

Statement of Admiral William Houston  
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U.S. Department of Energy  
on the  
Fiscal Year 2026 President's Budget Request  
Before the  
Senate Armed Services Committee  
Subcommittee on Strategic Forces

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Chair Fischer, Ranking Member King, and distinguished members of the subcommittee, thank you for the opportunity to appear before you today to discuss Naval Reactors. Your continued, strong support for the mission of the Naval Nuclear Propulsion Program enables the United States' nuclear Navy to maintain and expand the maritime dominance our nation has secured for many decades.

Naval Reactors continues to embody the foundational principles and standards of excellence set forth by Admiral Rickover over 76 years ago. Within my role, I routinely interact with our experts across the naval nuclear enterprise, directly supervise our dedicated laboratories and related work at our nuclear capable shipyards, and ensure safe and effective execution of the Program's cradle-to-grave responsibilities. As part of my annual appearance before the subcommittee, I want to assure you that the Naval Nuclear Propulsion Program is well positioned for the challenges ahead. On any given day, our Naval Reactors team is providing continuous support for a globally deployed force while maintaining an eye on future requirements and ensuring our position as the world's premier fighting force.

Naval Reactors' Congressional support and the trust of the American people has been steady throughout our 76+ years of service. That support has positioned us well, but we will not rest on our existing reputation or processes, as the world continues to change around us. Naval Reactors must outpace that change in all aspects of naval nuclear propulsion and the Program is committed to maximizing the resources provided by the American people to make that happen.

As part of the Naval Nuclear Propulsion Program's responsibilities, we train every nuclear operator that serves onboard our nuclear-powered ships. I have interviewed hundreds of officer candidates in my first year as the Director and I am routinely impressed with the young, talented and energetic candidates who sit across from me. When I talk with commanding officers returning from deployment, there is a consistent message that the propulsion plants are performing very well and are highly reliable. It is the combination of willing, capable experts and the finest technology in the world that sets the framework for the future of naval nuclear propulsion.

I have established three pillars for the Naval Nuclear Propulsion program to focus on in the year ahead: our mission, our people, and our foundation. Our mission centers on ensuring the nuclear powered Navy is increasingly ready to fight today. That fight could include not only traditional weapons and combat systems, but also a hybrid mix of new, ambiguous threats. Our nuclear Navy must be ready to respond.

“People, not organizations, get things done,” at Naval Reactors, and throughout the naval nuclear enterprise, we live this mantra on a daily basis. Our flat organizational construct enables and encourages seamless connections with our Fleet Sailors, public and private shipyards, the Navy and Department of Energy civilian workforce, and our Naval Nuclear Laboratory subject matter experts. As I will outline later in this testimony, our cadre of highly trained, educated and experienced professionals is keeping the US Navy ahead of competitors. Together, our people build and maintain the nuclear Navy, operate our dedicated research laboratories, train operators, utilize our nuclear infrastructure to support the Fleet, and ensure safe disposition of our spent naval nuclear fuel. Your partnership and leadership, together with the Department of Energy and the Navy is needed now, more than ever, as we design, manufacture and deliver warfighting ships that will power our fleet and protect the national security of the United States for the rest of this century and beyond.

Finally, Naval Reactors must solidify and reinforce our existing foundation, including the logistical frameworks we rely on to design, build, maintain and dispose of the nuclear powered fleet. While our continued success relies heavily on that foundation, we must keep an eye on the horizon. Through advanced development of cutting-edge technology, new materials and innovative designs, we continue to shepherd the naval nuclear industrial base while maintaining our high standards and delivering new capabilities.

Looking forward, we are increasingly aware of our adversaries’ ambitions and the nature of new threats to our national defense both above and below the sea. Our actions today in executing cradle-to-grave responsibility for naval nuclear propulsion will impact the security and prosperity of our nation for generations and our supremacy cannot be taken for granted. Naval Reactors will ensure our mission, people and foundation can efficiently meet the challenges the nation has entrusted us with.

### **Naval Reactors Overview**

This committee’s support has enabled Naval Reactors to continue to power maritime dominance and preserve our record of safely operating and maintaining our ships, while protecting personnel, the public and the environment. We accomplish this through sharply focused regulatory oversight of all aspects of the Program, documented in annual performance reports available via the Department of Energy webpage. Your support has been essential to the design, development, production, and proving out of manufacturability of the COLUMBIA Class propulsion plant, ongoing construction of the Naval Spent Fuel Handling Facility in Idaho, and recent resumption of training at our prototype research and training reactor at the Kesselring Site in New York. In the last year, we have made substantial progress with construction and assembly of

COLUMBIA Class life-of-ship cores which are in serial production, with the second and third ship cores currently being built.

