Statement of Admiral William Houston
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on the
Fiscal Year 2025 President's Budget Request
Before the
Senate Committee on Armed Services
Subcommittee on Strategic Forces

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Chairman King, Ranking Member Fischer, and distinguished members of the subcommittee, thank you for the opportunity to appear before you today and present the President's Fiscal Year (FY) 2025 budget for Naval Reactors. Your continued, strong support for the unique mission and successful execution of the Naval Nuclear Propulsion Program enables our nuclear Navy to carry out vital missions around the world, at any time, in response to global events.

In my first year of an eight-year tenure as Director of Naval Reactors, the program continues to celebrate the 75th anniversary of delivering naval nuclear propulsion for the Nation and powering maritime dominance. I have spent the first several months meeting our experts and touring the laboratories, nuclear capable shipyards, and facilities that ensure safe and effective operation of the Program's cradle to grave responsibilities. I look forward to continuing improve upon the solid foundation that Admiral Rickover and my predecessors have built and maintained.

With identification of the formal requirement for a nuclear powered submarine in 1948, the nation embarked on a path that continues today. We train nuclear operators, rely on and shepherd the nuclear industrial base, and employ nuclear shipyards with the same rigor and passion as those early days. The Program began with no certainty of success, but under the leadership of Admiral Rickover and with tremendous Congressional support, we, alongside our most capable allies, remain the dominant force in naval nuclear propulsion. Today, Naval Reactors is engaged in a tireless pursuit of new technologies, new materials, innovative designs and adaptive approaches toward keeping our nuclear-powered submarines and aircraft carriers at sea longer, with enhanced warfighting capabilities. Our potential adversaries are also dedicated in their pursuits. Your partnership and leadership together with the Department of Energy and the Navy is needed now, more than ever, as we work on naval nuclear propulsion that will power our fleet and protect the national security of the United States throughout the remainder of this century.

Today's strategic environment is rapidly changing and complex. The global balance of military capabilities is evolving, but the Naval Nuclear Propulsion Program is in place and answering the challenge. Our actions today will impact the security and prosperity of our nation for generations. As I enter my tenure at Naval Reactors, I will ensure that

we sustain and improve our principal naval warfighting advantage and maintain our supremacy in the maritime battlespace. That supremacy cannot be taken for granted and it is not the sole purview of the United States.

Consistent with the National Security Strategy and the National Defense Strategy, it is vital for the Navy to maintain and expand our competitive advantage by aggressively investing in emerging technologies. The principal strategic issues driving the need for urgent technological advancements are embedded in the growing security threat from China and Russia. China continues to advance and establish an expanding naval presence, projecting power and challenging U.S. maritime superiority in new arenas. Meanwhile, Russia poses an immediate threat to free and open international systems and sovereign rights, relying on coercive practices to pursue an edge over the United States and our allies. To properly defend against these threats, nuclear-powered submarines and aircraft carriers with greater capability, firepower, and endurance will be required. Technology for the next generation of nuclear propulsion must be developed today in order to be ready to deliver the increased speed, improved stealth, and enhanced warfighting capabilities needed to retain our advantage. From concept to production, our focus on technologies and processes that can reduce the build span times and costs of these platforms is essential to delivering more ships, faster. In addition to our own efforts, leveraging the technical expertise and resources of our allies and partners remains a key advantage and greatly complicates our adversaries planning.

For the last several years, diplomatic, and Congressional leaders have been developing, coordinating, and planning to execute the Australia, United Kingdom, and the United States (AUKUS) tri-lateral security partnership. The AUKUS partnership bolsters our own shipbuilding capability through uplift of our industrial and vendor base capacity, and builds upon over a half century of collaboration with the United Kingdom on naval nuclear propulsion. Operational, rotational deployments of US Navy submarines through the Submarine Rotational Force – West and ultimately the operation of Australian conventionally-armed, nuclear-powered submarines throughout the Indo-Pacific region, are efforts supported fully through the United States Naval Nuclear Propulsion Program. Given the global threats we face, it is imperative that we work with our closest allies to improve their capabilities and expand their reach in the undersea domain. Development and planning for AUKUS is resulting in tangible outputs this year, enabled by necessary investments from our foreign partners, but supported by Naval Reactors' core mission and activities funded in our DOE budget. We remain concentrated on providing nuclear propulsion to retain the US Navy's maritime dominance, while also leveraging our 75 years of preeminence in naval nuclear propulsion to support U.S. commitments under AUKUS. Our continued success rests on the foundation of prior efforts but is only sustained in what we build and prioritize today.

