WRITTEN STATEMENT

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UNITED STATES NUCLEAR REGULATORY COMMISSION

TO THE

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

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Chairman Carper, Ranking Member Capito, and distinguished members of the Committee. My colleagues and I appreciate the opportunity to discuss the U.S. Nuclear Regulatory Commission's (NRC) Fiscal Year (FY) 2024 budget request and update you on some of the agency's licensing and oversight activities.

The NRC is an independent Federal agency established to regulate commercial nuclear power plants; research and test reactors; nuclear fuel cycle facilities; and radioactive materials used in medicine, academia, and industry. The agency also regulates the transportation, storage, and disposal of radioactive materials and waste; the export and import of radioactive materials, nuclear reactors, and fuel cycle facilities; and the export of nuclear facility components.

The NRC's FY 2024 budget request is $1.006 billion to support activities focusing on the safety and security of the facilities and materials that we regulate. The budget request represents about a 6.7 percent increase, or $63.2 million over the NRC's enacted budget for FY 2023. This is primarily to support increased salaries and benefits, in accordance with the U.S. Office of Management and Budget guidance, and the workload changes I will describe within each business line. The budget request proposes to use $27.1 million in carryover to offset the Nuclear Reactor Safety budget, resulting in an adjusted gross budget authority request of

$979.2 million. The NRC expects to recover $832.2 million of the FY 2024 budget from fees assessed to NRC licensees. This will result in a net appropriation of $156 million, which is an increase of $19 million when compared with the FY 2023 enacted budget. The FY 2024 budget request is anticipated to encompass the regulation of 94 operating power reactors, 31 non-power production or utilization facilities, 23 power reactor sites undergoing decommissioning, and the numerous other facilities and materials that we regulate.

The NRC realized a number of important accomplishments and made progress in key areas over the past year. To highlight a few: the NRC authorized the operation of Vogtle Unit 3 in Georgia, marking the first time the agency has authorized fuel loading and startup operations for a nuclear power plant with a combined construction permit-operating license. Southern Nuclear Operating Company projects Vogtle Unit 4 will be operational by late 2023 or early 2024. In another major achievement, the NRC completed NuScale's design certification for a small modular reactor (SMR). The agency also renewed the license for Westinghouse's fuel fabrication facility in Columbia, S.C. for another 40 years.

Looking ahead, the FY 2024 request supports continued licensing and oversight of operating power reactors and non-power facilities, as well as the licensing of SMRs and advanced reactors. This request also supports the licensing and oversight of uranium processing and fuel facilities; research and pilot facilities; users of nuclear materials for medical, industrial, research, and academic purposes; spent fuel storage; radioactive material transportation and packaging; decontamination and decommissioning of facilities; and low-level and high-level radioactive waste.

Resources will allow the NRC to complete further work in several areas critical to the future of the agency. Specifically, funds will support staff work on the technology-inclusive reactor licensing framework for advanced reactors and other nuclear technologies ahead of the congressionally mandated schedule in the “Nuclear Energy Innovation and Modernization Act.” It also will assist ongoing efforts to develop a more risk-informed regulatory infrastructure overall, including development of an alternative physical security requirement for advanced reactors, and a rulemaking for increased enrichment to support accident tolerant fuels and advanced reactor fuel designs. The Commission recently took a major step in clarifying the regulation of fusion energy in the United States by directing the staff to license near-term fusion energy systems under a byproduct material framework. There is also work underway that will prepare the agency for specific anticipated future applications and further coordination with our Agreement State partners in this area.

To support our continued evolution into a more modern risk-informed regulator, the NRC staff proposed the development of a generic environmental impact statement for advanced reactors. This proposal is currently under Commission review. The NRC staff is also revising the generic environmental impact statement for license renewal of nuclear plants to account for the initial license renewal period (40-60 years) and one term of subsequent license renewal (60-80 years), consistent with Commission direction. In addition, the budget request supports engagements with foreign counterparts and other international partners to increase international collaboration on SMR and advanced reactor technical reviews. We have had tremendous success through our Memorandum of Cooperation (MOC) with the Canadian regulator in joint technical reviews, finishing six topical reports in highly complex areas of interest. Funding also will allow the NRC to provide critical international assistance to countries with burgeoning regulatory programs while we rise to emerging challenges around the world.

