

NUREG-1100  
Volume 36



United States Nuclear Regulatory Commission

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*Protecting People and the Environment*

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**CONGRESSIONAL  
BUDGET  
JUSTIFICATION  
FISCAL YEAR  
2021**

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BUDGET  
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FISCAL YEAR  
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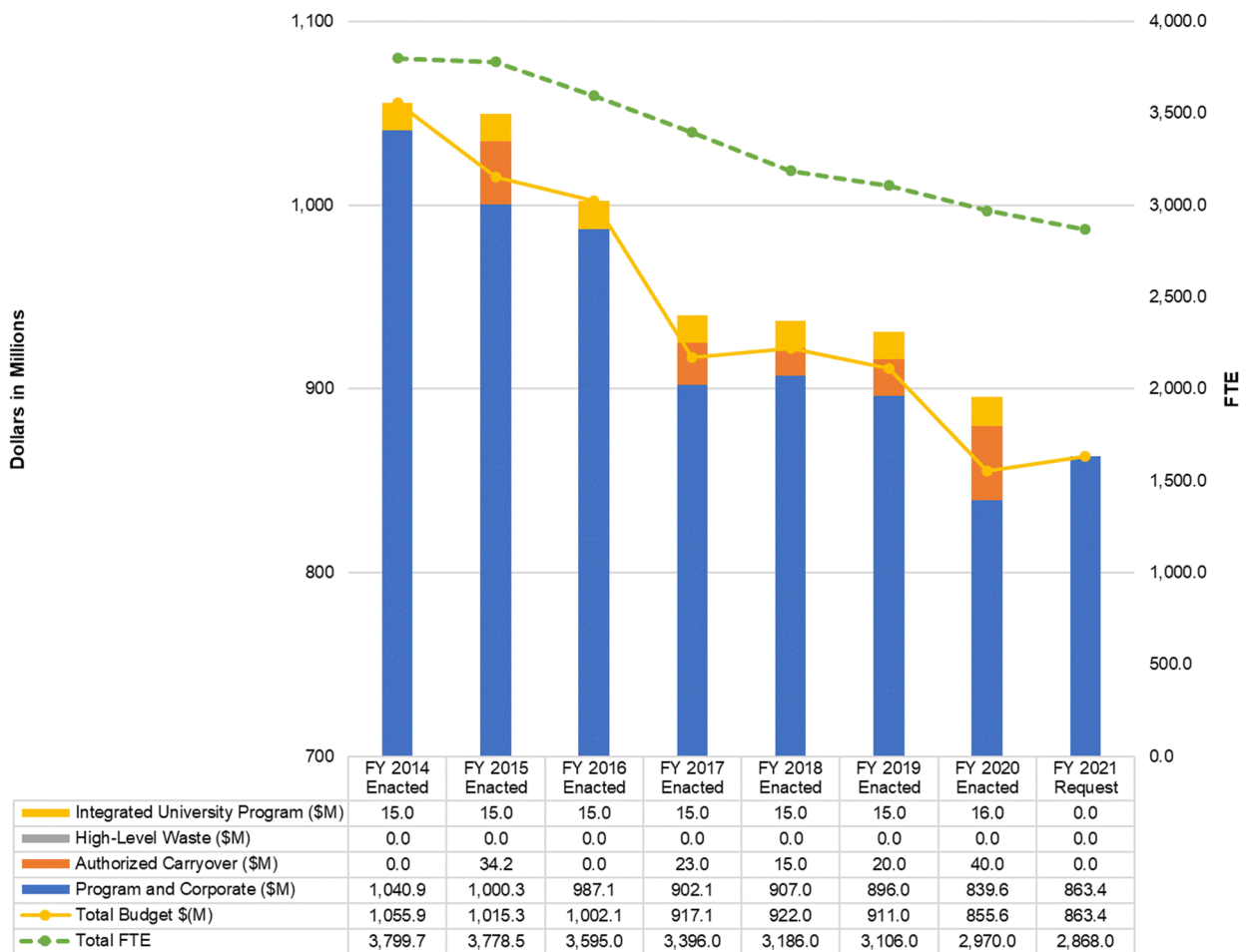
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EXECUTIVE SUMMARY

The mission of the U.S. Nuclear Regulatory Commission (NRC) is to license and regulate the Nation’s civilian use of radioactive materials to provide reasonable assurance of adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. The NRC’s fiscal year (FY) 2021 budget request is \$863.4 million, including 2,868 full-time equivalents (FTE). When compared to the NRC’s FY 2020 total budget authority, which included the use of \$40 million in authorized prior-year carryover, this request represents a decrease of \$32.2 million or approximately 3.6 percent and includes 102 fewer FTEs. The FY 2021 budget request also reflects changes directed by Public Law 115-439, “Nuclear Energy Innovation and Modernization Act” (NEIMA), including the agency’s efforts to comply with Section 102(a)(3)(A) of NEIMA (limitations on corporate support costs) to the maximum extent practicable.



**Figure 1: NRC FY 2014–FY 2021 Budget (Includes the Office of the Inspector General)**

As shown in Figure 1, since FY 2014, the agency budget has decreased by 17 percent, excluding resources for the licensing activities related to the proposed Yucca Mountain deep geological repository and the Integrated University Program. The agency has also reduced FTE by 25 percent during this period.

## EXECUTIVE SUMMARY

Budget Authority and Full-Time Equivalents								
(Dollars in Millions)								
Business Line/ Major Program	FY 2019 Actuals		FY 2020 Enacted*		FY 2021 Request		Changes from FY 2020	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Operating Reactors	363.2	1,463.1	342.6	1,483.0	372.8	1,470.0	30.3	(13.0)
New Reactors	80.3	328.4	84.1	332.0	80.0	285.0	(4.1)	(47.0)
<b>Nuclear Reactor Safety</b>	<b>\$443.4</b>	<b>1,791.5</b>	<b>\$426.7</b>	<b>1,815.0</b>	<b>\$452.8</b>	<b>1,755.0</b>	<b>\$26.2</b>	<b>(60.0)</b>
Spent Fuel Storage and Transportation	27.1	104.2	22.9	102.0	28.1	102.0	5.2	0.0
Nuclear Materials Users	58.2	206.7	56.2	205.0	55.5	201.0	(0.7)	(4.0)
Decommissioning and Low-Level Waste	23.7	92.8	21.8	93.0	22.8	86.0	1.0	(7.0)
High-Level Waste	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Facilities	20.7	87.9	19.2	81.0	19.3	73.0	0.0	(8.0)
<b>Nuclear Materials and Waste Safety Major Program Subtotal</b>	<b>\$129.7</b>	<b>491.8</b>	<b>\$120.2</b>	<b>481.0</b>	<b>\$125.6</b>	<b>462.0</b>	<b>\$5.4</b>	<b>(19.0)</b>
<b>Subtotal</b>	<b>\$573.2</b>	<b>2,283.3</b>	<b>\$546.8</b>	<b>2,296.0</b>	<b>\$578.5</b>	<b>2,217.0</b>	<b>\$31.6</b>	<b>(79.0)</b>
Corporate Support Integrated University Program	291.2	570.5	279.4	611.0	271.4	588.0	(8.0)	(23.0)
	14.8	0.0	16.0	0.0	0.0	0.0	(16.0)	0.0
<b>Subtotal</b>	<b>\$879.2</b>	<b>2,853.8</b>	<b>\$842.2</b>	<b>2,907.0</b>	<b>\$849.9</b>	<b>2,805.0</b>	<b>\$7.6</b>	<b>(102.0)</b>
Inspector General	12.3	58.5	13.3	63.0	13.5	63.0	0.2	0.0
<b>Total</b>	<b>\$891.5</b>	<b>2,912.3</b>	<b>\$855.5</b>	<b>2,970.0</b>	<b>\$863.4</b>	<b>2,868.0</b>	<b>\$7.8</b>	<b>(102.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, portions of the Operating Reactors, New Reactors, Spent Fuel Storage and Transportation, Nuclear Materials Users, Decommissioning and Low-Level Waste, Fuel Facilities, and Corporate Support Business Lines were funded \$40 million through the use of authorized prior-year carryover which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

Resources requested for the Nuclear Reactor Safety Program increase by \$26.2 million, as compared to the FY 2020 Enacted Budget primarily because of an increase in salaries and benefits to support enacted pay raises and increases in awards spending, yet include 60 fewer FTE. This increase is partially offset by a decline in workload, efficiencies in processing licensing actions, the merger of the Office of Nuclear Reactor Regulation and the Office of New Reactors, and the anticipated closure of the Duane Arnold Energy Center. The requested resources for the Nuclear Reactor Safety Program also include \$17.7 million for the continued development of a regulatory infrastructure for advanced nuclear reactor technologies.