Naval Reactors Overview

Naval Reactors' budget request for FY 2025 is $2.12 billion, an 8.9% increase over the FY 2024 enacted level.[1] Your support has also facilitated the continued safe operation of the nuclear fleet, along with the unmatched protection of the Sailors operating our ships, the workers maintaining our ships, and the public and environment through our continued, focused, regulatory oversight of the Naval Nuclear Propulsion Program, documented in our annual performance reports available via the Department of Energy webpage. Previous Congressional support has allowed significant progress on three major Department of Energy funded projects – COLUMBIA Class propulsion plant development and production, construction of the Naval Spent Fuel Handling Facility in Idaho, and completion of the refueling overhaul of our research and training reactor in New York. In the coming years, Naval Reactors will complete these projects and I look forward to keeping the committee updated as we move through each. For example, we have made substantial progress with COLUMBIA Class propulsion plants in support of the lead ship construction and are entering serial production of the life-of-ship cores. The Program also continues to make progress amid challenges during construction of the incredibly important Naval Spent Fuel Handling Facility, and I will provide a full update later in my statement. Finally, the refueling overhaul of our research and training reactor will complete later this year, and nuclear operator training will resume in New York early next year.

While we are staying focused on completing these near term efforts, we also continue to invest and plan for the long-term future of naval nuclear propulsion. Naval Reactors remains engaged under DOE and NNSA's leadership to ensure a future uranium enrichment capability to support national security requirements, including naval nuclear propulsion into the next century. Through the support of Congress, we continue to develop and pursue advanced technologies and recapitalize infrastructure across all four of our Naval Nuclear Laboratory sites. Notably, at the Naval Reactors Facility in Idaho, the Expended Core Facility continues to provide our Program the capability to manage spent nuclear fuel, and perform core and post-irradiation examinations. However, this facility is over 60 years old and Naval Reactors is executing a plan to exit the facility by transitioning capabilities out in stages, the first being spent fuel management, which will transition to the Naval Spent Fuel Handling Facility in the late 2020s. This budget request initiates the next stage in that exit strategy by requesting funding to begin the second infrastructure project that will transition core examinations out of the Expended Core Facility. Even further out, a future irradiation testing capability will be vital to the Naval Reactors program. DOE, NNSA and NR are working on a long-range plan for such a capability beyond 2040.

Major Projects

COLUMBIA Class Propulsion Plant

The COLUMBIA Class ballistic missile submarine remains the Navy's number one acquisition priority. Naval Reactors is delivering the life-of-ship reactor core and the

[1] FY 2024 Enacted amounts throughout this testimony do not reflect the mandated transfer of $92.8 million from Naval Reactors to the Office of Nuclear Energy for operation of the Advanced Test Reactor.

electric drive propulsion system for the COLUMBIA Class. To date, lead ship reactor plant components have been delivered on time and the reactor core is on track to support lead ship delivery. The FY 2025 budget includes $45.6 million to continue reactor plant design, fabrication, and safety analysis work required for lead ship reactor testing. Additionally, Naval Reactors will soon commence lead ship motor module testing of the electric drive propulsion system at the compatibility test facility in Philadelphia, PA.

Spent Fuel Handling Recapitalization Project

Naval Reactors is continuing construction of the Naval Spent Fuel Handling Facility at the Naval Reactors Facility in Idaho. The Naval Spent Fuel Handling Facility is essential to our mission to manage naval spent nuclear fuel in support of aircraft carrier and submarine fleet requirements. The FY 2025 budget request includes $292 million for continuation of this project through near-term milestones including erection of structural steel for the main process building, construction of the reinforced concrete spent fuel pools, and installation of utility systems. During the last several years, the project has encountered a number of challenges. Specifically, the COVID-19 pandemic introduced work delays and additional costs for the Project's active and planned construction subcontracts due to volatile market conditions. Most recently, we worked through subcontractor performance issues and the effects of limited competition for construction subcontracts in Idaho resulting in a revised acquisition plan for a major construction subcontract and additional funding requirements. Funding in FY 2025 will be vital to continuing the construction sequence and achieving the Project's milestones. Naval Reactors remains committed to keeping the committee informed of progress on this complex and large-scale infrastructure project.

