
Naval Reactors

Naval Reactors¹
(\$K)

FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request	FY 2027 Request vs FY 2026 Enacted
1,946,000	2,134,000	2,393,692	+259,692

Proposed Appropriation Language

For Department of Energy (DOE) expenses necessary for Naval Reactors’ activities to carry out the Department of Energy Organization Act (42 U.S.C. § 7101 et seq.), including the acquisition (by purchase, condemnation, construction, or otherwise) of real property, plant, and capital equipment, facilities, and facility expansion, \$2,393,692,000 to remain available until expended: Provided, that \$71,841,000 shall be available until September 30, 2028, for program direction.

Mission

The Naval Reactors Fiscal Year (FY) 2027 request of \$2,393,692,000 advances its core objective to safely and reliably operate the Nation’s nuclear fleet, beginning with reactor plant technology development and design, continuing through reactor plant operation and maintenance, and ending with final disposition of naval spent nuclear fuel. The Naval Nuclear Propulsion Program provides a United States (U.S.) Navy fleet that dominates the maritime domain with unmatched power and propulsion by harnessing the atom to safely, reliably, and affordably power a global fleet that enables unrivaled responsiveness, endurance, stealth, and warfighting capability. The Naval Reactors request continues reinvesting in advanced technology development, infrastructure modernization, and environmental liability remediation.

Overview

The Naval Reactors appropriation is responsible for the U.S. Navy nuclear propulsion program’s lifecycle activities, including reactor plant technology design and development, reactor plant operation and maintenance, and proper final disposition of naval spent nuclear fuel. The Program ensures reactor plants in nuclear-powered submarines and aircraft carriers are safely and reliably operated (constituting over 35 percent of the Navy’s major combatants)², and fulfills the Navy’s requirements for new nuclear propulsion plants that meet current and future national defense requirements.

The Naval Reactors mission includes ensuring the safety of reactors and associated naval nuclear propulsion plants, and control of radiation and radioactivity associated with naval nuclear propulsion activities, including prescribing and enforcing standards and regulations for these areas, as they affect the environment, safety and health of workers, operators, and the general public. Naval Reactors maintains oversight in areas such as security, nuclear safeguards and transportation, radiological controls, public information, procurement, logistics, and fiscal management.

¹ Throughout this document, funding tables and in-text amounts do not reflect the mandated transfer of \$92.8 million in FY 2025 and \$96.74 million in FY 2026 to the Office of Nuclear Energy for operation of the Advanced Test Reactor.

² Major combatants, in this instance, include aircraft carriers, submarines, and surface combatants based on the “Active in Commission” column from the Naval Vessel Register.

As part of the National Nuclear Security Administration (NNSA), Naval Reactors provides the U.S. Navy with nuclear propulsion plants that are capable of responding to the challenges of the 21st-century security environment.

Major Outyear Priorities and Assumptions

The Naval Reactors outyear funding (FY 2028 through FY 2031) request is \$10,093,988,000. Outyear funding supports Naval Reactors' mission goals to provide proper maintenance, safety oversight, and address emergent operational issues and technology obsolescence for 96 reactor plants. This includes 66 submarines, 11 aircraft carriers, and 3 research, development, and training platforms (including the land-based prototype). Outyear funding also supports Naval Reactors' continued support of existing Fleet technologies and development of new technologies and designs, as well as continued achievement of its legacy responsibilities, such as ensuring proper management of naval spent nuclear fuel, prudent recapitalization of aging facilities, and cleanup of environmental liabilities.

Department of Energy (DOE) Working Capital Fund (WCF) Support

The Naval Reactors appropriation's projected contribution to the DOE WCF for FY 2027 is \$3,770,000. This funding covers certain shared enterprise activities including managing enterprise-wide systems and data, telecommunications, and supporting the integrated acquisition environment.

Rickover Fellowship Program

The Naval Reactors appropriation's projected spending to support the Rickover Fellowship Program in FY 2027 is \$1,264,000. The Rickover Fellowship Program attracts and develops technical leaders in the areas of reactor technology and design as it pertains to naval nuclear propulsion.

Naval Reactors
Funding by Budget Control (\$K)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request	FY 2027 Request vs FY 2026 Enacted	
				\$	%
Naval Reactors Operating ¹					
<i>Research Reactor Facility Operations & Maintenance</i>	86,700	96,786	92,330	-4,456	-4.6%
<i>MARF Defueling and Layup</i>	70,100	32,900	-	-32,900	-100.0%
<i>Laboratory Facility Regulation, Compliance, and Protection</i>	167,080	179,460	194,620	15,160	+8.4%
<i>Nuclear Spent Fuel Management</i>	182,500	186,485	186,992	507	+0.3%
<i>Radiological/Environmental Remediation and Demolition</i>	159,008	130,798	86,147	-44,651	-34.1%
<i>Technical Infrastructure Operations Support</i>	18,500	24,948	21,000	-3,948	-15.8%
<i>Capital Equipment</i>	18,200	-	15,000	15,000	+100.0%
<i>Minor Construction</i>	39,992	52,204	48,961	-3,243	-6.2%
Total, Naval Reactors Operations and Infrastructure	742,080	703,581	645,050	-58,531	-8.3%
<i>Ship Construction and Maintenance Support</i>	40,400	39,800	41,910	2,110	+5.3%
<i>Nuclear Reactor Technology</i>	238,712	286,626	291,074	4,448	+1.6%
<i>Reactor Systems and Component Technology</i>	367,160	359,663	333,638	-26,025	-7.2%
<i>Advanced Test Reactor Operations</i>	92,800	96,740	98,770	2,030	+2.1%
<i>Capital Equipment</i>	42,728	14,250	14,832	582	+4.1%
<i>Future Advanced Submarine Technology</i>	54,000	67,500	96,600	29,100	+43.1%
Total, Naval Reactors Development	835,800	864,579	876,824	12,245	+1.4%
<i>Columbia-Class Reactor Systems Development</i>	45,610	35,300	29,700	-5,600	-15.9%
Total, Naval Reactors Operating	1,623,490	1,603,460	1,551,574	-51,886	-3.2%
26-D-530 KL East Side Office Building	-	5,000	-	-5,000	-100.0%
25-D-530 Naval Examination Acquisition Project	20,000	40,000	80,000	40,000	+100.0%
22-D-532 KL Security Upgrades	41,670	-	-	-	-
14-D-901 Spent Fuel Handling Recapitalization Project NRF	199,300	424,000	691,953	267,953	+63.2%
Total, Naval Reactors Construction	260,970	469,000	771,953	302,953	+64.6%
Program Direction	61,540	61,540	71,841	10,301	+16.7%
Use of Prior Year Balances	-	-	-1,676	-1,676	-
Total, Naval Reactors	1,946,000	2,134,000	2,393,692	259,692	+12.2%

¹ The FY 2027 Budget Request requests a budget structure change to combine Naval Reactors Operations and Infrastructure, Naval Reactors Development, and *Columbia-Class Reactor Systems Development* into one Congressional control, Naval Reactors Operating.

Outyears Funding by Budget Control (\$K)

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request
Naval Reactors Operating				
<i>Research Reactor Facility Operations & Maintenance</i>	97,757	105,800	147,608	97,700
<i>MARF Defueling and Layup</i>	-	-	-	-
<i>Laboratory Facility Regulation, Compliance, and Protection</i>	191,280	198,400	206,000	201,404
<i>Nuclear Spent Fuel Management</i>	214,900	212,800	216,600	210,000
<i>Radiological/Environmental Remediation and Demolition</i>	123,900	269,540	223,260	175,175
<i>Technical Infrastructure Operations Support</i>	20,300	18,200	17,000	14,800
<i>Capital Equipment</i>	3,900	-	-	-
<i>Minor Construction</i>	95,409	222,062	106,959	81,300
Total, Naval Reactors Operations and Infrastructure	747,446	1,026,802	917,427	780,379
<i>Ship Construction and Maintenance Support</i>	42,700	40,992	44,255	60,000
<i>Nuclear Reactor Technology</i>	218,700	235,200	236,987	276,100
<i>Reactor Systems and Component Technology</i>	330,177	353,910	357,320	386,872
<i>Advanced Test Reactor Operations</i>	100,840	102,958	105,120	107,328
<i>Capital Equipment</i>	13,400	13,100	9,250	16,000
<i>Future Advanced Submarine Technology</i>	206,000	274,100	303,600	317,600
Total, Naval Reactors Development	911,817	1,020,260	1,056,532	1,163,900
<i>Columbia-Class Reactor Systems Development</i>	-	-	-	-
Total, Naval Reactors Operating	1,659,263	2,047,062	1,973,959	1,944,279
30-D-XXX NRF Backup Power Project	-	-	71,000	-
29-D-XXX KL Central Chiller and Piping	-	81,290	-	-
28-D-XXX NRF South and West Boundary Area	61,000	-	-	-
26-D-530 KL East Side Office Building	-	-	-	-
25-D-530 Naval Examination Acquisition Project	130,000	200,000	425,000	575,000
22-D-532 KL Security Upgrades	-	-	-	-
14-D-901 Spent Fuel Handling Recapitalization Project NRF	519,247	90,000	-	-
Total, Naval Reactors Construction	710,247	371,290	496,000	575,000
Program Direction	76,491	79,015	79,853	81,529
Use of Prior Year Balances	-	-	-	-
Total, Naval Reactors	2,446,001	2,497,367	2,549,812	2,600,808

Naval Reactors

Naval Reactors Operations and Infrastructure

Overview

Naval Reactors Operations and Infrastructure resources ensure Naval Reactors maintains an integrated and effective enterprise across program sites located in Pennsylvania (PA), New York (NY), and Idaho, to provide safe operation of the nuclear fleet. The Naval Reactors Operations and Infrastructure resources support the operation of one land-based nuclear prototype and the lay-up of one land-based nuclear prototype at the Kesselring Site located in West Milton, NY; two dedicated, government-owned, contractor-operated laboratory facilities, Knolls and Bettis located in Niskayuna, NY and West Mifflin, PA, respectively; and naval spent nuclear fuel handling facilities and operations at the Naval Reactors Facility (NRF) at the Idaho National Laboratory (INL) in Idaho. These resources ensure unique Naval Reactors' infrastructure and advanced naval nuclear capabilities are maintained well into the future. These efforts include:

1. Operation, maintenance, and lay-up of the DOE land-based nuclear prototypes supporting technology development and nuclear operator training.
2. Activities to ensure Naval Reactors program operations meet or exceed applicable federal, state, and local standards and requirements.
3. Disposition of naval spent nuclear fuel from the inactivation and refueling of ships and prototypes.
4. Remediation, dismantlement, and disposal of inactive Naval Reactors program systems, facilities, and areas.
5. Provision of technical infrastructure support at headquarters, the laboratory field office, and laboratory facilities, enabling technical work that supports fleet operations, and design and development efforts.
6. Design and procurement of capital equipment.
7. Design and construction of facilities and infrastructure to provide for capacity, security, safety, environmental, R&D, and obsolescence needs.