The budget request supports our goals to continue fostering a healthy organization in a hybrid work environment and building stakeholder confidence in the NRC. With a strong and agile workforce, we will be able to meet the needs of the future. To achieve these goals, we will continue to maintain a highly qualified workforce through recruitment and retention of staff, with a greater emphasis on entry- and mid-career level hiring to address projected attrition and prepare for an anticipated increasing workload in future years. Currently, one-third of NRC's staff is eligible to retire. We are pursuing an ambitious hiring effort over the next number of years to maintain current staffing levels. In 2022 we successfully hired over 250 people and we've met approximately 25% of our hiring goal for fiscal year 2023, with over 100 new employees already on board. Included in this initiative, the agency continued to build its future workforce through implementation of the second cohort of its Nuclear Regulator Apprenticeship Network, a robust summer hire program, and conversion of students in the Co-op Program. In FY 2023, the Commission restarted the Minority Serving Institutions Grant Program, which had been discontinued in 2017. This grant program promotes the inclusion of women, minorities, and individuals with disabilities in science, technology, engineering, mathematics, and other fields of interest within the NRC. Resources in the budget request also support developing a pipeline of specialized expertise in health physics through the Graduate Fellowship Program.

FY 2024 BUDGET REQUEST

I would like to now highlight specific elements of the NRC's FY 2024 budget request.

Nuclear Reactor Safety

The NRC's Nuclear Reactor Safety Program encompasses licensing and oversight of civilian nuclear power reactors and non-power facilities, such as medical isotope production facilities.

This program oversees both the safety and security at these facilities and is executed through the activities of the Operating Reactors and New Reactors Business Lines.

The FY 2024 budget request for the Nuclear Reactor Safety Program is $530.8 million. A portion of this budget request, $34.2 million, would support the development of advanced reactor regulatory infrastructure and staff capabilities for licensing of advanced nuclear reactor and fuel cycle technologies.

Operating Reactors

The Operating Reactors Business Line for FY 2024 is anticipated to encompass the licensing and oversight of 94 operating power reactors and 31 non-power facilities. With the inclusion of the carryover used to offset the FY 2024 budget request, the NRC is requesting a total of $425.8 million for this business line to support licensing and inspection of activities such as digital instrumentation and controls upgrades and risk-informed initiatives. Resources support conducting review activities for three initial license renewal applications, three subsequent license renewal applications, and developing and updating regulatory guidance for license renewal. Also, the NRC is actively engaged in reviewing one medical radioisotope facility construction permit application, two non-power reactor construction permit applications, and two non-power reactor operating license applications. This is in addition to the agency's work on vendor technical, or "topical," reports, including those related to accident tolerant fuels.

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 budget request for new reactors is $105 million, with inclusion of the carryover used to offset the FY 2024 budget request. In addition to the development of the new regulatory licensing framework, this request supports numerous pre-application activities, including: one SMR combined license application; one SMR standard design application; two SMR construction permit applications; two advanced reactor combined license applications; and five advanced reactor construction permit applications. The budget request would also provide resources for technical reviews associated with several licensing activities including: one SMR and two advanced reactor combined license applications; one SMR standard design application; one SMR and four advanced reactor construction permit applications; new and advanced reactor licensing support activities such as guidance development and codes and standards activities; and research support for reviews and analysis.

Nuclear Materials and Waste Safety

The Nuclear Materials and Waste Safety Program is responsible for licensing, regulating, and overseeing uranium processing and fuel facilities; research and pilot facilities; and other nuclear materials licensees, such as medical, industrial, research, and academic users. This program includes regulation of the transportation, storage, and disposal of radioactive materials and waste. It serves an important security function through regulation of the physical security of materials and waste and protection against radiological sabotage, theft, and diversion. The FY 2024 budget request for the Nuclear Materials and Waste Safety Program is $152.9 million.

Spent Fuel Storage and Transportation

The Spent Fuel Storage and Transportation Business Line portion of the Nuclear Materials and Waste Safety Program supports NRC oversight of spent fuel storage and transport of

radioactive materials. The FY 2024 budget request for these activities is $28.8 million, which will support reviews for license amendments, transportation packages, storage certificates of compliance, and independent spent fuel storage installation license renewal applications. In addition, it will fund research to support the review of transportation packages containing accident tolerant fuel, oversight activities relating to routine operations, aging management inspections, and initial loading campaigns. Further work will be done to shore up program infrastructure, including revision of inspection guidance, and development and updates of regulations and guidance documents in support of spent fuel storage and transportation.

