

**Statement of Admiral John Richardson  
Director, Naval Nuclear Propulsion Program  
National Nuclear Security Administration  
U.S. Department of Energy  
on the  
Fiscal Year 2016 President's Budget Request  
Before the  
Senate Committee on Appropriations  
Subcommittee on Energy & Water Development**

**March 11, 2015**

Since my last testimony before this subcommittee, U.S. Nuclear Powered Warships – 10 aircraft carriers, 14 ballistic missile submarines, 53 attack submarines, and 4 guided missile submarines – operated for another year safely and effectively, steaming more than 2 million miles in support of our nation's interests. Some highlights of those operations include the nuclear-powered aircraft carrier, USS GEORGE H.W. BUSH (CVN 77), the only coalition strike option in the fight against ISIL militants for 54 days, executing 20-30 sorties each day. Our ballistic missile submarine force completed their 4000<sup>th</sup> strategic patrol, continuing over 50 years of peacekeeping capability through strategic deterrence. The USS GERALD R FORD began her propulsion plant test program and will proudly set sail for the first time next year. The attack submarine USS NORTH DAKOTA (SSN 784) was commissioned in November. We christened the USS JOHN WARNER, a submarine named after a truly great member of the Senate. We laid the keel for the USS ILLINOIS, our thirteenth Virginia-class submarine. Finally, this past January, we commemorated a truly historic event for Naval Reactors and the Nation. We celebrated the 60<sup>th</sup> anniversary of the submarine USS NAUTILUS (SSN 571), the world's first nuclear-powered ship.

Additionally, we finally completed construction and infrastructure projects, some deferred from 2010, to maintain and upgrade the facilities our engineers require to attain these important successes in the fleet. The \$75 million Cask Shipping and Receiving Facility in Idaho completed and opened this year under budget and will soon begin receiving shipments of Naval Spent Nuclear Fuel in support of the USS ENTERPRISE defueling.

This progress and service to the fleet is only possible through the firm support of this subcommittee. Naval Reactors' request for FY16 allows us to continue this work. The funding request is for \$1.375 billion, an increase of \$136 million (11 percent) over the FY15 enacted funding level. The requested funding permits Naval Reactors to continue to support today's operational fleet, as well as deliver tomorrow's fleet by funding three national priority projects. The projects are:

- Designing a new reactor plant for the replacement for the OHIO-class SSBN
- Refueling a Research and Training Reactor in New York
- Build a new spent fuel handling facility in Idaho

The FY16 request adequately funds all of our requirements: the highly-qualified people, equipment, facilities, and technology development needed to support today's nuclear-powered fleet, and the three projects in support of tomorrow's fleet.

Uncompromising and timely support for safe nuclear fleet operation will always be the highest priority for Naval Reactors. \$973 million of my budget request funds the technical support base for the 96 operating reactors at sea on ships and at our training and research sites. The extremely talented men and women, along with the equipment and facilities upon which they depend, stand ready 24 hours per day, 365 days per year to respond to advance the mission and respond to emergent fleet needs for assistance. They are the principal reason that the Program has delivered 60 years of safe and effective operations by ships on station supporting our national interests. The teams at our four Program sites – the Bettis Laboratory in Pittsburgh, the Knolls Laboratory and Kesselring Site in greater Albany, and our spent nuclear fuel facilities in Idaho – perform the research and development, analysis, engineering and testing needed to both support today's Fleet and develop future nuclear-powered warships. Importantly, they perform the technical evaluations that enable me to thoroughly assess emergent issues and deliver timely responses that both ensure nuclear safety and maximize operational flexibility. This technical support base is essential to enabling our submarines and aircraft carriers to deploy.

Funding reductions in FY15 most directly impacted this technical support base. The funding levels provided in FY-15 will result in a delay the start of the Engineerroom Team Trainer facility in upstate New York, a structure that will host a first-of-a-kind nuclear simulation technology. This training simulation technology, when built, will lower the cost and improve the effectiveness of providing nuclear-trained sailors in the future. The delay in building this technology also reduces our future training capacity and will limit the number of nuclear-trained sailors provided to the fleet. I have again requested funding for this essential facility in my FY-16 request. FY-15 funding levels also prevented construction of the Central Office and Prototype Staff Buildings in New York. These buildings were planned to accommodate the over 200 engineers and training staff that will arrive at the site in FY17-21 to conduct the S8G Prototype Refueling Overhaul discussed below. As a result, I will have to procure, at nearly the same total cost, temporary office spaces and trailers, reducing worker efficiency, effectiveness, and quality of life.

In addition to funding the technical support base, my request in FY16 includes \$186 million to continue Naval Reactors' efforts in designing a new reactor plant for the OHIO-Class Replacement. Activity this year includes reactor plant design and component development to support procurement of long lead components starting in FY19. Progress in these areas in FY16 will ensure that the advanced capability that the life-of-the-ship reactor core provides is delivered in a technically satisfactory and cost effective manner in time to support lead ship construction beginning in FY21.

Related to the OHIO-class Replacement, the FY16 request includes \$133 million in funding for the Land-based Prototype Refueling Overhaul in upstate New York. Refueling this reactor supports two major purposes: reducing cost and schedule risk to the life-of-ship core for OHIO-class Replacement project and supporting training of about 1000 Sailors per year for the next 20 years. In FY15 and FY16, Naval Reactors continues the core manufacturing development work needed for the Refueling Overhaul and the plant service life engineering design to ensure that the

Land-based Prototype plant overhaul is performed concurrently with the refueling that starts in FY18.

Finally my FY16 request contains \$86 million to continue the Spent Fuel Handling Recapitalization Project (SFHP). Thanks to the support Congress provided in FY15, we will complete the facility conceptual design and issue a draft environmental impact statement this year. The FY16 request will allow us to publish the final Environmental Impact Statement, set key facility dimensions, and continue to advance the design. Continued support in FY16 and beyond is essential to ensure the facility can begin receiving spent fuel from the fleet in FY25. Further delays to the project schedule incur costs of approximately \$150 million per year to procure shipping containers to temporarily store the spent fuel from aircraft carrier refuelings. Delays to date have incurred over \$500M in costs for temporary containers. More of these containers will not be necessary if the project stays on track.

In developing our request, I have worked closely with the leadership of the National Nuclear Security Administration (NNSA), the Department of Energy (DOE), Office of Management and Budget and the Department of Defense. This budget not only reflects my priorities for Naval Reactors but also integrates them with the other important work of my colleagues at NNSA. There is clear recognition of the valuable capabilities Naval Reactors provides and our history in effectively meeting our obligations. I understand the difficult budget environment in which Congress must craft legislation and I respectfully urge your support for aligning allocations with the FY16 Budget Request.

Naval Reactors' FY16 budget request will ensure that I can meet my statutory responsibilities to maintain a safe and effective nuclear-powered Fleet, continue environmental stewardship at my program sites, and progress OHIO-Class replacement, Land-based Prototype Refueling Overhaul and the Spent Fuel Handling Recapitalization Project.

With the help of Congress, Naval Reactors is committed to executing our projects on time and on budget, and I to continue to search for the most cost effective way to support safe operations of the nuclear fleet.