Research Reactor Facility Operations & Maintenance

This subprogram's mission supports one land-based prototype located at the Kesselring Site in NY through the following work efforts: (1) test and examine reactor materials, components, systems, and new design applications under actual operating conditions; (2) provide a ship-like operating platform to train nuclear operators; (3) support improved design activities for the operating prototype and perform systematic preventive maintenance, corrective maintenance, upgrades, and modifications on the prototype and support equipment; (4) evaluate problems using engineering tests and other troubleshooting techniques; and (5) procure and maintain adequate spare parts, material, specialized tools, and instrumentation for troubleshooting and prototype testing.

Modifications and Additions to a Reactor Facility (MARF) Defueling and Layup

This subprogram's mission was to defuel and lay up the MARF prototype, place the plant in a safe and benign condition for eventual dismantlement, and dispose of it off-site.

Laboratory Facility Regulation, Compliance & Protection

This subprogram's mission ensures that Naval Reactors operations and design activities meet or exceed applicable federal, state, and local standards and requirements, such as Radiological Controls, Environmental, Safety and Health, Quality Assurance, and Nuclear Materials Management. This compliance is accomplished by: (1) personnel training, instruction, supervision, independent oversight, and formal auditing; (2) extensive personnel and environmental sampling and monitoring programs to ensure operations have no discernible impact on human health or the environment; (3) preparing and issuing numerous reports required by federal, state, and local regulations and requirements; and (4) reviewing of new and existing nuclear plant designs and the related procurement of nuclear fuel and new project equipment. Naval Reactors' workforce is a highly

trained group, capable of responding in the event of an accident, as well as supporting routine operations. Funding also supports integrated contractor services essential to Naval Reactors operations at laboratory facilities, including network infrastructure and auxiliary support maintenance, while contributing to the ongoing development of both Naval Reactors headquarters and field office facilities, in alignment with the broader goals of the Naval Nuclear Propulsion Program.

Nuclear Spent Fuel Management

This subprogram's mission fulfills Naval Reactors' cradle-to-grave responsibility for all aspects of naval nuclear propulsion by properly managing naval spent nuclear fuel. Specifically, resources in this subprogram support the safe reception, handling, preparation, packaging, examination, and temporary storage of naval spent nuclear fuel coming from the nuclear-powered fleet and prototypes. This includes fuel handling operations at DOE facilities, mechanically processing naval spent nuclear fuel at the NRF in the State of Idaho, packaging the naval spent nuclear fuel for dry storage in a geologic repository or interim storage facility, and disposing of the radiological waste by-products produced by these processes. The subprogram also supports managing naval spent nuclear fuel shipping container capacity for aircraft carrier and submarine refueling overhauls and defueling inactivation operations; conducts destructive and non-destructive examinations of expended naval cores and irradiated test specimens from the Advanced Test Reactor located at the INL; and supports improvements to the naval spent nuclear fuel receiving, processing, packaging, and disposal efforts, reducing radiological risks at the NRF.

Radiological/Environmental Remediation & Demolition

This subprogram's mission remediates, dismantles, and disposes of inactive Naval Reactors systems, facilities, and areas that supported research and development, design, testing, training, and prototype operations. Requirements are prioritized with emphasis on balancing factors such as risk reduction and inactive facility lifecycle costs. This subprogram delivers usable site footprint for future infrastructure.

Technical Infrastructure and Operations Support

This subprogram's mission supports laboratory and testing facilities at Naval Nuclear Laboratory (NNL). These facilities enable the technical work supporting the operations of the naval nuclear fleet, as well as engineering and development efforts required to ensure continued performance, safety and reliability, and resolution of emergent fleet problems. This includes the preparation and maintenance of infrastructure at program laboratory sites (e.g., laboratory space/building, test loops, hot cells) to support Program technical work (e.g., testing, engineering and analysis, design, and examinations). The up-front work needed to prepare laboratory facilities is distinct from operating the systems or test programs within such facilities (e.g., actual execution/performance of the test once a test loop has been prepared). Technical infrastructure such as test loops are large and require significant infrastructure (e.g., building dimensions, utilities, and design safety calculations support in order to prepare the tests for safe operations.). The skills required to engineer and maintain technical infrastructure are like the skills used to support general facility infrastructure (e.g., general office buildings), and test engineers work collaboratively with site facilities engineers to maintain safe and reliable test operation.

Capital Equipment

This subprogram's mission provides the capital equipment, including Major Items of Equipment (MIE), required to support work efforts within the sub-categories of Naval Reactors Operations and Infrastructure. Capital equipment is defined as non-construction related equipment, computer systems, tooling, and furniture or fixtures having useful life of two or more years and costing greater than \$500,000, or \$750,000 for software.

Minor Construction Projects

This subprogram's mission executes construction projects of a general nature, the Total Estimated Costs (TEC) of which do not exceed the established minor construction threshold. These projects provide for design and

construction, additions, and improvements to land, buildings, and utilities necessary for mission accomplishment.

Highlights and Major Changes in the FY 2027 Budget Request

The decrease of \$58,531,000 over FY 2026 Enacted levels reflects the MARF prototype's final defueling and inactivation, progression towards achieving remediation goals in decontamination and decommissioning, continued recapitalization of infrastructure, and preparation for delivery of the Naval Spent Fuel Handling Facility.

Naval Reactors

Naval Reactors Development

Overview

Naval Reactors Development resources fund work that ensures the current and future fleet is the most advanced, well-maintained, and capable nuclear fleet in the world. This funding supports unique technologies used in naval reactors that are crucial to delivering superior navy fleet operations and dominance in the maritime domain to counter the increasing threats from our adversaries. These efforts include:

1. Supporting naval operations while ensuring reactor safety by providing technical support to the fleet, engineering solutions to emergent reactor plant issues, enabling equipment replacement and maintenance, and tracking reactor performance over time.
2. Validate design assumptions made for operating ships to reduce required conservatism allowing extension of ship lifetimes.
3. Developing and enhancing the fundamental methods, modeling, and materials used in reactor cores and plants, which reduce lifecycle costs and improves performance and reactor safety.
4. Designing and maintaining the major reactor plant components and plant systems required for technologically superior naval nuclear propulsion.
5. Providing funding for the operation of the Advanced Test Reactor (ATR) to DOE Office of Nuclear Energy and performing irradiation testing to support the operating fleet, evaluate new material systems, and develop new core designs to maintain the U.S. advantage over near-peer rivals.
6. Designing and procuring capital equipment in support of the work above.
7. Supporting development of technologies specifically targeted for implementation in the next propulsion plant design and sustainment of associated critical design skills.

Ship Construction & Maintenance Support (SCMS)

The mission of this subcategory is to directly support both the operation and new construction of the nuclear-powered fleet. Operating reactors require engineering support throughout their lifetimes to address any issues that arise, incorporate new technology, assess the effect of actual Navy operations compared to assumed operations when the reactors were designed, and to account for new information learned over the decades that ship class will operate. This engineering support is required to ensure safe operation throughout the life of the reactor plant. While overall fleet support efforts are funded across all Naval Reactors Development subprograms, SCMS supports direct efforts. Examples of direct SCMS efforts include analyses to extend the reactor operational life of a ship, reactor servicing technical support, new instrumentation and control system qualification prior to ship installation, emergent problem resolution arising during propulsion plant component manufacturing, installation, testing or operation, and continued technical validation of a ship's reactor performance and safety basis through operational life of the ship. Also, maintenance of the reactor plants involves designing equipment and systems to safely handle new fuel and highly radioactive spent fuel including safely maintaining plant components and resolving obsolescence issues. These efforts are closely associated with the more comprehensive technology efforts that underpin Naval Reactor's fleet support efforts in Nuclear Reactor Technology (NRT) and Reactor Systems & Component Technology (RSCT).

Nuclear Reactor Technology

The mission of this subcategory is to develop and deploy reactor core material systems that improve nuclear safety, stealth, tactical ability, and reactor plant capability and performance; and to support the qualification and the manufacture of those systems at the naval nuclear core vendor. The materials testing executed using NRT resources forms the basis for naval nuclear reactor operational capability, which has enabled over 75 years of safe nuclear reactor operations while increasing reactor plant performance and reducing platform lifecycle cost. This research and development capability informs new design decisions and enables timely response to issues

encountered in the operating fleet. Advanced fuel and poison development efforts, including specimen manufacture, irradiation testing, and post irradiation examination, are executed using resources from this subcategory. Lastly, this subcategory supports the examination of expended fuel modules and irradiated core components at the Expended Core Facility located at the NRF, which is part of the INL. This examination capability provides real performance data on hardware to ultimately understand both long-term material behavior and design impacts which are used to inform new design and extend the lifetime of existing platforms.