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 2024 budget request in this area is $71.4 million, which supports our work on international assistance, with particular emphasis on targeted regulatory capacity building in Central and Eastern Europe and sub-Saharan Africa to complement broader U.S. Government nuclear energy outreach in those regions. This request supports licensing and inspection of the NRC's radioactive materials licensees and oversight of the National Materials Program implemented by 39 "Agreement States" and the NRC. This work includes auditing programs nationwide under the Integrated Materials Performance Evaluation Program and reviewing applications from states seeking to become Agreement States. Three states — Connecticut, Indiana, and West Virginia — have submitted a letter of intent to become an Agreement State. We are also maintaining and improving the Integrated Source Management Portfolio, which provides critical national security infrastructure for managing high-risk radioactive sources nationwide and supports licensing and oversight workload management for the NRC and a growing number of Agreement States. This business line also supports the

agency's Tribal Liaison Program, which implements both Federal law and the agency's Tribal policy statement to ensure we have meaningful engagement with Tribes on our proposed actions.

Decommissioning and Low-Level Waste

The Decommissioning and Low-Level Waste Business Line portion of the Nuclear Materials and Waste Safety Program supports decommissioning licensing and oversight activities for 23 power reactor sites, two non-power utilization facilities, four complex materials sites, 28 uranium mill tailings sites, and five uranium recovery sites. The FY 2024 budget request of $27 million supports the increase in decommissioning work due to accelerated decommissioning schedules. The expected workload includes the review of seven anticipated license termination plans; oversight of 22 decommissioning Uranium Mill Tailings Radiation Control Act (UMTRCA) Title I sites; five decommissioning UMTRCA Title II sites and six Title II Uranium Recovery Sites that are under Department of Energy (DOE) long-term care and maintenance; three rulemaking activities; and guidance and code development.

Fuel Facilities

The Fuel Facilities Business Line portion of the Nuclear Materials and Waste Safety Program is responsible for licensing and oversight of fuel cycle facilities, including 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. The FY 2024 budget of $25.7 million supports activities for nine major fuel facilities and 10 greater-than-critical-mass special nuclear material licensees; continues maintenance and support of the Nuclear Materials Management and Safeguards System; sustains U.S. non-proliferation

activities, including implementation of international safeguards; and licensing the import and export of nuclear materials and equipment.

Corporate Support

The NRC's Corporate Support Business Line encompasses centrally managed activities that are necessary for the agency to accomplish its mission. This business line includes a wide range of important functions, including administrative services, financial management, human resource management, information technology/information management (IT/IM), outreach, policy support, legal support, activities of the Commission, training, and acquisitions. The FY 2024 budget request of $304 million would comprise 30.2 percent of the NRC's total requested budget, which reflects the agency's efforts to comply with the corporate support cap mandated by the "Nuclear Energy Innovation and Modernization Act" to the maximum extent practicable. The FY 2024 budget request supports much needed IT modernization efforts that will enhance workforce productivity, strengthen security, improve transparency of Federal IT spending, and encourage the use of data as a strategic asset. This will facilitate reductions in costs over time, increase efficiency, allow for better management of major acquisitions, and support effectiveness of administrative services.

RESEARCH

The NRC's research activities provide independent expertise and information for making timely regulatory judgments, anticipating potentially significant safety problems, and resolving safety issues. The NRC's research activities also support the development of technical regulations and standards and include the collection, analysis, and dissemination of information about the safety of commercial nuclear power plants and nuclear materials activities. The NRC's FY 2024 budget request of $96.3 million will support the NRC staff across business lines. For example, this

budget will provide for the development and maintenance of computer code capabilities and models, which allow for safety analysis, engineering, risk assessment of reactors, analysis of spent fuel casks and fuel transportation canisters, and assessment of human health effects. Funding in this area will also allow the NRC to prepare for new technologies, such as artificial intelligence; assess the impact of extreme weather events and seismic hazards; support experimental programs that provide data for advanced fuels and higher burnup; and provide tools to monitor and assess reactor components for long-term operation and operational enhancements.

OFFICE OF THE INSPECTOR GENERAL

The mission of NRC's Office of the Inspector General (OIG) is to independently and objectively audit and investigate programs and operations to promote effectiveness and efficiency by preventing and detecting fraud, waste, and abuse. The FY 2024 budget request for the NRC OIG is $18.6 million, which will support Inspector General auditing and investigation functions for both the NRC ($17.1 million) and the Defense Nuclear Facilities Safety Board ($1.5 million).

CONCLUSION

In closing, the FY 2024 budget request allows NRC to focus on conducting our mission activities and recruiting and retaining a highly diverse and skilled workforce to ensure the safety and security of nuclear power facilities and nuclear materials.

On behalf of the Commission, I thank you for the opportunity to discuss the important work we anticipate in the year ahead and for your support of the NRC's vital mission. We would be pleased to respond to your questions.