We will continue to meet current and near-term commitments, but we are constantly investing and planning for the future of naval nuclear propulsion. For example, Naval Reactors remains engaged with DOE and NNSA leadership to ensure a future uranium enrichment capability will 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. The Naval Reactors Facility in Idaho includes the Expended Core Facility (ECF), which provides the capability to manage and examine spent naval nuclear fuel, and materials irradiated in the Advanced Test Reactor. The ECF is over 60 years old, and Naval Reactors is transitioning its capabilities in stages, starting with spent fuel management, which will take place within the Naval Spent Fuel Handling Facility by the early 2030s. Naval Reactors is also beginning crucial design and scoping work on the second infrastructure project that will transition spent naval nuclear fuel examinations out of the ECF. As a continuation of our phased approach, a future irradiation testing capability will be vital to the Naval Reactors program into the next century.

## **Major Projects**

### **COLUMBIA Class Propulsion Plant**

The COLUMBIA Class ballistic missile submarine remains the Navy's number one acquisition priority. Research, development, and design for the Columbia-class SSBN began in FY 2010 and construction started in FY 2021. The Navy-funded electric drive propulsion system for the COLUMBIA Class is revolutionary. To date, lead ship reactor plant components have been delivered on schedule and the reactor core remains on track to support lead ship delivery. Naval Reactors will continue reactor plant design, fabrication, and safety analysis work required for lead ship reactor testing. Additionally, Naval Reactors recently commenced testing of the lead ship electric drive propulsion system at the compatibility test facility (CTF) in Philadelphia, PA.

### **Spent Fuel Handling Recapitalization Project**

Construction of the Naval Spent Fuel Handling Facility at the Naval Reactors Facility in Idaho is progressing. The Naval Spent Fuel Handling Facility is essential to management and disposition of naval spent nuclear fuel in support of aircraft carrier and submarine fleet operations. Near-term milestones include erection of structural steel for the main process building, construction of the reinforced concrete spent fuel pools, and procurement and installation of the process and utility systems required for operations. I want to encourage Members and staff to visit the site to view this project's scale and progress to date. As the visible progress and constant activity at the site get us closer to the finish, 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 Naval Examination Acquisition Project (NEAP) is the second major project at the Naval Reactors Facility in Idaho. NEAP will recapitalize and transition the existing reactor core examinations capability out of the aging ECF. These core examinations allow scientists and engineers to compare actual fleet operation-measured reactor core performance data, to performance predicted by models and testing programs during development and production of the core. These examinations provide vital data to validate, improve, and deliver, safe and unrestricted operations throughout the multi-decade lifespans US Navy reactor cores are designed to operate. Without examining actual spent fuel, current fleet operations may be restricted or limited when issues arise, with conservatism maintained to protect the crew, the core and the environment. The Program will move forward on the several-year detailed design phase to prepare for NEAP construction to support these examinations. We are incorporating lessons learned from the Spent Fuel Handling Recapitalization Project and are engaged with NNSA and DOE on timing and sequence of planned infrastructure projects at the Idaho National Laboratory. I look forward to providing an update in the coming years as we come through the complex design phase for this essential facility.

## **Technical Base**

In addition to the three priority projects discussed above, Naval Reactors maintains a world-class, high-performing workforce across the naval nuclear propulsion technical base. Our workforce provides sustained, uninterrupted support of the cradle-to-grave operations of our Nuclear Navy, and on-call assistance for hundreds of operational requests on an annual basis. The Program's technical base includes a foundation of specialists at our dedicated facilities and laboratories that provide a human-in-the loop, utilizing cutting edge equipment related to nuclear materials, nuclear physics, thermal-hydraulics testing, acoustics, electronics, software development, and systems integration, to conduct our work.

The Naval Reactors technical base not only supports the fleet operating today, it sets the foundations for our Navy to retain and expand our technological advantages over competitors. Specifically, the technical base: 1) receives daily emergent requests and feedback from our globally deployed nuclear fleet, 2) executes cutting-edge technology research and development in support of improving today's nuclear fleet and delivering a more capable and lethal future fleet, and 3) modernizes critical dedicated infrastructure and equipment while safely and efficiently addressing the Program's legacy environmental liabilities.