Reactor Systems & Component Technology

The mission of this subcategory is to provide Naval Reactors with the technology for major reactor plant components (e.g., reactors, steam generators, reactor coolant pumps, valves) as well as plant systems (e.g., instrumentation and control). This subcategory provides the support and expertise necessary to ensure the satisfactory operation of reactor plant components in the naval nuclear fleet and prototypes, to design and implement *Virginia*-class, *Ford*-class, *Columbia*-class, and future generation reactor plant components, and to develop higher power density, faster to build, and more affordable components for technology insertion applications in existing ship classes. Funding within this subcategory supports the major objectives of instrumentation and control component and system development to deliver the next generation of instrumentation and control, and electrical equipment for naval nuclear propulsion applications to improve ship mission capabilities, reactor safety, and widen the advanced technology gap over our adversaries. This subcategory also enables the Program's advanced technology incubator effort to accelerate the pace of research and development (R&D) that holds promise for step-change advancements and asymmetrical warfighting advantages for naval nuclear propulsion.

Advanced Test Reactor (ATR) Operations

The mission of this subcategory is to provide base operations funding for the ATR. The ATR is the only domestic platform that provides a prototypical thermal irradiation environment for fleet support, core design, manufacturing support, and analytical model development for reactor materials and nuclear fuels. The ATR is located on the INL and is owned by the DOE Office of Nuclear Energy and operated by the INL contractor. Naval Reactors has sole use of six of nine ATR flux traps. This subprogram provides the majority of the ATR's base operations funding.

Capital Equipment

This subprogram's mission provides the capital equipment, including MIE, required to support work efforts within the sub-categories of Naval Reactors Development. Capital equipment is defined as non-construction related equipment, computer systems, tooling, and furniture or fixtures having useful life of two or more years and costing greater than \$500,000, or \$750,000 for software.

Future Advanced Submarine Technology

The mission of this subcategory is to directly support the technological development and sustainment of associated critical design skills necessary to execute a new propulsion plant design and implement matured technologies. A supplementary data sheet within this document captures information for this subcategory within Naval Reactors Development.

Highlights and Major Changes in the FY 2027 Budget Request

The increase of \$12,245,000 over FY 2026 Enacted levels supports development of the methods, models, materials, components, and systems required for future platforms to achieve enhanced capability, improved affordability, and sustained reliability and provides continuous support to U.S. Navy fleet operations. Over the last decade, the need for generational investment in infrastructure, which is not yet complete, required a reduction in mid- to long- term technology development efforts. During this time, historic technology development efforts were leveraged to support *Columbia*-class design and existing nuclear-powered submarines

and aircraft carriers in the fleet. The increased level of investment in this Future Years Nuclear Security Program (FYNSP) will help address the atrophy of critical skills in the industrial base so that Naval Reactors can accelerate the pace of innovation and compete globally. To meet the growing strategic threat from China and Russia, Naval Reactors is partnering with NNL and industry to identify and develop cutting-edge technologies to aggressively improve propulsion plant capability and reduce design, acquisition, and lifecycle costs and timespans. This investment in R&D will continue critical progress in maintaining the U.S. Navy's dominance in the maritime domain.

Naval Reactors Future Advanced Submarine Technology

Overview

Since the commissioning of USS Nautilus in 1954, Naval Reactors has demonstrated the superior ability to design and deliver militarily effective naval nuclear propulsion plants to counter global threats, maintaining maritime superiority and an undersea advantage over our adversaries. Naval Reactors' investment in technology and critical design expertise for the next generation of submarine designs is essential to ensure maritime superiority is maintained into the future. Sustained investment in reactor plant technologies is required for agile response to Navy demands for increased capabilities as the global threat environment and adversary capabilities evolve. Future Advanced Submarine Technology (FAST) encompasses Naval Reactors' investment in technology and critical design expertise to support design of the propulsion plant for the Navy's next generation attack submarine.

FAST resources directly support the next generation attack submarine propulsion plant design as driven by capability goals set by the Navy. A gap analysis of the current fleet has identified the need for: (1) greater speed; (2) increased payload capacity; (3) improved acoustics; and (4) increased operational availability. In addition, Naval Reactors is working to develop technologies that address current submarine enterprise challenges by evolving propulsion plant designs to be more affordable, easier to sustain, and to take advantage of modern manufacturing techniques. Technology development is required to close these gaps.

Work within FAST is synchronized with Navy timelines for development of the next generation attack submarine propulsion plant design. The FAST-funded design work includes reactor plant concept and detail design, core concept design, reactor plant instrumentation and control design, reactor plant configuration, reactor coolant pump design, and applications of matured acoustics technology. Naval Reactors requests \$96,600,000 for this effort in FY 2027 to support current Navy timelines.

In addition to preparing for and executing the next generation attack submarine design, FAST resources maintain critical design skills that are not frequently exercised in support of existing ship classes and would be difficult to reconstitute if lost. Historically, these skills, such as core design and reactor plant system design, were exercised and maintained through the relatively frequent design of propulsion plants for new or existing prototypes and ship classes. However, in recent years, these skills have been underutilized due to the 22-year gap between submarine propulsion plant designs (*Columbia*-class and SSN(X)), the longest period between designs in Naval Reactors history. This gap in design work presents a risk that must be carefully managed to ensure design capabilities are not lost. To address this risk, the current budget request is based on defining the trade space for de-risking technology and sustaining critical design skills through insertions of SSN(X) technology into existing ship classes. The primary target for SSN(X) technology insertion will be propulsion plant design improvements for a future block of *Virginia*-class, titled the Improved Performance Machinery Program Phase IV (IPMP IV). Consistent with efforts for past submarine classes, the IPMP IV plant will deliver increased capability to the *Virginia*-class while enabling SSN(X) by preventing the loss of critical design skills and de-risking new technologies. This ensures that the highly specialized design teams at Navy laboratories and nuclear-capable Shipyards are sustained, prepared to execute the SSN(X) and other future designs. Therefore, this budget request accounts for the update to SSN(X) timing in the Navy's FY 2025 Shipbuilding Plan.

In contrast with Naval Reactors' base technology development efforts, FAST contains resources required to design a new propulsion plant and implement matured technologies. After the start of a formal design, this line contains all resources required to execute the anticipated SSN(X) design.

Highlights and Major Changes in the FY 2027 Budget Request

The increase of \$29,100,000 over FY 2026 Enacted levels supports ramp up of conceptual design activities for reactor plant components and systems, prototyping and testing, reactor plant arrangement studies, and technology implementation required to support capabilities identified by the Navy for the next generation attack submarine. This funding maximizes benefit to the fleet in reactor plant components and improvements in reactor equipment, steam generator design, analysis, and processes.

Naval Reactors *Columbia*-Class Reactor Systems Development

Overview

Ohio-class ballistic missile submarines (SSBNs) have been the backbone of the Nation's sea-based strategic deterrent since the early 1980s. Recapitalization of this strategic asset is required as the *Ohio*-class retires. With the *Columbia*-class, the Navy plans to maintain its sea-based strategic deterrent force with a class of 12 ships, two fewer than today's *Ohio*-class, due in part to a life-of-ship-core. This new life-of-ship core will eliminate the need for mid-life reactor refuelings (mid-life refueling overhauls are an over-three-year evolution during which the ship is unavailable for service). By increasing class operational availability, development of a new reactor plant for the *Columbia*-class will permit 12 *Columbia*-class submarines to do the work of 14 *Ohio*-class submarines—an operational and sustainment savings of over \$40 billion over the life of the class.

Research, development, and design for the *COLUMBIA*-class SSBN began in FY 2010. The new design will leverage *Virginia*-class technology, as well as manufacturing development and demonstration efforts being performed as part of the land-based S8G Prototype Refueling Overhaul program. Naval Reactors must design a new reactor plant to meet the Navy's required capabilities, maximize operational availability, and reduce acquisition and lifecycle costs. The DOE reactor plant design and development work for the *Columbia*-class includes oversight of the manufacture of lead ship reactor plant components including the core and conduct the requisite safety analysis for the lead ship reactor plant.

Work to support the *COLUMBIA*-class SSBN is tightly synchronized with Navy funded propulsion plant work. The DOE funded design work includes reactor plant component design and development, core design analysis and manufacturing development, reactor plant instrumentation and control design and development, reactor plant configuration, reactor systems development and integration, and reactor performance, analysis, and validation. Lead submarine construction began in FY 2021. Naval Reactors requests \$29,700,000 for this effort in FY 2027.

Highlights and Major Changes in the FY 2027 Budget Request

The decrease of \$5,600,000 over FY 2026 Enacted levels is consistent with the project's planned funding profile enabling 100 percent completion of DOE funded design work in FY 2027 and subsequent ship delivery to the fleet.

Naval Reactors Program Direction

Overview

Due to the essential nature of nuclear reactor work, Naval Reactors provides centrally controlled, technical management of program operations. Federal employees directly oversee and set policies and procedures for developing new reactor plants, operating existing reactor plants, facilities supporting these plants, contractors, and the Bettis and Knolls Atomic Power Laboratories. In addition, these employees' interface with other DOE offices and local, state, and Federal regulatory agencies.

Naval Reactors' federal employees are typically recruited from a community of highly trained military engineers who have completed a rigorous five-year on-the-job training program unique to Naval Reactors. This training program has groomed engineers with skill sets far beyond that of nuclear engineers found in the commercial and federal sectors.