Resources for the Nuclear Materials and Waste Safety Program increase by \$5.4 million, primarily because of an increase in salaries and benefits to support enacted pay raises and increases in awards spending, yet include 19 fewer FTE. This increase is partially offset by the anticipated decline in workload. Resources for the Nuclear Materials and Waste Safety Program do not include funding for licensing activities related to the proposed Yucca Mountain deep geologic repository for the disposal of spent nuclear fuel (SNF) and other high-level radioactive waste.

Resources requested for Corporate Support decrease by \$8 million, including 23 fewer FTE, when compared to the FY 2020 Enacted Budget. The decrease is primarily the result of the elimination of the planned restack and renovation of two floors in the One White Flint North (OWFN) building; the planned release of the Three White Flint North (3WFN) conference space and a floor of the Two White Flint North (TWFN) building. The decrease is also the result of identified efficiencies related to administrative support services, facilities management, and physical and personnel security; implementation of more cost effective telecommunication technologies and transition to governmentwide shared services; and reduced costs as a result of integrating the agency's financial and procurement systems. This decrease is partially offset by an increase to salaries and benefits to support enacted pay raises and increases in awards spending.

The FY 2021 Corporate Support request is approximately 31 percent of the agency's total budget authority and reflects the agency's efforts to comply with Section 102(a)(3)(A) of NEIMA to the maximum extent practicable. Further reductions to corporate support in FY 2021 were not feasible and would jeopardize the corporate activities necessary to accomplish the agency's mission. The agency will continue efforts to implement efficiencies and invest resources in initiatives that will result in future savings.

The Office of the Inspector General's (OIG) component of the FY 2021 proposed budget is \$13.5 million, including 63 FTE, of which \$12.3 million is for auditing and investigation activities for NRC programs, and \$1.2 million is for the auditing and investigation activities of the Defense Nuclear Facilities Safety Board (DNFSB).

## EXECUTIVE SUMMARY

<b>Budget Authority by Appropriation</b> (Dollars in Millions)			
	<b>FY 2020 Enacted</b>	<b>FY 2021 Request</b>	<b>Changes from FY 2020</b>
<b>NRC Appropriation</b>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
<b>Salaries and Expenses (S&amp;E)</b>			
Budget Authority	842.2	849.9	7.6
Offsetting Fees	717.1	729.3	12.1
<b>Net Appropriated S&amp;E</b>	<b>\$125.1</b>	<b>\$120.6</b>	<b>\$(4.5)</b>
<b>Office of the Inspector General (OIG)</b>			
Budget Authority	13.3	13.5	0.2
Offsetting Fees	10.9	11.1	0.2
<b>Net Appropriated OIG</b>	<b>\$2.4</b>	<b>\$2.4</b>	<b>\$0.0</b>
<b>Total NRC</b>			
Budget Authority	855.6	863.4	7.8
Offsetting Fees	728.1	740.4	12.3
<b>Total Net Appropriated</b>	<b>\$127.5</b>	<b>\$123.0</b>	<b>\$(4.5)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

In accordance with NEIMA, the NRC's FY 2021 budget request provides for approximately 100-percent fee recovery, less fee-relief activities identified by the Commission, which include international activities less amounts for import and export licensing; activities associated with amounts appropriated from the Nuclear Waste Fund; generic homeland security activities; Waste Incidental to Reprocessing (WIR) activities under Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005; OIG services for DNFSB; the Integrated University Program; and advanced reactor regulatory infrastructure activities. The NRC will recover \$740.4 million of the FY 2021 budget from fees assessed to NRC licensees. This will result in a net appropriation of \$123.0 million, which is a decrease of \$4.5 million when compared to the FY 2020 Enacted Budget.

Appendix A, "Full Cost of U.S. Nuclear Regulatory Commission Programs," provides the full cost of NRC programs, in accordance with the requirements defined in Section 51.2, "Requirements for Program Justification," of U.S. Office of Management and Budget (OMB) Circular A-11, "Preparation, Submission, and Execution of the Budget," issued June 2019.

In accordance with NEIMA, Appendix C, "Estimated Operating Power Reactors Annual Fee," details the FY 2021 estimated operating power reactors annual fee amount of \$4.8 million per licensee. The FY 2021 estimate is approximately \$0.6 million lower than the FY 2015 fee per licensee adjusted for inflation.

Appendix D, "Estimated Agency Fee Recovery," lists the activities excluded from fee recovery in this budget request and provides the estimated adjusted fee recovery amounts for FY 2021 under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 170, "Fees for Facilities,

Materials, Import and Export Licenses, and Other Regulatory Services under the Atomic Energy Act of 1954, as Amended,” and 10 CFR Part 171, “Annual Fees for Reactor Licenses and Fuel Cycle Licenses and Materials Licenses, Including Holders of Certificates of Compliance, Registrations, and Quality Assurance Program Approvals and Government Agencies Licensed by the NRC.”

## **SIGNIFICANT AGENCYWIDE ACCOMPLISHMENTS IN FY 2019**

The NRC’s significant agencywide accomplishments include the following:

- Continued to oversee the safe and secure operation of nuclear power plants and fuel cycle facilities, as well as the possession and use of radioactive materials.
- Continued the technical reviews of large light-water (LWR) reactor and small modular reactor (SMR) applications and conducted regulatory oversight of construction activities.
- The NRC conducted more than 1,000 public meetings, in the Washington, DC area and in States and communities with NRC-licensed or proposed facilities, to address a full range of NRC issues. The agency supplements these meetings by utilizing available technology to hold a variety of webinars with the public.
- Continued focus on the NRC’s innovation and transformation initiatives to adapt to the evolving nuclear industry and the future regulatory environment, including the completion of the merger of the Office of Nuclear Reactor Regulation and the Office of New Reactors.
- The NRC and the U.S. Department of Energy (DOE) entered into a memorandum of understanding to implement provisions of the Nuclear Energy Innovation Capabilities Act of 2017 to share technical expertise and knowledge on advanced nuclear reactor technologies and nuclear energy innovation.
- The NRC signed a first-of-a-kind Memorandum of Cooperation with the Canadian Nuclear Safety Commission to increase regulatory effectiveness through collaborative work on the technical reviews of advanced reactor and SMRs. The memorandum represents an important step in both countries’ strong commitment to a more efficient and timely analysis of next-generation technologies.
- Implemented the standardized fee billing validation process, which resulted in a major agencywide improvement in accountability and internal control. Also improved fee billing transparency and efficiency by creating the eBilling system allowing licensees to view and pay their bills online and download data electronically.
- The NRC held its 31<sup>st</sup> Annual Regulatory Information Conference (RIC), convening over 3,000 participants from over 30 countries to learn, share, and discuss information on nuclear regulatory activities, processes, and emerging issues. The NRC enhanced the RIC with innovative new formats and technology.
- The State of Vermont became the 39<sup>th</sup> NRC Agreement State with the signature of an agreement in September 2019 by NRC Chairman Svinicki and Vermont Governor Scott.

## **EXECUTIVE SUMMARY**

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- The Commission conducted the first mandatory hearing for an early site permit (ESP) for a potential SMR site.
- Updated internal agency guidance on application of the Backfit Rule to enhance clarity and reflect recent Supreme Court precedent.

Additional FY 2019 accomplishments specific to each business line are included in each chapter.