Recruiting, promoting 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, but many choose to stay with the Program because we are directly supporting national defense. We remain focused on attracting and retaining a well-trained, highly qualified workforce and continue to work with our

laboratories, private shipyards, Navy, and DOE leadership to stay competitive in this aggressive talent market within the nuclear enterprise.

### Program Direction

The Naval Nuclear Propulsion Program will utilize federal employees to supervise, set direction for, and effectively manage operations at our Headquarters in Washington D.C. and field offices in New York, Pennsylvania, and Idaho.

Supporting several classes of nuclear-powered ships whose lifetimes can extend over half a century requires staffing continuity and longevity, and that workforce possesses the deep technical knowledge to execute Naval Reactors' cradle-to-grave responsibilities. The combination of increasingly complex systems, new and innovative research, and evolving and expanding vulnerabilities are informing our human capital strategy to develop and mature generational expertise. Recruiting, training, and retaining the Naval Reactors workforce is a fundamental enabler of all aspects of naval nuclear propulsion, and assures the power to propel our submarines and aircraft carriers and their systems.

In concert with our ongoing focus on research and development, we continue to identify new approaches to attract the nation's top talent and retain the skilled workforce to meet the critical requirements of naval nuclear propulsion.

### Research and Development of Naval Reactors (NRD)

Naval Reactors Development (NRD) is focused on safely and effectively delivering competitive advantage in all that we do. Technology investment today will increase capability, reduce costs, shorten lead times, and tighten construction spans for current and future nuclear powered warships.

Our first priority is today's fleet of nuclear powered submarines and aircraft carriers. Our laboratories and resident experts directly respond to hundreds of operational requests and technical evaluations annually. They assess and respond to emergent issues, keep our ships mission-ready, safe to operate, and deployable anywhere, any time. The unique nature of military operations has a significant portion of our nuclear powered ships at sea and globally deployed all day, every day. Their propulsion and power systems are required to remain online at all times. That does not happen without critical support, years of technical expertise, and a ready technical laboratory infrastructure.

Naval Reactors has reinvigorated advanced technology development for the next generation of nuclear powered ships and submarines. We are pursuing advanced reactor core and fuel systems, manufacturing methods and inspection techniques, next-generation propulsion plant equipment, instrumentation and control systems and sensors, and asymmetrical applications of technologies. These advancements take time to materialize and be proven, but in response to today's strategic environment, we are executing with a higher sense of urgency to simultaneously shorten development timelines, lower acquisition and lifecycle costs, and improve adaptability. I invite you to

visit our facilities with your staffs, talk with our naval nuclear propulsion experts and enhance your understanding of how we are delivering this capability.

### Operations, Facilities and Infrastructure

Our operations, facilities and infrastructure support a wide spectrum of Naval Reactors' cradle-to-grave related work and recapitalization projects at multiple Naval Nuclear Laboratory facilities and infrastructure systems. Many of the Program's required facilities have supported the Program since its inception under Admiral Rickover, over 76 years ago.

Decontaminating and decommissioning (D&D) facilities that date back to the early 1950s, including some no longer in use, is also part of our facilities and infrastructure plan. We have approximately \$6B in environmental liabilities requiring D&D efforts. A significant portion of this estimate includes the cost to remediate and demolish the inactive facilities and infrastructure at the Naval Nuclear Laboratory sites, which were essential to earlier propulsion plants on now-retired classes of submarine and surface ships.

We continue to retire these liabilities in an environmentally responsible and cost-effective manner. Our established partnership with the Department of Energy Office of Environmental Management (DOE-EM) leverages their experience in efficient, safe, and cost-effective remediation of environmental liabilities. DOE-EM is working on all four of our sites, including D&D of the S1W prototype that supported development of the USS Nautilus (SSN 571), which will complete dismantlement later this year.

### Conclusion

Over 76 years of maritime dominance does not guarantee we will continue to lead, and every day, there are active challenges to our maritime position. Naval nuclear propulsion remains an incredible but unforgiving technology, we harness it with a constant focus on safe operation across the cradle-to-grave responsibilities the nation entrusts to Naval Reactors. We are balancing investment in today's fleet with future fleet requirements, while delivering unflinching naval nuclear propulsion for the U. S. Navy. I appreciate the strong support of Congress for this program.