Naval Examination Acquisition Project (NEAP)

The FY 2025 budget request represents the first year of Major Construction Project construction funding to begin the detailed design phase for the Naval Examination Acquisition Project, which will recapitalize and transition the core examinations capability out of the Expended Core Facility. Core examinations are critical to current fleet operations as they allow scientists and engineers to compare actual, measured core performance data to expected performance predicted by models and various testing programs during design and manufacture. More specifically, these examinations provide feedback to validate and deliver safe and unrestricted fleet operations throughout the decades-long lifespans for which we have designed the cores. Without these examinations, current fleet operations may be conservatively restricted or reduced when issues arise so that sufficient conservatism is maintained to protect the crew, the core and the environment. In addition to directly informing current fleet operations, core examinations provide critical feedback for future designs to improve performance, manufacturability, and efficiency of our cores. Funding in FY 2025 enables the Program to begin the several-year detailed design phase to prepare for construction. We are incorporating lessons learned from the Spent Fuel Handling Recapitalization Project and are engaged with the NNSA and DOE on the outlook of

infrastructure, especially in Idaho, to ensure the project is best positioned for success. I look forward to providing an update as we come through the design phase of the project.

Technical Base Funding

In addition to our three priority projects, Naval Reactors maintains a world-class, high-performing workforce across the technical base providing 24/7 year-round support of the cradle-to-grave operations of our naval nuclear enterprise. The technical base is the set of fundamental skills and capabilities necessary to safely and effectively support the nuclear Navy. It includes a foundation of specialists in nuclear materials, nuclear physics, thermal-hydraulics testing, acoustics, electronics, software development, systems integration, and other specialized skills, along with the associated facilities and laboratories to conduct our work.

The people and activities that make up our technical base perform essential work to support the operating fleet and set the foundations for our Navy to retain its technological advantages over our competitors. Specifically, the technical base: 1) addresses emergent, daily needs and challenges of our globally deployed nuclear fleet, 2) executes cutting edge technology research and development that supports improving today's nuclear fleet and assessing future naval nuclear propulsion capabilities, and 3) modernizes critical infrastructure and equipment while reducing the Program's legacy environmental liabilities.

Attracting and retaining top talent in our government civilian and contract workforce is critical to our ability to fulfill and mature our mission amidst a wide array of challenges and new demands. The broad range of talent in our organization is in high demand from all areas of our economy. We remain focused on recruiting and retaining a well-trained, highly qualified workforce and continue to work with the leadership of our laboratories, private shipyards, Navy, and DOE to stay competitive in this aggressive talent market.

Program Direction

Our lean and highly skilled federal workforce is critical to the execution of our responsibilities. With the FY 2025 Program Direction request of $62.8 million, we remain dedicated to attracting, developing, and retaining a talented and diverse workforce to oversee and manage work across the Naval Nuclear Propulsion Program. The talented and dedicated people at our Washington, DC headquarters and field offices around the world report directly to me and are essential to our strong, centralized management model and oversight of the important work we perform every single day.

Supporting the life-cycles of several classes of nuclear-powered ships whose lifetimes can extend over half a century requires staffing continuity and longevity to ensure the Nation has a workforce with the deep technical knowledge to execute Naval Reactors'

cradle-to-grave responsibilities. I must have sufficient Federal staffing to meet the demands of sustaining and improving today's fleet while simultaneously growing our future capabilities. Diverse, complex systems, new and innovative research efforts, and growing cyber and other vulnerabilities require maintaining and then developing additional workforce expertise within our human capital strategy. Recruiting, rewarding, and retaining our workforce at our full personnel requirements is the fundamental enabler of all aspects of naval nuclear propulsion.

The market demand for our highly skilled and experienced workforce introduces challenges to recruit and retain a top-tier workforce that values its contribution to national defense. In concert with our ongoing focus on research and development, we are implementing new ways to bring in and retain the nation's top talent at Naval Reactors and give them resources to introduce technical innovations into our submarines and aircraft carriers. I respectfully request Congress' support of the FY 2025 Program Direction budget request, which will allow me to recruit, select, develop, and retain a highly skilled workforce to support mission requirements.

Research and Development

Our research and development strategy remains focused on strengthening a vulnerable competitive advantage over strategic adversaries like China and Russia. Technology investment must be prioritized and sustained today to develop new technologies that deliver increased capability, and reduce costs, lead times and construction spans for both the current and future nuclear powered fleet. Throughout the United States, important research and development is conducted by the dedicated and talented teams of people at our Naval Nuclear Laboratory sites – the Bettis Atomic Power Laboratory in Pittsburgh, the Knolls Atomic Power Laboratory and Kesselring Site in greater Albany, and the Naval Reactors Facility in Idaho.