## ABOUT THE U.S. NUCLEAR REGULATORY COMMISSION

### Mission

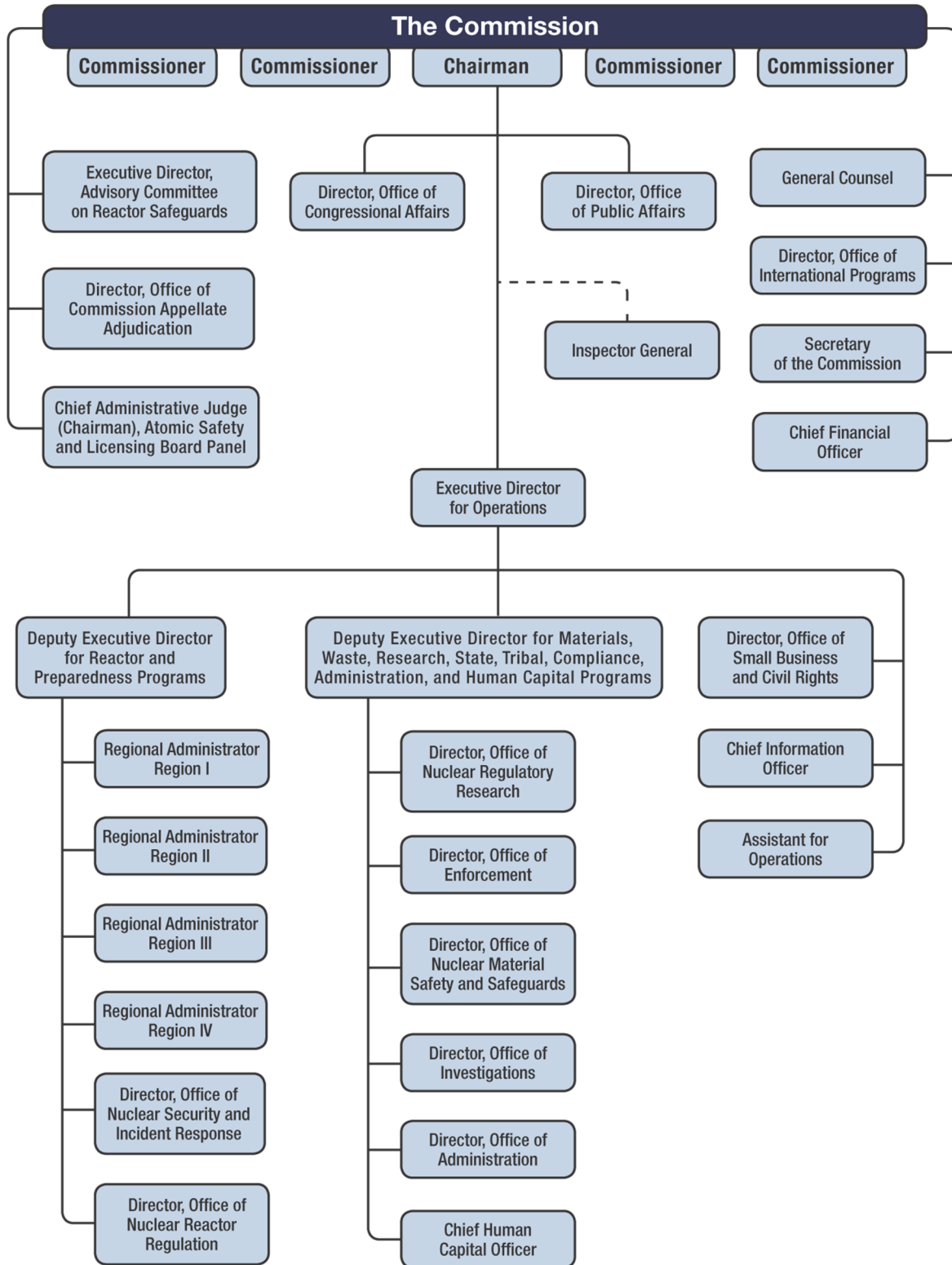
**To license and regulate the Nation's civilian use of radioactive materials to provide reasonable assurance of adequate protection of public health and safety, to promote the common defense and security, and to protect the environment.**

The NRC is an independent Federal agency established by Congress. It regulates commercial nuclear power plants; research, test, and training reactors; nuclear fuel cycle facilities; and radioactive materials used in medicine, academia, and industry. The agency also regulates the transport, storage, and disposal of radioactive materials and waste and the export and import of radioactive materials. The NRC regulates industries within the United States and works with agencies around the world to enhance global nuclear safety and security. The NRC's key regulatory functions include the following:

- Developing regulations and guidance, including participating in consensus standards development.
- Licensing and certifying the use of nuclear materials, the operation of nuclear facilities, and the decommissioning of nuclear facilities.
- Inspecting and assessing licensee operations and nuclear facilities, including incident response and investigation, and taking enforcement actions when necessary.
- Evaluating domestic and international operational experience and taking generic action when appropriate.
- Conducting research, holding hearings, and obtaining independent insights that support sound regulatory decision-making.

The NRC's Commission has up to five members nominated by the President and confirmed by the Senate for 5-year terms. The President designates one member to serve as Chairman. The Chairman is the principal executive officer and spokesperson for the Commission. As a collegial body, the Commission formulates policies and regulations governing the safety and security of nuclear reactors and materials, issues orders to licensees, and adjudicates legal matters brought before it. The Executive Director for Operations carries out the policies and decisions of the Commission and directs the activities of the program and regional offices (see Figure 2).

**ABOUT THE U.S. NUCLEAR REGULATORY COMMISSION**



**Figure 2: NRC Organizational Chart**

## **ABOUT THE U.S. NUCLEAR REGULATORY COMMISSION**

The NRC is headquartered in Rockville, MD. The agency has four regional offices, located in King of Prussia, PA (Region I); Atlanta, GA (Region II); Lisle, IL (Region III); and Arlington, TX (Region IV). The major program offices within the NRC include the following:

- The *Office of Nuclear Reactor Regulation* licenses and oversees activities for existing nuclear power reactors and research and test reactors and design, siting, licensing, and construction of new commercial nuclear power reactors.
- The *Office of Nuclear Regulatory Research* provides independent expertise and information for making timely regulatory judgments, anticipating potentially significant safety problems, and resolving safety issues. It supports the development of technical regulations and standards and collects, analyzes, and disseminates information about the safety of commercial nuclear power plants and certain nuclear materials activities.
- The *Office of Nuclear Material Safety and Safeguards* licenses and oversees the production of commercial nuclear fuel; uranium-recovery activities; decommissioning of nuclear facilities; and the use of radioactive materials in medical, industrial, academic, and commercial applications. It regulates safe storage, transportation, and disposal of high- and low-level radioactive waste and spent nuclear fuel. The office also works with other Federal agencies and State, Tribal, and local governments on regulatory matters.
- The *Office of Nuclear Security and Incident Response* supports the program offices in overseeing the implementation of agency security policy for nuclear facilities and users of radioactive material and coordinates with other Federal agencies and international organizations on security issues. This office also maintains the NRC's emergency preparedness and incident response programs.
- The *regional offices* conduct inspections and investigations (in conjunction with the *Office of Investigations*); take enforcement actions (in coordination with the *Office of Enforcement*); and maintain emergency response programs for nuclear reactors, fuel facilities, and materials licensees. In addition, the regions carry out licensing for certain materials licensees.



## **PROPOSED FISCAL YEAR 2021 APPROPRIATIONS LEGISLATION**

The NRC's proposed appropriations legislation for Fiscal Year (FY) 2021 is as follows:

### **SALARIES AND EXPENSES**

For expenses necessary for the Commission in carrying out the purposes of the Energy Reorganization Act of 1974 and the Atomic Energy Act of 1954, \$849,900,000, including official representation expenses not to exceed \$25,000, to remain available until expended: *Provided*, That of the amount appropriated herein, not more than \$9,500,000 may be made available for salaries, travel, and other support costs for the Office of the Commission, to remain available until September 30, 2022: *Provided further*, That of the amounts appropriated under this heading, \$62,481,000 shall be used, to the maximum extent practicable, solely for conducting requested activities of the Commission, as such term is defined in section 3(10) of the Nuclear Energy Innovation and Modernization Act (Public Law 115-439): *Provided further*, That revenues from licensing fees, inspection services, and other services and collections estimated at \$729,293,000 in fiscal year 2021 shall be retained and used for necessary salaries and expenses in this account, notwithstanding 31 U.S.C. 3302, and shall remain available until expended: *Provided further*, That the sum herein appropriated shall be reduced by the amount of revenues received during fiscal year 2021 so as to result in a final fiscal year 2021 appropriation estimated at not more than \$120,607,000.

### **OFFICE OF INSPECTOR GENERAL**

For expenses necessary for the Office of the Inspector General in carrying out the provisions of the Inspector General Act of 1978, \$13,499,000, to remain available until September 30, 2022: *Provided*, That revenues from licensing fees, inspection services, and other services and collections estimated at \$11,106,000 in fiscal year 2021 shall be retained and be available until September 30, 2022, for necessary salaries and expenses in this account, notwithstanding section 3302 of title 31, United States Code: *Provided further*, That the sum herein appropriated shall be reduced by the amount of revenues received during fiscal year 2021 so as to result in a final fiscal year 2021 appropriation estimated at not more than \$2,393,000: *Provided further*, That of the amounts appropriated under this heading, \$1,206,000 shall be for Inspector General services for the Defense Nuclear Facilities Safety Board.