Training funds are essential to maintaining the high level of expertise required for the oversight of facilities worldwide. These resources support comprehensive training programs and in-person workshops designed to continually enhance technical skills, broaden professional knowledge, and reinforce mission-critical competencies. Ongoing investment in training not only ensures employees remain prepared to address evolving challenges, but also safeguards organizational continuity by supporting succession planning and mitigating the impacts of retirements and workforce attrition.

Other Related Expenses fund a wide range of mission-support activities essential to Naval Reactors' operations. These include security, contractor support, travel, equipment purchases, employee incentive awards, and permanent change of station (PCS) costs. Funding also provides for communications, rent and utilities, outreach efforts, postage and courier services, and other contracted services required to sustain daily operations. Collectively, these expenses ensure program continuity, strengthen organizational infrastructure, and provide the flexibility to meet both current and emerging mission demands.

Highlights and Major Changes in the FY 2027 Budget Request

This increase (+16.7%) provides the necessary resources to achieve and maintain approved staffing levels, ensuring continued funding for Naval Reactors' personnel pay and benefits. It also funds Information Technology (IT) and equipment maintenance to uphold technical readiness, strengthens physical security at both Naval Reactors Headquarters and Field Office, continues critical contractor support, and supports efforts to streamline administrative services. FY 2026 activities were executed using the enacted funding level and FY 2025 carryover funding. The FY 2027 request reflects the total funding requirements, excluding the use of carryover funds. These investments ensure ongoing operational effectiveness and workforce development, enabling the successful execution of the Naval Reactor's mission.

Program Direction¹
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	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Salaries and Benefits	37,791	40,231	42,831
Training	440	449	1,360
Other Related Expenses	5,345	3,502	7,401
Total, Naval Reactors Headquarters	43,576	44,183	51,593
Salaries and Benefits	15,634	15,843	16,867
Training	164	167	536
Other Related Expenses	2,167	1,347	2,846
Total, Naval Reactors Laboratory Field Office	17,964	17,357	20,248
Salaries and Benefits	53,424	56,074	59,698
Training	604	617	1,896
Other Related Expenses	7,512	4,849	10,247
Total, Program Direction	61,540	61,540	71,841
Total Federal FTEs	230	246	246

**Program Direction
Outyears (\$K)**

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request
Salaries and Benefits	44,793	45,506	46,231	47,202
Training	1,955	1,995	2,029	2,072
Other Related Expenses	8,598	9,551	9,292	9,486
Total, Naval Reactors Headquarters	55,345	57,051	57,552	58,760
Salaries and Benefits	17,744	18,116	18,495	18,884
Training	178	182	186	189
Other Related Expenses	3,223	3,666	3,620	3,696
Total, Naval Reactors Laboratory Field Office	21,146	21,964	22,301	22,769
Salaries and Benefits	62,537	63,622	64,726	66,086
Training	2,133	2,176	2,215	2,261
Other Related Expenses	11,821	13,217	12,912	13,181
Total, Program Direction	76,491	79,015	79,853	81,529
Total Federal FTEs	252	252	252	252

¹ Totals on this page may not sum due to rounding.

**Program Direction
Activities and Explanation of Changes
(\$K)**

FY 2026 Enacted	FY 2027 Request	Explanation of Changes FY 2027 Request vs FY 2026 Enacted
Program Direction		
61,540	71,841	+10,301
<i>Salaries and Benefits</i>		
<i>56,074</i>	<i>59,698</i>	<i>+3,624</i>
Federal salaries and benefits for employees that directly oversee and set policies and procedures for developing new reactor plants, operating existing reactor plants, facilities supporting these plants, contractors, and the Bettis and Knolls Atomic Power Laboratories.	Federal salaries and benefits for employees that directly oversee and set policies and procedures for developing new reactor plants, operating existing reactor plants, facilities supporting these plants, contractors, and the Bettis and Knolls Atomic Power Laboratories.	This funding level supports personnel pay-related costs and provides the resources necessary to restore and sustain staffing to the approved 246 FTE level, compared to the 230 FTE average executed in FY 2025.
<i>Training</i>		
<i>617</i>	<i>1,896</i>	<i>+1,279</i>
Provide training necessary to ensure personnel maintain the technical expertise required to support mission success and operational readiness. Develop and sustain the next generation of the workforce through structured training and professional development to ensure continuity amid retirements and attrition.	Provide training necessary to ensure personnel maintain the technical expertise required to support mission success and operational readiness. Develop and sustain the next generation of the workforce through structured training and professional development to ensure continuity amid retirements and attrition.	The increase reflects the funding required to support planned training activities. FY 2026 activities were executed using the enacted funding level and FY 2025 carryover funding.
<i>Other Related Expenses</i>		
<i>4,849</i>	<i>10,247</i>	<i>+5,398</i>
Maintenance of Naval Reactors' IT hardware, engineering software, and related licenses supporting mission essential technical work. Resources also provide for limited equipment purchases, PCS costs, communications, and other services necessary to maintain core operations.	Funding restores capacity for IT hardware, engineering software, and equipment purchases to meet essential technical requirements. Resources also strengthen security and workforce support costs while continuing to provide for contractor services, communications, and utilities to ensure operational continuity.	The increase reflects the funding required to fully support mission needs, sustain technical readiness, and maintain operational resilience. FY 2026 activities were executed using the enacted funding level and FY 2025 carryover funding.

**Program Direction¹
Other Related Expenses
(\$K)**

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Security	1,036	605	1,571
Contract Support	1,274	881	1,486
Travel	1,677	838	2,043
Equipment	1,490	215	1,876
Employee Incentive Awards	1,149	1,867	1,826
PCS	557	225	910
Communications, Other Rent and Utilities	191	127	309
Outreach	80	54	133
Postage and Courier	12	8	19
Other Services	45	30	74
Total, Other Related Expenses	7,512	4,849	10,247

**Program Direction
Other Related Expenses
Outyears (\$K)**

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request
Security	1,591	1,767	1,638	1,564
Contract Support	1,777	1,969	1,890	1,933
Travel	2,463	2,751	2,662	2,745
Equipment	2,106	2,337	2,474	2,564
Employee Incentive Awards	2,198	2,453	2,371	2,442
PCS	1,093	1,217	1,174	1,206
Communications, Other Rent and Utilities	373	417	403	416
Outreach	108	183	179	187
Postage and Courier	23	25	25	25
Other Services	89	99	96	99
Total, Other Related Expenses	11,821	13,217	12,912	13,181

¹ Totals on this page may not sum due to rounding.

**Naval Reactors
Capital Equipment Summary
(\$K)**

	Total	Prior Years	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Capital Equipment (> \$500K)					
Total Non-MIE Capital Equipment (TEC <\$10M)	N/A	N/A	48,518	14,250	1,732
Consolidated Steam Water Test Loops, BL M-140 Cranes, Naval Spent Fuel Handling Facility	41,015	15,505	12,410	-	13,100
	15,000	-	-	-	15,000
Total, Capital Equipment	N/A	N/A	60,928	14,250	29,832

**Outyears Capital Equipment Summary
(\$K)**

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request	Outyears
Capital Equipment (> \$500K)					
Total Non-MIE Capital Equipment (TEC <\$10M)	17,300	13,100	9,250	16,000	N/A
Total, Capital Equipment	17,300	13,100	9,250	16,000	N/A

**25-D-530, Naval Examination Acquisition Project
Naval Reactors Facility, Idaho Falls, Idaho
Project is for Design and Construction**

1. Summary, Significant Changes, and Schedule and Cost History

Summary

The FY 2027 request for 25-D-530, Naval Examination Acquisition Project (NEAP), is \$80,000,000 to progress the detailed (preliminary & final) design. Critical Decision (CD)-0, *Approve Mission Need*, was approved on January 3, 2018, and CD-1, *Approve Alternative Selection and Cost Range*, was approved on May 23, 2025, with a preferred alternative to build a new facility and with an estimated CD-4 date of 4Q FY 2036. The cost range approved with CD-1 is \$1,630,000,000 to \$5,000,000,000 (then-year dollars). The point estimate associated with the current stage of the project is \$3,228,500,000 (then-year dollars). The management reserve and government contingency included in the cost estimate provides approximately 80% confidence in the project cost. The cost and schedule will be baselined with CD-2/3, *Performance Baseline and Start of Construction*. A Federal Project Manager (FPM) has been assigned to this project and has approved this construction project data sheet (CPDS). Other Project Costs (OPCs) are funded out of the Naval Reactors Operating program.

Significant Changes

This CPDS is an update of the FY 2026 CPDS and does not include a new start for the budget year. The Project has not experienced significant changes since approval of CD-1, which was reflected in the FY 2026 CPDS. This CPDS includes detail on outyear funding by fiscal year through the FYNSP.

Critical Milestone History

The schedule below represents an estimate and not a performance baseline, which will be developed in support of CD-2/3.

Fiscal Year	CD-0	Conceptual Design Complete	CD-1	CD-3A	Final Design Complete	CD-2/3	D&D Complete ¹	CD-4
FY 2025	01/03/2018	2Q FY 2024	2Q FY 2025	3Q FY 2028	4Q FY 2029	2Q FY 2030	N/A	4Q FY 2035
FY 2026	01/03/2018	09/30/2024	5/23/2025	3Q FY 2028	4Q FY 2029	2Q FY 2030	N/A	4Q FY 2036
FY 2027	01/03/2018	09/30/2024	5/23/2025	3Q FY 2028	4Q FY 2029	2Q FY 2030	N/A	4Q FY 2036

CD-0 – Approve Mission Need for a construction project with a conceptual scope and cost range

Conceptual Design Complete – Actual date the conceptual design was completed

CD-1 – Approve Alternate Selection and Cost Range

CD-3A – Approve Long Lead Procurement and Site Preparation

Final Design Complete – Actual date the facility design was completed

CD-2/3 – Approve Performance Baseline and Start of Construction

D&D Complete – Completion of D&D work

CD-4 – Approve Project Completion

¹ D&D of the Expended Core Facility is not within the scope of this project.