Our first priority is to support today's fleet of nuclear powered forces. Our labs perform thousands of technical evaluations annually that enable Naval Reactors to assess and respond to emergent issues, keep our ships mission-ready, safe to operate, and deployable anywhere, any time.

Several years ago Naval Reactors began an effort to reinvigorate investment in advanced technology development for the next generation of nuclear powered ships and submarines. Today, we are pursuing advanced reactor core and fuel systems, advanced manufacturing and inspection techniques, next-generation propulsion plant equipment, including instrumentation and control systems and sensors and asymmetrical applications of emerging technologies. These advancements take time to materialize but today's strategic environment requires a renewed sense of urgency in leveraging exploratory methods to shorten development timelines, lower acquisition and lifecycle costs and improve adaptability. I invite you to visit our facilities with your staffs, talk with our onsite experts and enhance your understanding of how we are delivering nuclear propulsion capability.

I want to assure the committee that our investments are supported by a comprehensive and rigorous planning effort we undertake with our partners at the Naval Nuclear Laboratory. This year's budget request has been meticulously developed and prioritized to meet our required investment needs to stay ahead of our adversaries.

Facilities and Infrastructure

Our Naval Nuclear Laboratory facilities and infrastructure are essential in carrying out Naval Reactors' mission. This year's budget request supports recapitalization of Naval Nuclear Laboratory facilities and infrastructure systems, many of which have supported the Program since its inception, 75 years ago.

Decontaminating and decommissioning (D&D) older facilities that have been in existence since the early 1950s is also part of our facilities and infrastructure request. We have approximately $6.4 billion in environmental liabilities requiring D&D efforts. A significant portion of this estimate is associated with the cost to remediate and demolish inactive facilities and infrastructure at the Naval Nuclear Laboratory sites.

We continue to retire liabilities in an environmentally responsible and cost-effective manner to support best use of our funding. Through our established partnership with the Department of Energy Office of Environmental Management (DOE-EM), we are leveraging their experience in efficient, safe, and cost-effective remediation of environmental liabilities across the enterprise. DOE-EM is active on all four of our sites with impressive efforts taking place, such as the D&D of our legacy prototypes at the Naval Reactors Facility, including the S1W prototype that supported development of the USS Nautilus (SSN 571), which will complete dismantlement in FY 2025.

AUKUS

In September of 2021, President Biden announced an enhanced trilateral security partnership between Australia, the United Kingdom, and the United States (AUKUS). Concrete steps are underway to support Australia acquiring conventionally-armed nuclear-powered submarines (SSNs) and Naval Reactors remains integral in informing discussions to ensure that our nation's preeminent expertise is applied to the nuclear-powered submarine initiative.

Efforts are focused on ensuring Australia acquires full scope of capabilities necessary to build, operate, and maintain a nuclear navy. Additionally, we are concurrently executing the process of providing a generational uplift in technology to the United Kingdom in support of delivering SSN-AUKUS. We will increasingly utilize the trilateral partners' existing and evolving regulatory frameworks, educational, industrial, and technical capabilities and capacities to collectively strengthen each nation's defense. Naval Reactors is fully committed to supporting Australia in the development of its stewardship and technical capabilities. Going forward, all three of our naval nuclear propulsion programs will be inextricably linked, and remain committed to ensuring the highest standards of stewardship for this complex and unforgiving technology.

AUKUS is a significant addition to Naval Reactors' existing mission, with activities funded through reimbursable agreements with Australia and the U.K. I am committed to work productively with our partner nations, the Administration and Congress to ensure the necessary and enduring investment is made for this critical endeavor to succeed. Naval Reactors must continue to deliver its primary mission to the United States Navy without compromise, as it is foundational to being able to support the AUKUS objectives

Conclusion

The United States .Navy's ability to maintain our 75-year dominance of the maritime domain and sustain a formidable forward presence is not guaranteed; every day we are being actively challenged on a global scale. Naval nuclear propulsion is an incredible but unforgiving technology, and must be harnessed with a constant focus on safe operation across the cradle-to-grave responsibilities the nation entrusts to Naval Reactors. The Program is dedicated to balancing investments in today's fleet with future fleet requirements, while delivering effective naval nuclear propulsion for the U. S. Navy. I appreciate the strong support of Congress for this program and respectfully urge your full support for our FY 2025 budget request.