### **GENERAL PROVISIONS—INDEPENDENT AGENCIES**

SEC. 401. (a) The amounts made available by this title for the Nuclear Regulatory Commission may be reprogrammed for any program, project, or activity, and the Commission shall notify the Committees on Appropriations of both Houses of Congress at least 30 days prior to the use of any proposed reprogramming that would cause any program funding level to increase or decrease by more than \$500,000 or 10 percent, whichever is less, during the time period covered by this Act.

(b)(1) The Nuclear Regulatory Commission may waive the notification requirement in subsection (a) if compliance with such requirement would pose a substantial risk to human health, the environment, welfare, or national security.

(2) The Nuclear Regulatory Commission shall notify the Committees on Appropriations of both Houses of Congress of any waiver under paragraph (1) as soon as practicable, but not later than 3 days after the date of the activity to which a requirement or restriction would otherwise have applied. Such notice shall include an explanation of the substantial risk under

## **PROPOSED FY 2021 APPROPRIATIONS LEGISLATION**

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paragraph (1) that permitted such waiver and shall provide a detailed report to the Committees of such waiver and changes to funding levels to programs, projects, or activities.

(c) Except as provided in subsections (a), (b), and (d), the amounts made available by this title for “Nuclear Regulatory Commission—Salaries and Expenses” shall be expended as directed in the joint explanatory statement accompanying this Act.

(d) None of the funds provided for the Nuclear Regulatory Commission shall be available for obligation or expenditure through a reprogramming of funds that increases funds or personnel for any program, project, or activity for which funds are denied or restricted by this Act.

(e) The Commission shall provide a monthly report to the Committees on Appropriations of both Houses of Congress, which includes the following for each program, project, or activity, including any prior year appropriations—

- (1) total budget authority;
- (2) total unobligated balances; and
- (3) total unliquidated obligations.

## **ANALYSIS OF PROPOSED FY 2021 APPROPRIATIONS LEGISLATION**

The analysis of the NRC’s proposed appropriations legislation for FY 2021 is as follows:

### **SALARIES AND EXPENSES**

#### **1. FOR EXPENSES NECESSARY FOR THE COMMISSION IN CARRYING OUT THE PURPOSES OF THE ENERGY REORGANIZATION ACT OF 1974 AND THE ATOMIC ENERGY ACT OF 1954:**

The NRC was established by the Energy Reorganization Act of 1974, as amended (42 United States Code (USC) 5841). This act abolished the Atomic Energy Commission (AEC) and transferred to the NRC all of the AEC’s licensing and related regulatory functions. These functions included those of the Atomic Safety and Licensing Board Panel and the Advisory Committee on Reactor Safeguards; responsibilities for licensing and regulating nuclear facilities and materials; and conducting research for the purpose of confirmatory assessment related to licensing, regulation, and other activities, including research related to nuclear materials safety and regulation under the provisions of the Atomic Energy Act of 1954, as amended (42 USC 2011 et seq.).

#### **2. INCLUDING OFFICIAL REPRESENTATION EXPENSES:**

47 Comp. Gen. 657, 43 Comp. Gen. 305

This language is required because of the established rule restricting an agency from charging appropriations with the cost of official representation unless the appropriations involved are specifically available for such purpose. Congress has appropriated funds for official representation expenses to the NRC and its predecessor, the AEC, each year since FY 1950.

#### **3. TO REMAIN AVAILABLE UNTIL EXPENDED:**

31 USC 1301 provides that no regular, annual appropriation shall be construed to be permanent or available continuously unless the appropriation expressly provides that it is available after the fiscal year covered by the law in which it appears (or is for specific uses not applicable here).

**4. \$62,481,000 SHALL BE USED, TO THE MAXIMUM EXTENT PRACTICABLE, SOLELY FOR CONDUCTING REQUESTED ACTIVITIES OF THE COMMISSION:**

Section 3(10) of the Nuclear Energy Innovation and Modernization Act (NEIMA), Public Law (PL) 115-439, defines requested activities of the Commission as the processing of applications for design certifications or approvals, licenses, permits, license amendments, license renewals, certificates of compliance, and power uprates, as well as “any other activity requested by a licensee or applicant.”

Section 102(a)(2) of NEIMA specifies that “[b]udget authority granted to the Commission for purposes of the requested activities of the Commission shall be used, to the maximum extent practicable, solely for conducting requested activities of the Commission.” The proposed appropriations legislation language mirrors the language enacted by Congress in NEIMA in Section 102(a)(2) by providing that “\$62,481,000 shall be used, to the maximum extent practicable, solely for conducting requested activities of the Commission, as such term is defined in section 3(10) of [NEIMA].” The proposed appropriations legislation language makes clear the intended application of Section 102(a)(2) of NEIMA to the NRC in FY 2021.

**5. REVENUES FROM LICENSING FEES, INSPECTION SERVICES, AND OTHER SERVICES AND COLLECTIONS SHALL BE RETAINED AND USED FOR NECESSARY SALARIES AND EXPENSES IN THIS ACCOUNT, NOTWITHSTANDING 31 U.S.C. 3302, AND SHALL REMAIN AVAILABLE UNTIL EXPENDED:**

Under Title V of the Independent Offices Appropriation Act, 1952, PL 82-137, the NRC is authorized to collect user fees from any person who receives a service or thing of value from the Commission. Pursuant to Section 102(b) of NEIMA, the NRC is required to assess and collect user fees from any person who receives a service or thing of value from the Commission and annual charges from NRC licensees and certificate holders, with the exception of the holders of any license for a federally owned research reactor used primarily for educational training and academic research purposes. In accordance with Section 102(b) of NEIMA, and consistent with this appropriations request, the annual amount of fees assessed and collected, to the maximum extent practicable, shall approximate the total budget authority of the Commission, less the budget authority for the excluded activities described in Section 102(b)(1)(B). The excluded activities are the following: any fee relief activity, as identified by the Commission; amounts appropriated to the Commission from the Nuclear Waste Fund; and amounts appropriated to the Commission for implementation of Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, PL 108-375, generic homeland security, Inspector General services for the Defense Nuclear Facilities Safety Board, research and development at universities in areas relevant to the mission of the Commission, a nuclear science and engineering grant program, and activities related to the development of regulatory infrastructure for advanced nuclear reactor technologies.

31 USC 3302 requires the NRC to deposit all revenues collected to miscellaneous receipts of the Treasury unless specifically authorized by law to retain and use such revenues.

**6. THE SUM HEREIN APPROPRIATED SHALL BE REDUCED BY THE AMOUNT OF REVENUES RECEIVED:**

Pursuant to Section 102(b) of NEIMA, the NRC is required to assess and collect user fees from any person who receives a service or thing of value from the Commission and annual charges from NRC licensees and certificate holders, with the exception of the holders of any license for a federally owned research reactor used primarily for educational training and academic research purposes. In accordance with Section 102(b) of NEIMA, and consistent with this appropriations request, the annual amount of fees assessed and collected, to the maximum extent practicable, shall approximate the total budget authority of the Commission, less the budget authority for the excluded activities.

**OFFICE OF THE INSPECTOR GENERAL**

**7. FOR EXPENSES NECESSARY FOR THE OFFICE OF THE INSPECTOR GENERAL IN CARRYING OUT THE PROVISIONS OF THE INSPECTOR GENERAL ACT OF 1978:**

PL 100-504 amended the Inspector General Act of 1978, PL 95-452, 5 USC app., to establish an Office of the Inspector General (OIG) in the NRC effective in April 1989, and to require the establishment of a separate appropriation account to fund the OIG.

**8. TO REMAIN AVAILABLE UNTIL SEPTEMBER 30, 2022:**

In order for an appropriation to remain available for two fiscal years, 31 USC 1301 requires that the appropriation expressly provide that it is available after the fiscal year covered by the law in which it appears.

**9. REVENUES FROM LICENSING FEES, INSPECTION SERVICES, AND OTHER SERVICES AND COLLECTIONS SHALL BE RETAINED AND BE AVAILABLE UNTIL SEPTEMBER 30, 2022, FOR NECESSARY SALARIES AND EXPENSES IN THIS ACCOUNT, NOTWITHSTANDING SECTION 3302 OF TITLE 31, UNITED STATES CODE:**

Under Title V of the Independent Offices Appropriation Act, 1952, the NRC is authorized to collect user fees from any person who receives a service or thing of value from the Commission. Pursuant to Section 102(b) of NEIMA, the NRC is required to assess and collect user fees from any person who receives a service or thing of value from the Commission and annual charges from NRC licensees and certificate holders, with the exception of the holders of any license for a federally owned research reactor used primarily for educational training and academic research purposes. In accordance with Section 102(b) of NEIMA, and consistent with this appropriations request, the annual amount of fees assessed and collected, to the maximum extent practicable, shall approximate the total budget authority of the Commission, less the budget authority for the excluded activities. Section 102(b)(1)(B) of NEIMA identifies the following excluded activity applicable to the OIG appropriation: Inspector General services for the Defense Nuclear Facilities Safety Board.