Project Cost History (\$K)

Fiscal Year	TEC, Design	TEC, Construction	TEC, Total	OPC, Except D&D	OPC, D&D	OPC, Total	TPC
FY 2025	524,200	2,351,160	2,875,360	143,500	N/A	143,500	3,018,860
FY 2026	520,562	2,564,752	3,085,314	143,186	N/A	143,186	3,228,500
FY 2027	515,651	2,564,752	3,080,403	148,097	N/A	148,097	3,228,500

2. Project Scope and Justification

Scope

The NEAP is a facility design and construction project. The project will recapitalize the capabilities for examining spent nuclear fuel that currently exists in the Expended Core Facility and its support facilities. The Project considered alternatives, including constructing a new facility on the Idaho National Laboratory and refurbishing the existing Naval Reactors examination infrastructure at the Expended Core Facility. The preferred alternative selected with CD-1 is to construct a new facility.

The following represents the general scope of the NEAP:

- Design and construct a facility and facility systems to examine naval spent nuclear fuel, poison, and structural materials, including the capability to receive, unload, prepare, and package examination specimens.
- Design and construct infrastructure needed to support examination of naval spent nuclear fuel, poison, and structural material.
- Design and procure equipment to make the facility ready for use to receive, unload, prepare, and package examination specimens of naval spent nuclear fuel, poison, and structural material.
- Prepare testing, operating, and preventive maintenance procedures and drawings, where appropriate, for the naval spent nuclear fuel examination process systems, equipment, facilities, and facility systems.
- Develop training programs and conduct personnel training, where appropriate.
- Develop project management procedures and manage Project activities.
- Provide support services needed for the Project.
- Manage subcontracts supporting the design and construction or refurbishment.
- Prepare an Environmental Assessment in accordance with the National Environmental Policy Act.

Justification

Naval Reactors is responsible for providing the Nation with safe, effective, and affordable naval nuclear propulsion plants and ensuring their continued safe and reliable operation through lifetime support, research and development, design, construction, specification, certification, testing, maintenance, and disposal. Naval Reactors maintains total responsibility for all aspects of the U.S. Navy's nuclear propulsion systems. To support the continued operation of nuclear-powered vessels, it is critical that Naval Reactors maintain the capability to demonstrate acceptable operation of existing core designs, as well as to investigate and analyze unexpected conditions found during ship operation or upon refueling or defueling nuclear-powered vessels. To deliver cores with the capability required to support new weapons systems and operational capabilities in naval combatants, Naval Reactors must continue to design new and more capable reactors using the data obtained from examinations.

The Naval Reactors Facility, located on the Idaho National Laboratory, serves as the Naval Reactors focal point for the evaluation, preparation, and shipment of naval spent nuclear fuel. Operations in the Expended Core Facility include processing of highly radioactive naval spent nuclear fuel in water pools and non-destructive and destructive examinations of naval spent nuclear fuel samples in hot cells. Although the existing Expended Core Facility continues to be maintained and operated in a safe and environmentally responsible manner, the infrastructure is over 60 years old, does not meet current standards (i.e., requirements that were not applicable at the time of construction such as modern structural and seismic codes) and requires recapitalization.

The existing Expended Core Facility at the Naval Reactors Facility in Idaho is a single facility that is approximately 197,000 square feet. The Expended Core Facility has three major capabilities: (1) to receive, unload, prepare for packaging, and package naval spent nuclear fuel, (2) to prepare for examination and examine naval spent nuclear fuel, and (3) to prepare and examine irradiation test specimens from the Advanced Test Reactor. To cease operations in the aging Expended Core Facility, a three-part exit strategy is required to recapitalize the three distinct missions provided by the facility today. First, the Spent Fuel Handling Recapitalization Project (14-D-901) is constructing the Naval Spent Fuel Handling Facility to recapitalize the capabilities to receive, unload, prepare, and package naval spent nuclear fuel. Second, the Naval Examination Acquisition Project (25-D-530) is recapitalizing the capabilities to examine naval spent nuclear fuel. Lastly, the capability to prepare and examine irradiation test specimens will be recapitalized by separate efforts.

The NEAP plans to conduct an Environmental Assessment to consider the environmental impacts of the proposed alternative in accordance with the National Environmental Policy Act. The NEAP environmental analysis will rely on analysis from the Final EIS for Recapitalization of Infrastructure Supporting Naval Spent Nuclear Fuel Handling at the Idaho National Laboratory to the extent the previous analysis remains current and is applicable to NEAP construction and operations.

Naval Reactors has an equivalency to the project management requirements in DOE Order 413.3, *Program and Project Management for the Acquisition of Capital Assets*. The NEAP is being conducted in accordance with the Naval Reactors Implementation Bulletin for DOE O 413.3, and appropriate project management requirements have been met.

Key Performance Parameters (KPPs)

KPPs will be established as part of Critical Decision – 2/3, *Performance Baseline and Start of Construction*.

3. Financial Schedule (\$K) ¹²

	Budget Authority (Appropriations)	Obligations	Costs
Total Estimated Cost (TEC)			
Design			
FY 2025	20,000	20,000	6,448
FY 2026	40,000	40,000	40,318
FY 2027	80,000	80,000	77,611
FY 2028	115,000	115,000	83,855
FY 2029	80,000	80,000	70,401
FY 2030	75,000	75,000	61,163
FY 2031	40,000	40,000	48,762
Outyears	65,651	65,651	127,094
Total Design	515,651	515,651	515,651
Construction			
FY 2025	-	-	-
FY 2026	-	-	-
FY 2027	-	-	-
FY 2028	15,000	15,000	10,083
FY 2029	120,000	120,000	29,480
FY 2030	350,000	250,000	130,594
FY 2031	535,000	435,000	306,010
Outyears	1,544,752	1,444,752	1,788,585
Total Construction	2,564,752	2,264,752	2,264,752
TEC			
FY 2025	20,000	20,000	6,448
FY 2026	40,000	40,000	40,318
FY 2027	80,000	80,000	77,611
FY 2028	130,000	130,000	93,938
FY 2029	200,000	200,000	99,881
FY 2030	425,000	325,000	191,757
FY 2031	575,000	475,000	354,772
Outyears	1,610,403	1,510,403	1,915,679
Total TEC	3,080,403	2,780,403	2,780,403
Other Project Costs (OPC)			
Prior Years	90,541	90,541	90,541
FY 2025	15,059	15,059	15,059
FY 2026	1,659	1,659	1,659
FY 2027	610	610	610

¹Totals may not add due to rounding.

²Planned Obligations and Costs do not include \$300M in Government Contingency in Outyears

	Budget Authority (Appropriations)	Obligations	Costs
FY 2028	613	613	613
FY 2029	1,014	1,014	1,014
FY 2030	1,064	1,064	1,064
FY 2031	4,291	4,291	4,291
Outyears	33,246	33,246	33,246
Total, OPC	148,097	148,097	148,097
Total Project Costs (TPC)			
Prior Years	90,541	90,541	90,541
FY 2025	35,059	35,059	21,507
FY 2026	41,659	41,659	41,977
FY 2027	80,610	80,610	78,221
FY 2028	130,613	130,613	94,551
FY 2029	201,014	201,014	100,895
FY 2030	426,064	326,064	192,821
FY 2031	579,291	479,291	359,063
Outyears	1,643,649	1,543,649	1,948,925
Total TPC	3,228,500	2,928,500	2,928,500

4. Details of Project Cost Estimate (\$K)

	Current Total Estimate	Previous Total Estimate¹	Previous Validated Baseline
Total Estimated Cost (TEC)			
Design			
Design	388,989	393,900	N/A
Management Reserve	126,662	126,661	N/A
Total Design	515,651	520,562	N/A
Construction			
Site Work	50,685	50,685	N/A
Equipment	217,624	217,624	N/A
Facility Construction	1,346,816	1,346,816	N/A
Safety	12,337	12,337	N/A
Management Reserve	637,289	637,289	N/A
Government Contingency	300,000	300,000	N/A
Total Construction	2,564,752	2,564,752	N/A
Total Estimated Cost (TEC)	3,080,403	3,085,314	N/A
<i>Management Reserve & Contingency, TEC</i>	<i>1,063,951</i>	<i>1,063,951</i>	<i>N/A</i>
Other Project Costs (OPC)			
OPC except D&D			
Conceptual Design	99,100	95,133	N/A
NEPA	7,834	7,834	N/A
Start-up	28,410	28,410	N/A
Closeout	4,092	4,092	N/A
Management Reserve	8,660	7,717	N/A
Total OPC	148,097	143,186	N/A
<i>Management Reserve, OPC</i>	<i>7,717</i>	<i>7,717</i>	<i>N/A</i>
Total Project Cost	3,228,500	3,228,500	N/A
Total Management Reserve & Contingency (TEC+OPC)	1,071,668	1,071,667	N/A

¹ Totals may not add due to rounding.

