defense and security. Through this program, the NRC regulates uranium processing and fuel facilities; research and pilot facilities; other nuclear materials licensees such as medical, industrial, research, and academic uses; and the transportation, storage, and disposal of radioactive materials and waste. This program provides reasonable assurance of the physical security of materials and waste and protection against radiological sabotage, theft, and

diversion. The FY 2022 budget request for the Nuclear Materials and Waste Safety Program is \$130.2 million, including 453 FTE. These funding levels represent an increase of \$4.6 million and a decrease of nine FTE when compared to the FY 2021 enacted budget and authorized carryover.

#### Spent Fuel Storage and Transportation

The Spent Fuel Storage and Transportation Business Line portion of the Nuclear Materials and Waste Safety Program supports the safe and secure storage of spent fuel and the safe and secure transport of radioactive materials. The FY 2022 budget request for spent fuel and transportation is \$28 million, including 99 FTE. These funding levels represent a decrease of \$0.1 million and three FTE when compared to the FY 2021 enacted budget and authorized carryover. Resources decrease primarily because of completions of the license application reviews for consolidated interim storage facilities and renewals for other Independent Spent Fuel Storage Installations (ISFSIs).

During FY 2022, the staff's major activities will include developing technical bases for transportation packages with batch quantities of ATF in preparation for licensing reviews of ATF designs for use in U.S. commercial power plants. In addition, the NRC expects to review four license applications for ISFSIs and eight spent fuel storage renewal applications and will continue to conduct safety and security inspections of ISFSIs.

#### Nuclear Materials Users

The Nuclear Materials Users Business Line portion of the Nuclear Materials and Waste Safety Program supports the licensing and oversight of industrial, medical, and academic uses of radioactive materials. The FY 2022 budget request for nuclear materials activities is \$60.3

million, including 198 FTE, a funding increase of \$4.8 million and a decrease of three FTE when compared to the FY 2021 enacted budget. Resources increase primarily to fully fund the Integrated Source Management Portfolio and to support international assistance. The FY 2022 requested funding supports the completion of reviews of approximately 2,000 materials licensing actions including new license applications, amendments, renewals, and terminations; 900 routine health, safety, and security inspections; outreach to existing and potential new Agreement States; and implementation of the NRC's Tribal Policy Statement. In addition, resources will be used to conduct and review high-priority rulemaking activities and coordinate source security activities with other Federal agencies; satisfy international treaty and convention obligations; and support information, knowledge, and technical cooperation with international regulatory counterparts.

#### Decommissioning and Low-Level Waste

The Decommissioning and Low-Level Waste (LLW) Business Line portion of the Nuclear Materials and Waste Safety Program supports oversight of decommissioning nuclear facilities, licensing and oversight of uranium recovery facilities, and disposition of low-level radioactive waste from all civilian sources. The FY 2022 budget request for decommissioning and LLW is \$22.9 million, including 85 FTE, a funding increase of \$0.1 million and a decrease of one FTE when compared to the FY 2021 enacted budget and authorized carryover. Resources increase primarily to support decommissioning reviews and increased inspection activities for decommissioning nuclear power reactors. In FY 2022, the NRC expects to perform licensing and oversight activities for the decommissioning of three research and test reactors; 22 nuclear power reactors; and ten complex materials sites. Additionally, the NRC expects to perform licensing and oversight activities for one uranium recovery facility and two licensed, but not yet constructed, uranium recovery facilities.

## Fuel Facilities

The Fuel Facilities Business Line portion of the Nuclear Materials and Waste Safety Program is responsible for ensuring that fuel cycle facilities are licensed and operated in a manner that adequately protects public health and safety and promotes the common defense and security. The FY 2022 budget request for fuel facilities is \$19 million, including 71 FTE, which represents a funding decrease of \$0.2 million and two FTE when compared with the FY 2021 enacted budget. Resources decrease primarily because of efficiencies and enhancements to the fuel facility licensing and oversight programs.

Funding in the Fuel Facilities Business Line supports licensing and oversight activities related to fuel conversion, enrichment, and fuel fabrication. This business line also provides licensing and oversight support for additional licensees that possess greater-than-critical-mass quantities of special nuclear material, such as universities and research and test facilities.

## **CORPORATE SUPPORT**

The NRC's Corporate Support Business Line supports centrally managed activities that are necessary for the agency to accomplish its mission and includes administrative services, financial management, human resource management, IT/information management (IM), outreach, policy support, activities of the Commission, training, and acquisitions. The FY 2022 budget request for corporate support comprises 30 percent of the NRC's total requested budget consistent with Section 102(a)(3)(A) of NEIMA. Resources reflect a \$5.1 million decrease, including eight fewer FTE, when compared to the FY 2021 enacted budget. The FY 2022 budget request supports the NRC's commitment and ongoing efforts to manage the IT/IM portfolio; public access to ensure transparency; development and implementation of

cybersecurity policy to mitigate cybersecurity vulnerabilities; and targeted investments such as modernizing IT to enable new capabilities and yield future cost savings.

## **OFFICE OF THE INSPECTOR GENERAL**

The NRC's Office of the Inspector General (OIG) is a statutory entity whose mission is to independently and objectively audit and investigate programs and operations to promote effectiveness and efficiency and to prevent and detect fraud, waste, and abuse. The FY 2022 budget request for the NRC OIG is \$13.8 million, which includes \$11.9 million in salaries and benefits to support 63 FTE and \$1.9 million in program support. These resources will support Inspector General auditing and investigation functions for both the NRC (\$12.7 million) and the Defense Nuclear Facilities Safety Board (\$1.1 million).

## **FY 2021 FINAL FEE RULE**

The NRC's FY 2021 Final Fee Rule, published on June 16, 2021, includes fees to recover, to the maximum extent practicable, approximately 100 percent of the NRC's total budget authority for FY 2021, less the budget authority for certain activities excluded by NEIMA.

The final fee rule reflects a total budget authority of \$844.4 million, a decrease of \$11.2 million from FY 2020. After accounting for exclusions from the fee-recovery requirement and net billing adjustments, the NRC must recover approximately \$708 million in fees in FY 2021. Of this amount, approximately \$190.6 million will be recovered under Part 170 fees for service and approximately \$517.4 million will be recovered through Part 171 annual fees.

## **CONCLUSION**

In closing, the NRC remains deeply committed to protecting public health and safety and the environment, as well as ensuring the long-term safety and security of nuclear power facilities and nuclear materials. We are closely monitoring the changing environment, tackling new challenges, and taking new approaches to address the issues that confront us. Chairman Rush and Chairman Tonko, Ranking Members Upton and McKinley, and distinguished members of the subcommittees, this concludes my testimony. On behalf of the Commission, I thank you for the opportunity to appear before you and for your support of the vital mission of the NRC. We would be pleased to respond to your questions. Thank you.