31 USC 3302 requires the NRC to deposit all revenues collected to miscellaneous receipts of the Treasury unless specifically authorized by law to retain and use such revenue.



**10. THE SUM HEREIN APPROPRIATED SHALL BE REDUCED BY THE AMOUNT OF REVENUES RECEIVED:**

Pursuant to Section 102(b) of NEIMA, the NRC is required to assess and collect user fees from any person who receives a service or thing of value from the Commission and annual charges from NRC licensees and certificate holders, with the exception of the holders of any license for a federally owned research reactor used primarily for educational training and academic research purposes. In accordance with Section 102(b) of NEIMA, and consistent with this appropriations request, the annual amount of fees assessed and collected, to the maximum extent practicable, shall approximate the total budget authority of the Commission, less the budget authority for the excluded activities.

**11. \$1,206,000 SHALL BE FOR INSPECTOR GENERAL SERVICES FOR THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD:**

The Consolidated Appropriations Act, 2014, PL 113-76, and the Consolidated and Further Continuing Appropriations Act, 2015, PL 113-235, authorize the NRC's Inspector General to exercise the same authorities with respect to the Defense Nuclear Facilities Safety Board, as determined by the NRC's Inspector General, as the Inspector General exercises under the Inspector General Act of 1978 (5 USC app.) with respect to the NRC. This proposed appropriations legislation language makes clear that \$1,206,000 of the OIG appropriation request is available only for Inspector General services for the Defense Nuclear Facilities Safety Board.

**GENERAL PROVISIONS—INDEPENDENT AGENCIES**

**12. SEC. 401(A)-(E):**

The proposed appropriations legislation language in Section 401(a)-(e) mirrors the provision relating to reprogramming that has been included in the appropriations legislation for the NRC since FY 2016 (see Section 402 of Division D of the Consolidated Appropriations Act, 2016, PL 114-113, and Section 402 of Division A of the Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019, PL 115-244).



**NUCLEAR REACTOR SAFETY**

<b>Nuclear Reactor Safety</b> (Dollars in Millions)								
<b>Business Line</b>	<b>FY 2019 Actuals</b>		<b>FY 2020 Enacted*</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$ M</b>	<b>FTE</b>	<b>\$ M</b>	<b>FTE</b>	<b>\$ M</b>	<b>FTE</b>	<b>\$ M</b>	<b>FTE</b>
Operating Reactors	363.2	1,463.1	342.6	1,483.0	372.8	1,470.0	30.3	(13.0)
New Reactors	80.3	328.4	84.1	332.0	80.0	285.0	(4.1)	(47.0)
<b>Total</b>	<b>\$443.4</b>	<b>1,791.5</b>	<b>\$426.7</b>	<b>1,815.0</b>	<b>\$452.8</b>	<b>1,755.0</b>	<b>\$26.2</b>	<b>(60.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, event response, research, licensing, oversight, and mission support activities within the Operating Reactors and New Reactors Business Lines were funded \$20.5 million and \$0.4 million, respectively, through the use of authorized prior-year carryover which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

The NRC’s Nuclear Reactor Safety Program encompasses licensing and overseeing civilian nuclear power reactors, research and test reactors, and other nonpower production and utilization facilities (e.g., medical radioisotope facilities) in a manner that adequately protects public health and safety. This program also provides reasonable assurance of the security of facilities and protection against radiological sabotage. This program contributes to the NRC’s safety and security strategic goals through the activities of the Operating Reactors and New Reactors Business Lines that regulate existing and new nuclear reactors to ensure they meet applicable requirements.

Resources requested in the FY 2021 budget for the Nuclear Reactor Safety Program are \$452.8 million, including 1,755 FTE. This funding level represents an increase of \$26.2 million, yet includes 60 fewer FTE, when compared to the FY 2020 Enacted Budget. The budget request reflects reductions resulting from the merger of the Office of Nuclear Reactor Regulation and the Office of New Reactors. Resources for the Nuclear Reactor Safety Program budget also include \$17.7 million for the continued development of a regulatory infrastructure for advanced nuclear reactor technologies.



OPERATING REACTORS

Operating Reactors by Product Line (Dollars in Millions)								
Product Line	FY 2019 Actuals		FY 2020 Enacted*		FY 2021 Request		Changes from FY 2020	
	\$ M	FTE	\$ M	FTE	\$ M	FTE	\$ M	FTE
Event Response	17.5	47.4	14.2	45.0	15.5	45.0	1.3	0.0
Generic Homeland Security	1.4	7.5	1.6	8.0	1.6	8.0	0.0	0.0
International Activities	3.7	19.5	3.4	18.0	3.6	18.0	0.2	0.0
Licensing	77.1	380.8	73.5	369.0	82.0	378.0	8.5	9.0
Oversight	111.9	497.9	108.8	516.0	116.5	497.0	7.6	(19.0)
Research	60.5	118.2	47.8	128.0	54.2	121.0	6.4	(7.0)
Rulemaking	7.2	34.4	7.5	38.0	6.9	33.0	(0.6)	(5.0)
Mission Support and Supervisors	62.5	336.7	62.5	326.0	66.5	324.0	4.0	(2.0)
Training	7.8	20.6	10.4	35.0	13.2	46.0	2.8	11.0
Travel	13.6	0.0	13.0	0.0	12.9	0.0	(0.1)	0.0
<b>Total</b>	<b>\$363.2</b>	<b>1,463.1</b>	<b>\$342.6</b>	<b>1,483.0</b>	<b>\$372.8</b>	<b>1,470.0</b>	<b>\$30.3</b>	<b>(13.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, event response, research, licensing, oversight, and mission support activities within the Operating Reactors Business Line was funded \$20.5 million through the use of authorized prior-year carryover, which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

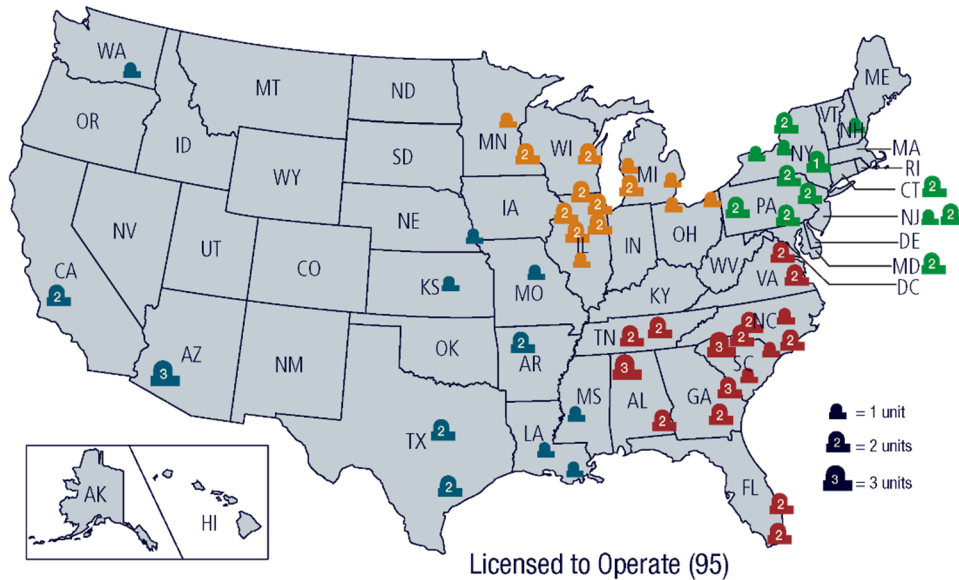
The Operating Reactors Business Line encompasses the regulation of 95 operating civilian nuclear power reactors and 31 research and test reactors in a manner that provides for reasonable assurance of adequate protection of public health and safety and promotes the common defense and security.

The NRC establishes regulatory requirements for the design, construction, operation, and security of nuclear power plants, research and test reactors, and other nonpower production and utilization facilities (e.g., medical isotope production facilities), in accordance with the provisions of the Atomic Energy Act of 1954, as amended (AEA). Through the activities of this business line, the NRC implements programs to meet its safety and security strategic goals in protecting both the public and workers from the radiation hazards of nuclear reactors. To ensure that plants and facilities are operating safely, the NRC licenses the plants to operate and the personnel who operate them. The NRC also supports nuclear safety through rulemaking, research, enforcement, and international activities.