5. Schedule of Appropriation Requests (\$K)

Request Year	Type	Prior Years	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Out Years	Total
FY 2025	TEC	-	45,000	90,000	110,000	125,000	200,000	585,000	630,000	1,090,360	2,875,360
	OPC	90,800	12,700	1,400	900	1,100	600	4,500	7,500	24,000	143,500
	TPC	90,800	57,700	91,400	110,900	126,100	200,600	589,500	637,500	1,114,360	3,018,860
FY 2026	TEC	-	20,000	60,000	-	-	-	-	-	3,005,314	3,085,314
	OPC	90,541	11,092	1,659	-	-	-	-	-	39,895	143,186
	TPC	90,541	31,092	61,659	-	-	-	-	-	3,045,209	3,228,500
FY 2027	TEC	-	20,000	40,000	80,000	130,000	200,000	425,000	575,000	1,610,403	3,080,403
	OPC	90,541	15,059	1,659	610	613	1,014	1,064	4,291	33,246	148,097
	TPC	90,541	35,059	41,659	80,610	130,613	201,014	426,064	579,291	1,643,649	3,228,500

6. Related Operations and Maintenance Funding Requirements

Start of Operation of Beneficial Occupancy	1Q FY 2037
Expected Useful Life	40 years
Expected Future Start of D&D	1Q FY 2077

Related Funding Requirements (\$M)

Funding Requirements	Annual Costs (FY37 \$)		Life Cycle Costs (then-year \$)	
	Previous Estimate	Current Estimate	Previous Estimate	Current Estimate
Estimate Totals				
Operations and Maintenance	45.6	45.6	3,397.3	3,397.3
Future Installations and Refurbishment	N/A	N/A	1,021.6	1,021.6

7. D&D Information

The new area being constructed in this project is replacing existing facility capabilities. However, preparation and examination of irradiation test specimens in the existing Expended Core Facility will continue until that capability is recapitalized; therefore, the costs associated with D&D of the Expended Core Facility are not included in the costs cited for the NEAP. The new area being constructed by this Project at the Naval Reactors Facility is 94,800 ft².

	Square Feet
New area being constructed by this Project at the Naval Reactors Facility	94,800
Area of D&D in this Project at the Naval Reactors Facility	-
Area at the Naval Reactors Facility to be transferred, sold, and/or D&D outside the project including area previously "banked"	-
Area of D&D in this Project at other sites	-
Area at other sites to be transferred, sold, and/or D&D outside the Project including area previously "banked"	-
Total area eliminated	-

8. Acquisition Approach

The integrated Management & Operating (M&O) prime partners will plan and execute the NEAP in accordance with requirements. Naval spent nuclear fuel examination equipment will be procured through the procurement M&O partners as appropriate. An Architecture / Engineering firm was selected as the subcontracting strategy for development of a conceptual design. The M&O prime contractor will subcontract detailed design with an Architecture / Engineering firm and will subcontract construction to a construction manager via a Construction Manager at Risk arrangement.

14-D-901, Spent Fuel Handling Recapitalization Project
Naval Reactors Facility, Idaho
Project is for Design and Construction

1. Summary, Significant Changes, and Schedule and Cost History

Summary

The Fiscal Year (FY) 2027 Request for 14-D-901, Spent Fuel Handling Recapitalization Project (SFHP) is \$691,953,000. The FY 2027 budget request will enable the project to continue permanent construction activities such as installation of the main process building siding and roofing, installation of the process and utility systems, and completion of the spent fuel pools. Critical Decision (CD)-2/3, *Performance Baseline and Start of Permanent Construction*, was approved on September 24, 2018, with a Total Project Cost (TPC) of \$1,686,500,000 and a CD-4 of 3Q FY 2025. On May 7, 2025, a fourth revision to the Performance Baseline was approved with a TPC of \$4,532,898,000 and a CD-4 date of 4Q FY 2031. The Performance Baseline revision provides an 80 percent confidence level the project can be completed within the TPC.

Funding within the project’s line-item is controlled at the TPC level; funds are available to perform both Total Estimated Cost (TEC) -type and Other Project Cost (OPC)-type activities.

Significant Changes

This Construction Project Data Sheet (CPDS) is an update of the FY 2026 CPDS and does not include a new start for the budget year. The FY 2027 request of \$691,953,000 supports Project execution in accordance with the Performance Baseline revision approved by Naval Reactors on May 7, 2025. The majority of the request is necessary to fund the peak year of the Project’s largest construction contract, which will outfit the facility with the process and utility systems required for operations. This contract was awarded in May 2025.

Critical Milestone History

Fiscal Year	CD-0	Conceptual Design Complete	CD-1	CD-2	Final Design Complete	CD-3	D&D Complete	CD-4
FY 2014	03/29/2008		1QFY2014	3QFY2015	4QFY2016	4QFY2016	N/A	4QFY2022
FY 2015	03/29/2008		1QFY2014	3QFY2015	4QFY2016	4Q FY 2016	N/A	4QFY2022
FY 2015 Rev	03/29/2008		1QFY2015	3QFY2017	4QFY2018	1Q FY 2018	N/A	4QFY2024
FY 2016	03/29/2008		2QFY2015	1QFY2018	4QFY2019	4QFY2018	N/A	3QFY2025
FY 2017	03/29/2008	03/19/2015	03/19/2015	1QFY2018	3QFY2020	4QFY2018	N/A	3QFY2025
FY 2018	03/29/2008	03/19/2015	03/19/2015	4QFY2018	3QFY2020	4QFY2018	N/A	3QFY2025
FY 2019	03/29/2008	03/19/2015	03/19/2015	4QFY2018	3QFY2020	4QFY2018	N/A	3QFY2025
FY 2020	03/29/2008	03/19/2015	03/19/2015	09/24/2018	3QFY2020	09/24/2018	N/A	3QFY2025
FY 2021	03/29/2008	03/19/2015	03/19/2015	09/24/2018	2QFY2021	09/24/2018	N/A	3QFY2026
FY 2022	03/29/2008	03/19/2015	03/19/2015	09/24/2018	03/04/2021	09/24/2018	N/A	3QFY2026
FY 2023	03/29/2008	03/19/2015	03/19/2015	09/24/2018	03/04/2021	09/24/2018	N/A	3QFY2026
FY 2024	03/29/2008	03/19/2015	03/19/2015	09/24/2018	03/04/2021	09/24/2018	N/A	4QFY2028
FY 2025	03/29/2008	03/19/2015	03/19/2015	09/24/2018	03/04/2021	09/24/2018	N/A	4QFY2029
FY 2026	03/29/2008	03/19/2015	03/19/2015	09/24/2018	03/04/2021	09/24/2018	N/A	4QFY2031
FY 2027	03/29/2008	03/19/2015	03/19/2015	09/24/2018	03/04/2021	09/24/2018	N/A	4QFY2031

CD-0 – Approve Mission Need

Conceptual Design Complete – Actual date the conceptual design was completed

CD-1 – Approve Alternate Selection and Cost Range

CD-2 – Approve Performance Baseline

Final Design Complete – Actual date the facility design was completed

CD-3 – Approve Start of Construction/Execution

D&D Complete – Completion of D&D work (see Section 5)

CD-4 – Approve Start of Operations or Project Completion

Fiscal Year	CD-3A	CD-3B	CD-4A
FY 2017	2QFY2017	1QFY2018	3QFY2024
FY 2018	12/7/2016	4QFY2017	3QFY2024
FY 2019	12/7/2016	6/14/2017	3QFY2024
FY 2020	12/7/2016	6/14/2017	3QFY2024
FY 2021	12/7/2016	6/14/2017	3QFY2025
FY 2022	12/7/2016	6/14/2017	3QFY2025
FY 2023	12/7/2016	6/14/2017	3QFY2025
FY 2024	12/7/2016	6/14/2017	2QFY2027
FY 2025	12/7/2016	6/14/2017	2QFY2028
FY 2026	12/7/2016	6/14/2017	4QFY2030
FY 2027	12/7/2016	6/14/2017	4QFY2030

CD-3A – Start of Long Lead Material Procurement

CD-3B – Start of Early Site Preparation

CD-4A – Start of M-290 Shipping Container Unloading Operations

Project Cost History (\$K)

Fiscal Year	TEC, Design	TEC, Construction	TEC, Total	OPC, Except D&D	OPC, D&D	OPC, Total	TPC
FY 2014	369,400	917,100	1,286,500	165,000	N/A	165,000	1,451,500
FY 2015	369,400	917,100	1,286,500	165,000	N/A	165,000	1,451,500
FY 2015 Rev	263,000	1,144,900	1,407,900	178,200	N/A	178,200	1,586,200
FY 2016	268,800	1,182,100	1,450,900	195,600	N/A	195,600	1,646,500
FY 2017	239,800	1,232,600	1,472,400	174,100	N/A	174,100	1,646,500
FY 2018	239,800	1,232,600	1,472,400	174,100	N/A	174,100	1,646,500
FY 2019	306,982	1,165,418	1,472,400	174,100	N/A	174,100	1,646,500
FY 2020	302,489	1,169,911	1,472,400	174,100	N/A	174,100	1,686,500
FY 2021	278,860	1,607,140	1,886,000	174,000	N/A	174,000	2,060,000
FY 2022	276,896	1,609,104	1,886,000	174,000	N/A	174,000	2,060,000
FY 2023	332,288	1,826,712	2,159,000	174,000	N/A	174,000	2,333,000
FY 2024	332,288	2,491,339	2,823,627	176,373	N/A	176,373	3,000,000
FY 2025	332,288	2,491,339	2,823,627	176,373	N/A	176,373	3,000,000
FY 2026	332,288	4,013,854	4,346,143	186,755	N/A	186,857	4,533,000
FY 2027	332,288	4,013,742	4,346,031	186,867	N/A	186,867	4,532,898

2. Project Scope and Justification

Scope

The SFHP will design and construct a new facility, the Naval Spent Fuel Handling Facility, to incorporate the capabilities for naval spent nuclear fuel handling that currently exist in the Expended Core Facility and its support facilities. Additionally, a major portion of this new facility is required to support additional capability, which does not exist in the Expended Core Facility, to handle full-length aircraft carrier naval spent nuclear fuel received in M-290 shipping containers. The Naval Spent Fuel Handling Facility footprint will be approximately 213,000 square feet. Of this, approximately 121,000 square feet is required for spent fuel shipping container and dry storage operations, which includes approximately 17,000 square feet for water pool spent fuel preparation and in-process storage. The remainder of the facility, approximately 92,000 square feet, is required for waste management, facility systems operations, staging, and administrative office space. The SFHP has completed final design and site preparation and is in the construction phase.