The NRC provides continuing oversight of civilian nuclear reactors and verifies operator adherence to the agency's rules and regulations. The NRC has established requirements to ensure the security of the Nation's nuclear facilities. Nuclear power plants must be able to

## OPERATING REACTORS

defend successfully against a set of hypothetical threats that the agency refers to as the design-basis threat. These hypothetical threats challenge a plant's physical security, personnel security, and cybersecurity. The agency continuously evaluates this set of hypothetical threats against real-world intelligence to ensure safety and security.



### REGION I

- CONNECTICUT
  - Millstone 2 and 3
- MARYLAND
  - Calvert Cliffs 1 and 2
- NEW HAMPSHIRE
  - Seabrook
- NEW JERSEY
  - Hope Creek
  - Salem 1 and 2
- NEW YORK
  - FitzPatrick
  - Ginna
  - Indian Point 3
  - Nine Mile Point 1 and 2
- PENNSYLVANIA
  - Beaver Valley 1 and 2
  - Limerick 1 and 2
  - Peach Bottom 2 and 3
  - Susquehanna 1 and 2

### REGION II

- ALABAMA
  - Browns Ferry 1, 2, and 3
  - Farley 1 and 2
- FLORIDA
  - St. Lucie 1 and 2
  - Turkey Point 3 and 4
- GEORGIA
  - Hatch 1 and 2
  - Vogtle 1, 2 and 3
- NORTH CAROLINA
  - Brunswick 1 and 2
  - McGuire 1 and 2
  - Harris 1
- SOUTH CAROLINA
  - Catawba 1 and 2
  - Oconee 1, 2, and 3
  - Robinson 2
  - Summer
- TENNESSEE
  - Sequoyah 1 and 2
  - Watts Bar 1 and 2
- VIRGINIA
  - North Anna 1 and 2
  - Surry 1 and 2

### REGION III

- ILLINOIS
  - Braidwood 1 and 2
  - Byron 1 and 2
  - Clinton
  - Dresden 2 and 3
  - LaSalle 1 and 2
  - Quad Cities 1 and 2
- MICHIGAN
  - Cook 1 and 2
  - Fermi 2
  - Palisades
- MINNESOTA
  - Monticello
  - Prairie Island 1 and 2
- OHIO
  - Davis-Besse
  - Perry
- WISCONSIN
  - Point Beach 1 and 2

### REGION IV

- ARKANSAS
  - Arkansas Nuclear 1 and 2
- ARIZONA
  - Palo Verde 1, 2, and 3
- CALIFORNIA
  - Diablo Canyon 1 and 2
- KANSAS
  - Wolf Creek 1
- LOUISIANA
  - River Bend 1
  - Waterford 3
- MISSISSIPPI
  - Grand Gulf
- MISSOURI
  - Callaway
- NEBRASKA
  - Cooper
- TEXAS
  - Comanche Peak 1 and 2
  - South Texas Project 1 and 2
- WASHINGTON
  - Columbia

**Figure 3: U.S. Commercial Nuclear Power Reactors Anticipated to be Operating in FY 2021<sup>1</sup>**

<sup>1</sup> Duane Arnold Energy Center (Palo, Iowa) is scheduled to shut down in November 2020 and therefore, is not shown on the map or included in the total of 95 operating power reactors. Indian Point Nuclear Generating Station, Unit 3, is scheduled to shut down in April 2021.

**CHANGES FROM FY 2020 ENACTED BUDGET<sup>2</sup>**

Resources increase primarily to support the following:

- Three new subsequent license renewal applications (North Anna Power Station and two unnamed plants) (+\$3.2M, +16 FTE);
- The anticipated increase in the topical report inventory as a result of the influx of accident tolerant fuel (ATF) topical reports (+\$0.6M, +3 FTE);
- A new medical radioisotope construction permit application for Coqui RadioPharmaceuticals Corporation (Coqui) and three ongoing medical radioisotope operating license application reviews for Northwest Medical Isotopes, LLC (NWM), SHINE Medical Technologies, Inc. (SHINE), and the University of Missouri, Columbia Research Reactor (MURR) (+\$1.8M, +9 FTE);
- The Transformation Directorate as well as other transformation initiatives and the Innovation Forum (+\$1.7M, +6 FTE);
- The anticipated transition of Vogtle Electric Generating Plant (Vogtle), Unit 3, to the Reactor Oversight Process (ROP) (+\$0.4M, +2 FTE);
- Future-focused research activities (+\$0.9M, +2 FTE); and
- Entry-level hiring to support the agency’s ongoing Strategic Workforce Plan (SWP) (+\$2.5M, +12 FTE).

These increases are partially offset by decreases primarily as a result of the following:

- The closure of the Duane Arnold Energy Center in FY 2021 (-\$1.5M, -8 FTE);
- No States requiring potassium iodide replenishment (-\$1.4M);
- Efficiencies in processing licensing actions and lower than anticipated workload, primarily associated with external hazards (-\$1.3M, -7 FTE);
- The completion of flooding and seismic probabilistic risk assessment reviews related to lessons learned from the accident at Fukushima Dai-ichi in Japan (-\$1.7M, -7 FTE);
- The completion of the safety and environmental reviews of the subsequent license renewal applications for Turkey Point Nuclear Generating Station, and the anticipated completion of the safety and environmental reviews of the subsequent license renewal applications for Surry Power Station, and Peach Bottom Atomic Power Station (-\$0.6M, -3 FTE);
- Reduced workload expected in allegations and investigations (-\$0.9M, -5 FTE);

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<sup>2</sup> Resource amounts in parentheses within the “Changes from the FY 2020 Enacted Budget” section in each business line chapter of the FY 2021 Congressional Budget Justification reflect the resource changes from the FY 2020 Enacted Budget. The list of activities described in the section is a subset of items that represent the drivers for resource changes within the business line.

## **OPERATING REACTORS**

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- The completion of Fukushima inspections related to the mitigating strategies, spent fuel pool instrumentation, and vent orders (-\$0.9M, -5 FTE);
- Reduced workload in event evaluation that includes the review of and technical support for determining the significance of events related to plant operation or technical issues, evaluating operating experience, and developing generic communications (-\$0.6M, -3 FTE);
- A decrease in research activities that includes flooding and external hazards and fire protection, less work in accident, consequence, and radiation protection code development and analysis, a decrease in laboratory testing and staff technical support for primary water stress-corrosion cracking research and a decrease in research activities on irradiated assisted degradation of reactor vessel internals (-\$1.5M, -8 FTE);
- Reduced workload due to the expected completion of the reactor vessel material surveillance program requirements rulemaking and discontinuation of the Access Authorization Program rulemaking (-\$1.0M, -5 FTE);
- Efficiencies gained from the merger of the Office of Nuclear Reactor Regulation and the Office of New Reactors (-\$1.1M, -6 FTE); and
- Reduced costs resulting from partial acceleration of hardware refresh, reduced operations and maintenance costs for reactor program workload planning, and telecommunications savings for the resident inspector facilities (-\$2.2M).

The resources for event response, research, licensing, oversight, and mission support activities decrease when compared to the FY 2020 total budget authority, which includes the use of \$20.5 million in authorized prior-year carryover to fund these activities. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," which provides a comparison of the FY 2021 request to the FY 2020 Budget Authority.

Generally, resources budgeted in the Licensing and Oversight Product Lines impact fees for service. All other resources impact annual fees.



**MAJOR ACTIVITIES<sup>3</sup>**

The major activities within the Operating Reactors Business Line include the following:

- Ensure that licensed operating nuclear power reactors operate in accordance with the NRC’s rules, regulations, and licensing requirements for safety and security. The ROP uses both NRC inspection findings and performance indicators from licensees to assess the safety performance of each plant (\$64.7M, 317 FTE).
- Conduct license renewal safety and environmental reviews, in accordance with published schedules, for three subsequent license renewal applications (North Anna Power Station and two unnamed plants) (\$10.4M, 52 FTE).
- Complete licensing actions, including license amendment requests related to risk-informed initiatives such as adopting Standard Technical Specifications; implementing 10 CFR 50.69, “Risk-Informed Categorization and Treatment of Structures, Systems and Components for Nuclear Power Reactors”; digital instrumentation and controls; and power uprates (\$27.1M, 127.7 FTE).
- Perform project management and security-related activities to ensure that operators are qualified and licensed to perform their duties for the 31 licensed operating research and test reactors, streamline the license renewal process for certain classes of nonpower production and utilization facilities, and conduct preapplication activities for reviews of license amendment applications requesting conversion from high-enriched uranium to low-enriched uranium fuel at research reactors (\$3.0M, 13.5 FTE).
- Conduct operating license application reviews for three proposed medical radioisotope (molybdenum-99) facilities (NWMI, SHINE, and MURR), review one new medical radioisotope construction permit application for Coqui, and provide construction oversight (\$4.1M, 17.5 FTE).
- Conduct nine high-priority rulemakings and one medium-priority rulemaking, as directed by the Commission, and continue the review of petitions for rulemaking, maintain rulemaking infrastructure and generic regulatory analysis guidance, and perform mandatory reporting and rulemaking tracking as directed by the Commission (\$6.9M, 33 FTE).
- Complete licensing-basis reviews, license renewal commitment reviews, and quality assurance and emergency plan reviews (\$3.0M, 15.3 FTE).
- Review topical reports, including those for ATF (\$5.4M, 18.5 FTE).
- Continue developing the licensing infrastructure and conduct confirmatory research for ATF (\$3.8M, 7 FTE).
- Continue developing the licensing infrastructure for fuel burnup and enrichment extensions. (\$2.6M, 2 FTE).

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<sup>3</sup> The list of activities described in the “Major Activities” section of each business line chapter in the FY 2021 Congressional Budget Justification represents a subset of activities in the business line budget request. Resource amounts in parentheses may not add to the total resources for the business line.

## **OPERATING REACTORS**

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- Support cybersecurity program implementation, oversight, and related program and policy issues (\$3.6M, 12.3 FTE).
- Conduct confirmatory and anticipatory research on topics such as seismic and structural stability; fire safety; probabilistic risk assessment, including human reliability; digital instrumentation and controls and electrical systems safety; materials performance; probabilistic assessment of reactor component integrity; aging management of operating reactors; fuel performance, including codes and standards; development and maintenance of analytical tools that support radiation protection, risk, severe accident, consequence, and thermal-hydraulic assessments; evaluation of operational experience; evaluation of generic issues; evaluation of external hazards, including flooding; and human factors analysis; and continue management of the regulatory guide program. (\$45.9M, 114 FTE).
- Satisfy international treaty and convention obligations, as well as statutory mandates. This includes serving as the U.S. lead for implementing the Convention on Nuclear Safety, leading and contributing to multilateral efforts on key nuclear safety and security issues, and ensuring appropriate representation at U.S.-led interagency initiatives (\$0.8M, 4 FTE).
- Participate in international nuclear safety peer review missions (e.g., Integrated Regulatory Review Service), exchange information (including regulatory best practices) with established regulatory counterparts bilaterally and multilaterally, and participate in or lead international nuclear safety research activities (\$2.8M, 14 FTE).
- Maintain a highly qualified workforce through recruitment and staffing of entry-level positions to support the agency's SWP. Resources include support for the NRC's new entry-level hiring program, as well as training and travel for those hired through the program (\$4.2M, 21 FTE).
- Establish a transformation directorate, to develop and implement transformation and innovation initiatives and implement innovation projects focusing on modernizing and risk-informing the regulatory framework. Initiatives will primarily focus on the Nuclear Reactor Safety Program but are anticipated to be applicable and beneficial to other NRC programs (\$1.7M, 6 FTE).

**License Renewal and Medical Radioisotope Production Facility Review Schedule<sup>1</sup>**

Project	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>License Renewal</b>						
New Applications				• Comanche Peak 1&2		• Clinton
Ongoing Complex Reviews (due to hearings or technical issues)	• Seabrook <sup>2</sup>					
Ongoing Noncomplex Reviews	• River Bend <sup>2</sup> • Waterford <sup>2</sup>				• Comanche Peak 1&2	• Comanche Peak 1&2 <sup>2</sup>
<b>Subsequent License Renewal</b>						
New Applications	• Surry		• North Anna • Unnamed Plant • Unnamed Plant			
Ongoing Noncomplex Reviews	• Peach Bottom • Turkey Point	• Turkey Point <sup>2</sup> • Surry <sup>2</sup> • Peach Bottom <sup>2</sup>		• North Anna <sup>2</sup> • Unnamed Plant <sup>2</sup> • Unnamed Plant	Unnamed Plant <sup>2</sup>	
<b>Medical Radioisotope Production Facilities</b>						
New Applications	• SHINE Operating License (OL)	• NWMI OL • MURR Amendment (associated with NWMI)	• Coqui Construction Permit (CP)	• Oregon State Amendment (associated with NWMI)		
Ongoing Reviews		• SHINE OL	• SHINE OL <sup>2</sup> • NWMI OL • MURR Amendment (associated with NWMI)	• NWMI OL <sup>2</sup> • MURR Amendment (associated with NWMI) <sup>2</sup> • Coqui CP	• Oregon State Amendment (associated with NWMI) • Coqui CP <sup>2</sup>	• Oregon State Amendment (associated with NWMI) <sup>2</sup>

Note: This schedule is subject to change.

<sup>1</sup> Budgeting for the license renewal and medical radioisotope facility applications for the projected years (FY 2020–FY 2024) is based on information received from applicant correspondence or responses to NRC-issued regulatory information summaries.

<sup>2</sup> The NRC’s safety and environmental reviews have been or are expected to be completed in the fiscal year shown.

## OPERATING REACTORS

**Status of Reactors Transitioning from Operating to Decommissioning<sup>4</sup>**

Site	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Ft. Calhoun	Site Transfer Is Complete	Site Is with Decommissioning Group in Decommissioning and Low-Level Waste (LLW) Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line
Oyster Creek	Shut Down September 2018 Transitioning Year	Site Transfer Is Complete	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line
Pilgrim	Shut Down May 2019 Transitioning Year	Site Transfer Is Complete	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line
Three Mile Island	Shut Down September 2019 Transitioning Year	Site Transfer Is Complete	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line
Indian Point 2	Operating	Expected to Shut Down April 2020 Transitioning Year	Transitioning Year until Indian Point 3 Shuts Down	Site Transfer Is Complete	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line
Duane Arnold	Operating	Operating	Expected to Shut Down November 2020 Site Transfer Is Complete	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line
Indian Point 3	Operating	Operating	Expected to Shut Down April 2021 Transitioning Year	Site Transfer Is Complete	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line
Beaver Valley 1	Operating	Operating	Expected to Shut Down May 2021 Transitioning Year until Beaver Valley 2 Shuts Down	Site Transfer Is Complete	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line

<sup>4</sup> When reactors permanently shut down, the Operating Reactors Business Line works with the Decommissioning and Low-Level Waste (LLW) Business line to transfer oversight of these sites. Once this transfer is complete, the budget for the shut down reactors comes under the Decommissioning and LLW Business Line.

## OPERATING REACTORS

Site	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Beaver Valley 2	Operating	Operating	Operating	Expected to Shut Down October 2021 Site Transfer is Complete	Site Is with Decommissioning Group in Decommissioning and LLW Business Line	Site Is with Decommissioning Group in Decommissioning and LLW Business Line
Palisades	Operating	Operating	Operating	Expected to Shut Down May 2022 Transitioning Year	Site Transfer Is Complete	Site Is with Decommissioning Group in Decommissioning and LLW Business Line

Data are current as of August 16, 2019. The status of the plants transitioning from operating to decommissioning is subject to change.

### SIGNIFICANT ACCOMPLISHMENTS IN FY 2019

The significant accomplishments within the Operating Reactors Business Line include the following:

- Issued renewed operating licenses for River Bend, Waterford, and Seabrook.
- Significant progress has been made to complete the reviews of the first three subsequent license renewal applications within the 18-month schedule, including the issuance of a safety evaluation report with open items for Turkey Point.
- Completed the reviews of license amendments authorizing the first all-digital safety systems approved by the NRC for research and test reactors at the Purdue University Research Reactor.
- Issued a revised Digital Instrumentation and Controls Licensing Process (ISG-06 Revision 2, dated December 27, 2018) that introduces an alternate review process to facilitate an earlier safety determination before the detailed design, implementation, and testing are complete.
- Finalized the chromium coated cladding phenomenon identification and ranking table report, the first for an accident tolerant fuel concept. The report documents the phenomena important to in-reactor performance of chromium coated cladding, including an assessment of their safety significance.
- Implemented the Inspection Sample Tracking and Reporting tool, which is used to automatically generate inspection reports.
- Issued a report for Phase 2 of the Risk-Informed Decision-Making Action Plan.
- Addressed options for tornado missile protection after considering qualitative and quantitative risk insights as well as sufficient margins to safety.
- Established the Embark Venture Studio to build and implement sustainable innovations and creative solutions to improve the way the agency works and further enable and promote the risk-informed mindset within the Reactor Safety Program.