The following represents the general scope of the SFHP :

- Design and construct a facility and facility systems for naval spent nuclear fuel handling, including the capability to receive, unload, prepare, and package naval spent nuclear fuel.
- Design and construct infrastructure needed to support naval spent nuclear fuel handling operations.
- Design and procure equipment to make the facility ready for use to receive, unload, prepare, and package naval spent nuclear fuel, where appropriate.
- Provide the new capability to unload M-290 spent fuel shipping containers.
- Prepare testing, operating, and preventive maintenance procedures and drawings, where appropriate, for the naval spent nuclear fuel handling process systems, equipment, facilities, and facility systems.
- Develop training programs and conduct personnel training, where appropriate.
- Develop project management procedures and manage Project activities.
- Provide support services needed for the Project.
- Manage subcontracts supporting the design and construction.
- Prepare an Environmental Impact Statement in accordance with the National Environmental Policy Act.

Justification

The mission of Naval Reactors is to provide the nation with militarily effective nuclear propulsion plants and to ensure their safe, reliable, long-lived, and affordable operation. Naval Reactors maintains total responsibility for all aspects of the United States (U.S.) Navy's nuclear propulsion systems, including research, design, construction, testing, operation, maintenance, and disposal. At the end of reactor service life, Naval Reactors transports naval spent nuclear fuel from its origin (e.g., servicing shipyards and naval training platforms) to the Naval Reactors Facility at the Idaho National Laboratory (INL).

The Expended Core Facility, located at the Naval Reactors Facility in Idaho, is the only facility with the capabilities to receive naval spent nuclear fuel shipping containers and process naval spent nuclear fuel. Although the existing Expended Core Facility continues to be maintained and operated in a safe and environmentally responsible manner, the infrastructure is over 60 years old, does not meet current standards (i.e., requirements that were not applicable at the time of construction), and requires recapitalization. The Expended Core Facility is also incapable of receiving full-length aircraft carrier naval spent nuclear fuel, which is required to support aircraft carrier refuelings. The magnitude of required sustainment efforts and incremental infrastructure upgrades within the Expended Core Facility pose substantial risk to the continued preparation of naval spent nuclear fuel for long term storage. Specifically, sustainment efforts could require delays to naval spent nuclear fuel shipping container unloading operations, which would interrupt refueling and defueling schedules for nuclear-powered vessels and would adversely affect the operational availability of the nuclear fleet. If this interruption were to extend over long periods of time, the ability to sustain fleet operations would

be impacted, resulting ultimately in a significant decrement to the Navy's responsiveness and agility to fulfill military missions worldwide.

The existing Expended Core Facility at the Naval Reactors Facility in Idaho is a single facility that is approximately 197,000 square feet. The Expended Core Facility has three major capabilities: (1) to receive, unload, prepare for packaging, and package naval spent nuclear fuel, (2) to prepare for examination and examine naval spent nuclear fuel, and (3) to prepare and examine irradiation test specimens from the Advanced Test Reactor. To cease operations in the aging Expended Core Facility, a three-part exit strategy is required to recapitalize the three distinct missions provided by the facility today. First, the SFHP (14-D-901) is constructing the Naval Spent Fuel Handling Facility to recapitalize the capabilities to receive, unload, prepare, and package naval spent nuclear fuel. Second, the Naval Examination Acquisition Project (25-D-530) is recapitalizing the capabilities to examine naval spent nuclear fuel. Lastly, the capability to prepare and examine irradiation test specimens will be recapitalized by separate efforts.

Actions necessary to continue Naval Reactors' ability to support naval spent nuclear fuel handling were the subject of an Environmental Impact Statement. The Final Environmental Impact Statement for recapitalization of the infrastructure supporting naval spent nuclear fuel was published on September 30, 2016, and included an assessment of the environmental impacts associated with handling of naval spent nuclear fuel for the following alternatives:

- (1) No Action Alternative – Maintain the naval spent nuclear fuel handling capabilities of the existing Expended Core Facility by continuing to use the existing infrastructure while performing corrective maintenance and repairs.
- (2) Overhaul Alternative – Recapitalize the naval spent nuclear fuel handling capabilities of the Expended Core Facility by overhauling the existing facility with major refurbishment projects for the infrastructure and water pools.
- (3) New Facility Alternative, including the SFHP – Recapitalize the naval spent nuclear fuel handling capabilities of the Expended Core Facility by constructing and operating a new facility at one of two potential locations at the Naval Reactors Facility in Idaho.

The National Environmental Policy Act Record of Decision, which identified the New Facility Alternative as the preferred method to recapitalize the naval spent nuclear fuel handling capabilities of the Expended Core Facility, was published on December 5, 2016.

Naval Reactors has an equivalency to the project management requirements in DOE Order 413.3, *Program and Project Management for the Acquisition of Capital Assets*. The Project is being conducted in accordance with the Naval Reactors Implementation Bulletin for DOE Order 413.3, and appropriate project management requirements have been met.

Prior to CD-2/3 approval, an independent cost estimate was completed by the Department of Defense Office of Cost Assessment and Program Evaluation.

Key Performance Parameters (KPPs)

The Threshold KPPs represent the minimum acceptable performance that the project must achieve. Achievement of the Threshold KPPs will be a prerequisite for approval of CD-4, Project Completion. The KPPs were formally established as part of the Performance Baseline and approval of CD-2/3. The current SFHP Performance Baseline supports exceeding the Threshold KPPs.

Performance Measure	Threshold	Objective
Provide the facility (infrastructure) to receive, unload, prepare, and package full-length aircraft carrier and submarine naval spent nuclear fuel.	An approximately 185,000 square foot facility, which includes an approximate 15,000 square foot water pool.	An approximately 245,000 square foot facility, which includes an approximate 20,000 square foot water pool.
Provide equipment to receive and unload naval spent nuclear fuel.	Receive and unload 7 M-290 shipping containers per year.	Receive and unload 9 M-290 and 12 M-140 shipping containers per year.
Provide equipment to initially inspect and prepare naval spent nuclear fuel for ultimate disposal.	Initially inspect and prepare 62 full-length NIMITZ Class aircraft carrier spent nuclear fuel modules per year.	Initially inspect and prepare 96 full-length aircraft carrier and 64 submarine spent nuclear fuel modules per year.
Provide equipment to package naval spent nuclear fuel into canisters for dry storage.	Package 6 naval spent fuel canisters per year.	Package 10 naval spent fuel canisters per year.
Provide equipment to temporarily store naval spent nuclear fuel in the water pool.	Storage for 126 full-length NIMITZ Class aircraft carrier spent nuclear fuel modules.	Storage for 408 aircraft carrier and submarine spent nuclear fuel modules.
Provide equipment to manage remote-handled low-level waste generated from receiving, unloading, preparing, and packaging spent nuclear fuel.	Package and ship 9 remote-handled low level waste canisters per year.	Package and ship 20 remote-handled low level waste canisters per year.

3. Financial Schedule (\$K)¹²³

	Budget Authority (Appropriations)	Obligations	Costs
Total Estimated Cost (TEC)			
Design			
Prior Years	N/A	N/A	332,288
Total, Design	N/A	N/A	332,288
Construction			
Prior Years	N/A	N/A	1,084,924
FY 2025	N/A	N/A	474,878
FY 2026	N/A	N/A	614,229
FY 2027	N/A	N/A	1,033,568
FY 2028	N/A	N/A	506,339
FY 2029	N/A	N/A	166,166
FY 2030	N/A	N/A	31,638
Total, Construction	N/A	N/A	3,911,742
Total Estimated Costs (TEC)			
Prior Years	N/A	N/A	1,417,212
FY 2025	N/A	N/A	474,878
FY 2026	N/A	N/A	614,229
FY 2027	N/A	N/A	1,033,568
FY 2028	N/A	N/A	506,339
FY 2029	N/A	N/A	166,166
FY 2030	N/A	N/A	31,638
Total, TEC	N/A	N/A	4,244,031
Other Project Cost (OPC)			
Prior Years	N/A	N/A	151,774
FY 2025	N/A	N/A	2,914
FY 2026	N/A	N/A	4,474
FY 2027	N/A	N/A	4,360
FY 2028	N/A	N/A	9,407
FY 2029	N/A	N/A	4,303
FY 2030	N/A	N/A	5,662
FY 2031	N/A	N/A	3,973
Total, OPC	N/A	N/A	186,867

¹ Due to the Consolidated and Further Continuing Appropriations Act, 2015, the TEC and OPC appropriations/obligations for FY 2015 and beyond are combined into the TPC appropriations/obligations.

² Totals may not add due to rounding.

³ FY 2026 enacted appropriations provided less funding for the project than assumed as part of the funding profile supporting Performance Baseline Revision 4. As such, the FYNSP does not fund the project to the baselined TPC.

	Budget Authority (Appropriations)	Obligations	Costs
Total Project Costs (TPC)			
Prior Years	2,506,398	2,506,398	1,568,986
FY 2025	199,300	199,300	477,792
FY 2026	424,000	424,000	618,703
FY 2027	691,953	691,953	1,037,928
FY 2028	519,247	519,247	515,746
FY 2029	90,000	90,000	170,469
FY 2030	0	0	37,303
FY 2031	0	0	3,973
Total, TPC³	4,430,898	4,430,898	4,430,898

³ FY 2026 enacted appropriations provided less funding for the project than assumed as part of the funding profile supporting Performance Baseline Revision 4. As such, the FYNSP does not fund the project to the baselined TPC.

4. Details of Project Cost Estimate (\$K)¹

	Current Total Estimate¹	Previous Total Estimate¹	Original Validated Baseline
Total Estimated Cost (TEC)			
Design			
Design	332,289	332,288	300,789
Contingency	0	0	1,700
Total, Design	332,289	332,288	302,489
Construction			
Long Lead Material and Site Preparation	57,010	57,010	41,148
Spent Fuel Handling Equipment	289,437	288,599	215,454
Facility Construction	3,364,033	3,385,539	845,841
Contingency	303,262	282,707	107,468
Total, Construction¹	4,013,742	4,013,854	1,209,911
Total Estimated Cost	4,346,031	4,346,143	1,512,400
<i>Contingency, TEC</i>	303,262	282,707	109,168
Other Project Cost (OPC)			
Conceptual Planning	37,540	37,540	37,540
Conceptual Design	99,427	99,427	99,427
Start-up	28,516	28,445	26,273
Other (e.g., EIS, Project Reviews)	18,383	17,445	7,301
Contingency	3,000	4,000	3,559
Total, OPC	186,867	186,857	174,100
<i>Contingency, OPC</i>	3,000	4,000	3,559
Total Project Cost	4,532,898	4,533,000	1,686,500
Total, Contingency (TEC+OPC)	306,262	286,707	112,727

¹ Totals may not add due to rounding.

5. Schedule of Appropriation Requests (\$K)¹²

Request Year	Type	Prior Years	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Outyears	Total
FY 2014	TEC	1,286,500	0	0	0	0	0	0	0	0	1,286,500
	OPC	165,000	0	0	0	0	0	0	0	0	165,000
	TPC	1,451,500	0	0	0	0	0	0	0	0	1,451,500
FY 2015	TEC	1,286,500	0	0	0	0	0	0	0	0	1,286,500
	OPC	165,000	0	0	0	0	0	0	0	0	165,000
	TPC	1,451,500	0	0	0	0	0	0	0	0	1,451,500
FY 2015 Rev	TEC	1,407,900	0	0	0	0	0	0	0	0	1,407,900
	OPC	174,600	3,600	0	0	0	0	0	0	0	178,200
	TPC	1,582,500	3,600	0	0	0	0	0	0	0	1,586,100
FY 2016	TEC	1,431,200	19,700	0	0	0	0	0	0	0	1,450,900
	OPC	181,300	10,300	4,000	0	0	0	0	0	0	195,600
	TPC	1,612,500	30,000	4,000	0	0	0	0	0	0	1,646,500
FY 2017	TEC	1,448,800	23,600	0	0	0	0	0	0	0	1,472,400
	OPC	164,100	6,200	3,800	0	0	0	0	0	0	174,100
	TPC	1,612,900	29,800	3,800	0	0	0	0	0	0	1,646,500
FY 2018	TEC	1,448,800	23,600	0	0	0	0	0	0	0	1,472,400
	OPC	164,100	6,200	3,800	0	0	0	0	0	0	174,100
	TPC	1,612,900	29,800	3,800	0	0	0	0	0	0	1,646,500
FY 2019	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,472,400
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	174,100
	TPC	1,612,900	29,800	3,800	0	0	0	0	0	0	1,646,500
FY 2020	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,472,400
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	174,100
	TPC	1,612,900	29,800	3,800	0	0	0	0	0	0	1,646,500
FY 2021	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,886,000
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	174,000
	TPC	1,720,600	13,100	3,800	0	0	0	0	0	0	2,060,000

Request Year	Type	Prior Years	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Outyears	Total
FY 2022	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,886,000
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	174,000
	TPC	2,043,100	16,900	0	0	0	0	0	0	0	2,060,000
FY 2023	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,159,000
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	174,000
	TPC	2,367,395	16,900	0	0	0	0	0	0	0	2,333,000
FY 2024	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,823,627
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	176,373
	TPC	2,506,398	292,002	176,000	25,600	0	0	0	0	0	3,000,000
FY 2025	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,823,627
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	176,373
	TPC	2,506,398	292,002	280,968	219,479	213,197	0	0	0	0	3,000,000 ¹
FY 2026	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4,346,143
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	186,857
	TPC	2,506,398	199,300	526,000	-	-	-	-	-	1,301,200	4,533,000
FY 2027	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4,244,031
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	186,867
	TPC	2,506,398	199,300	424,000	691,953	519,247	90,000	0	0	0	4,430,898 ²

¹ Outyears included preliminary budget increases in anticipation of Performance Baseline Revision 4, but the TPC remained at \$3B. Accordingly, the FY totals do not sum to the TPC.

² FY 2026 enacted appropriations provided less funding for the project than assumed as part of the funding profile supporting Performance Baseline Revision 4. As such, the FYNSP does not fund the project to the baselined TPC.

6. Related Operations and Maintenance Funding Requirements

Start of Operation of Beneficial Occupancy	1QFY2031
Expected Useful Life	40 years
Expected Future Start of D&D	1QFY2071

Related Funding Requirements (Budget Authority in \$K)

	Annual Costs (FY31 \$K)		Life Cycle Costs (then-year \$K)	
	Previous Total Estimate	Current Total Estimate	Previous Total Estimate	Current Total Estimate
Operations and Maintenance	114,642	114,642	4,585,687	4,585,687
Transition to Operations and Future Installation	n/a	n/a	532,038	532,038

The Operations and Maintenance costs include the recurring costs to operate the Naval Spent Fuel Handling Facility, including the costs to receive, unload, prepare, and package naval spent nuclear fuel and the costs to maintain and refurbish facility systems. The Transition to Operations and Future Installation costs include one-time costs to expand the capabilities of the facility and to transition the facility to a fully operational status including checkout, training, and qualification of work teams.

7. D&D Information

The new area being constructed in this project is replacing existing facilities. However, spent fuel handling operations in the existing Expended Core Facility will overlap with operations in the new Naval Spent Fuel Handling Facility for a period of 5 to 12 years, and examination operations in the existing Expended Core Facility will continue for the foreseeable future; therefore, the costs associated with D&D of the Expended Core Facility are not included in the costs cited for the SFHP.

	Square Feet
New area being constructed by this Project at the Naval Reactors Facility	213,000
Area of D&D in this Project at the Naval Reactors Facility	0
Area at the Naval Reactors Facility to be transferred, sold, and/or D&D outside the project including area previously "banked"	0
Area of D&D in this Project at other sites	0
Area at other sites to be transferred, sold, and/or D&D outside the Project including area previously "banked"	0
Total area eliminated	0

8. Acquisition Approach

The integrated Management & Operating (M&O) prime partners will plan and execute the SFHP in accordance with requirements. Naval spent nuclear fuel handling equipment will be procured through the procurement M&O partners. An Engineering, Procurement, and Construction Management (EPCM) firm was selected as the subcontracting strategy for design and construction management of the facility and facility systems. A 2019 amendment to the EPCM's contract changed the contract type from cost plus fixed fee to cost plus fixed fee—completion, reflecting the maturing design and the improved certainty in Project costs and schedules. Long-lead materials were purchased, and site preparation work was performed ahead of CD-2/3.

DEPARTMENT OF ENERGY
Funding by Site Detail
TAS_0314 - Naval Reactors - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Bettis Atomic Power Laboratory			
Naval Reactors Development	419,005	436,321	438,392
Columbia-Class Reactor Systems Development	10,774	8,339	7,016
Naval Reactors Operations and Infrastructure	166,054	163,169	141,192
14-D-901 Spent Fuel Handling Recapitalization Project, NRF	7,211	15,341	25,036
Naval Reactors Construction	7,211	15,341	25,036
Total Bettis Atomic Power Laboratory	603,044	623,170	611,636
Idaho National Laboratory			
Naval Reactors Development	92,800	96,740	98,770
Total Idaho National Laboratory	92,800	96,740	98,770
Knolls Atomic Power Laboratory			
Naval Reactors Development	304,830	313,845	318,934
Columbia-Class Reactor Systems Development	34,836	26,961	22,684
Naval Reactors Operations and Infrastructure	350,816	305,270	287,494
26-D-530 East Side Office Building	0	5,000	0
22-D-532 KL Security Upgrades	41,670	0	0
14-D-901 Spent Fuel Handling Recapitalization Project, NRF	455	967	1,578
Naval Reactors Construction	42,125	5,967	1,578
Total Knolls Atomic Power Laboratory	732,607	652,043	630,690
Naval Reactors Facility			
Naval Reactors Development	17,505	15,310	18,315
Naval Reactors Operations and Infrastructure	214,632	214,216	194,068
25-D-530 Naval Examination Acquisition Project	20,000	40,000	80,000
14-D-901 Spent Fuel Handling Recapitalization Project, NRF	191,634	407,692	665,339
Naval Reactors Construction	211,634	447,692	745,339
Total Naval Reactors Facility	443,771	677,218	957,722
Naval Reactors Laboratory Field Office			
Program Direction - Naval Reactors	17,460	17,460	20,383
Total Naval Reactors Laboratory Field Office	17,460	17,460	20,383

DEPARTMENT OF ENERGY
Funding by Site Detail
TAS_0314 - Naval Reactors - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Washington Headquarters			
Naval Reactors Development	1,660	2,363	2,413
Naval Reactors Operations and Infrastructure	10,578	20,926	22,296
Program Direction - Naval Reactors	44,080	44,080	51,458
Total Washington Headquarters	56,318	67,369	76,167
Total Funding by Site for TAS_0314 - Naval Reactors	1,946,000	2,134,000	2,395,368