## **OPERATING REACTORS**

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- Submitted the United States of America National Report for the 8<sup>th</sup> Convention on Nuclear Safety to the International Atomic Energy Agency (IAEA) on August 15, 2019. NRC leads this U.S. legally mandated initiative. The report was prepared in coordination with the Institute for Nuclear Power Operations, the U.S. Department of State (DOS) and the U.S. Department of Energy (DOE).
- Supported bilateral and IAEA regional networks with regulatory assistance efforts on topics such as research and test reactor licensing, inspection and emergency preparedness; codes and standards; and reactor licensing framework through the NRC's International Regulatory Development Partnership.
- Completed a revision of Inspection Manual Chapter 0326, "Operability Determinations & Functionality Assessments for Conditions Adverse to Quality or Safety," to align the inspection procedure for operability determinations with revised industry guidance.
- Reviewed and approved Southern Nuclear Operating Company's strategy to maintain active licenses for reactor operators and senior reactor operators for Vogtle Unit 3 prior to initial fuel load, enabling operators qualifying on AP1000 to maintain proficiency prior to fuel load.
- Provided guidance on licensing aspects for the use of lead test assemblies (LTAs) for ATF in power reactors that describes a regulatory pathway for loading LTAs without NRC approval, reducing regulatory uncertainty and facilitating fuel performance data collection.
- Issued an Order approving the direct transfer of the operating authority of the Pilgrim Nuclear Power Station (Pilgrim) from Entergy Nuclear Operations, Inc. to Holtec Decommissioning International, LLC (HDI), the indirect transfer of control of the Renewed Facility Operating License for Pilgrim, and the general license for the Pilgrim Independent Spent Fuel Storage Installation to Holtec International. The NRC also granted an exemption for HDI and Entergy Nuclear Generation Company to use the decommissioning trust fund for spent fuel management and site restoration.
- Completed all remaining inspection, investigation and enforcement activities associated with the Arkansas Nuclear One turbine stator drop event.
- Completed the redesign and development of a revision to the NRC's emergency preparedness training program, using input from regional emergency preparedness inspectors and experts at the NRC's Technical Training Center.
- Established an integrated plan for advancing the use of risk-insights in the security oversight program and leveraged the plan to embrace risk tolerance, realism, and stakeholder engagement in security initiatives.
- Issued the final safety evaluations for operating reactor implementation of post-Fukushima mitigating strategies and Reliable Spent Fuel Pool Instrumentation Orders (EA-12-049 and EA-12-051).
- Completed confirmatory action letter (CAL) follow-up inspections at Pilgrim, to verify that the licensee had adequately completed the remaining open actions in the CAL. All 156

items discussed in the Pilgrim CAL have been closed. Transitioned Pilgrim from Column 4 to Column 1 of the NRC’s action matrix.

- Published the final Mitigation of Beyond-Design-Basis Events rulemaking. This rulemaking amended the NRC’s regulations to enhance mitigation strategies for nuclear power reactors to withstand beyond-design-basis external events. This rulemaking affects nuclear power reactor licensees and applicants and addresses several petitions for rulemaking. The new regulations and guidance became effective on September 9, 2019.

**OTHER INDICATORS**

**EVENT RESPONSE**

<b>Emergency Response Performance Index (ERPI)* (OR-26)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
	New indicator in FY 2021		
FY 2021	100		New for FY 2021. This indicator is being added because a new subindicator, “Critical Incident Response Positions,” is being included as part of the rollup to the ERPI, which provides a more accurate measure for maintaining the NRC’s readiness.
*Ensures the NRC maintains its readiness to respond to incidents and emergencies involving NRC-licensed facilities and radioactive materials and other events of domestic and international interest. The specific subindicators that will be included under this indicator will be evaluated and updated on an annual basis to reflect the agency’s readiness to respond. Examples may include (1) training and qualifications of the different incident response teams, to ensure enough personnel are trained and qualified for different incident response positions and (2) communications systems at NRC Headquarters and in the backup location are properly maintained and tested to ensure licensees and other stakeholders can report incidents consistent with the NRC’s regulatory requirements.			

**LICENSING**

<b>Number of License Renewal Applications (Units) on which Final Decision Has Been Made* (OR-01)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	7**	5***	**The FY 2015 Congressional Budget Justification target was shown as 9 in error. ***Byron Station, Units 1 and 2, and Braidwood Station, Units 1 and 2, rescheduled for FY 2016.
FY 2016	7	5	Diablo Canyon Power Plant was expected to be completed in FY 2016 but was delayed, and the application was suspended. Other units, such as Fermi Unit 2, Grand Gulf Nuclear Station, and Seabrook Station, were expected to be completed in FY 2016, but all were delayed as a result of technical issues.
FY 2017	7	6	The target was not met as the result of the licensee’s decision to discontinue pursuit of license renewal for Diablo Canyon Power Plant.
FY 2018	1	2	
FY 2019	1	3	
FY 2020	2		
FY 2021	0		
*The targets are based on the scheduled completion of the license renewal applications under review and the schedule of future applications.			

## OPERATING REACTORS

Percentage of Licensing Actions Completed in 2 Years or Less* (OR-04)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	99	Because of the redirection of resources to process the Fukushima-related licensing actions and other licensing tasks, which had completion schedules extending into 2017, the indicator target was not met. The NRC developed a staffing strategy to identify resources and critical skills needed to address the gap between the budgeted number of staff and those who are currently on board.
FY 2016	100	100	
FY 2017	100	99	This target was not met as a result of the need to resolve the technical adequacy of applications to risk-inform technical specifications.
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		
*Excludes improved Standard Technical Specification conversions, licensing actions associated with the Fukushima Near-Term Task Force (NTTF) recommendations, and power uprates. Also excludes license amendment requests that are unusually complex. This indicator only includes licensing actions that were accepted prior to July 13, 2019.			

Percentage of Other Licensing Tasks Completed in 2 Years or Less* (OR-08)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	97	Because of the redirection of resources to process the Fukushima-related licensing actions and other licensing tasks, which had completion schedules extending into 2017, the indicator target was not met. The NRC developed a staffing strategy to identify resources and critical skills needed to address the gap between the budgeted number of staff and those who are currently on board.
FY 2016	100	99	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		
*Excludes multiplant actions, licensing tasks associated with the Fukushima NTTF recommendations, and other unusually complex licensing tasks.			

Percentage of Timely Completion of Final Safety Evaluations by the Generic Milestone Date for All Requested Activities of the Commission, as Identified by NEIMA, from a Licensee or Applicant (OR-27)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2021		
FY 2021	100		
*Includes all requested activities of the Commission from licensees or applicants that involve the issuance of a final safety evaluation accepted after July 13, 2019, for this business line. This includes design certifications, licenses, permits, license amendments, license renewals, certificates of compliance, power uprates, and any other requested activity, as applicable, that involves the issuance of a final safety evaluation processed under this business line.			

## OVERSIGHT

Percentage of All Required Baseline Inspection Procedures Completed for All Plants (OR-12.1)			
Fiscal Year	Target	Actual	Comment
FY 2018	99	100	New target in FY 2018 (replacing OR-12).
FY 2019	99	100	
FY 2020	99		
FY 2021	99		



<b>Percentage of Technical Allegation Reviews Completed in 180 Days or Less* (OR-15)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	95	99	
FY 2016	95	99	
FY 2017	95	99	
FY 2018	95	99	
FY 2019	95	100	
FY 2020	95		
FY 2021	95		

\*This target also includes the calculations for New Reactors for the same indicator and is reported under Operating Reactors.

<b>Percentage of Technical Allegation Reviews Completed in 360 Days or Less* (OR-16)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		

\*This target also includes the calculations for New Reactors for the same indicator and is reported under Operating Reactors.

<b>Percentage of Enforcement Actions where No Investigation Is Involved Completed in 160 Days or Less (OR-17)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	100	87	Three cases missed the metric because of the complexity of each case.
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	67	Of the three cases, one missed the metric because substantial new supplemental information was provided that needed to be reviewed and considered prior to final disposition.
FY 2020	100		
FY 2021	100		

<b>Percentage of Enforcement Actions where Investigation Is Involved Completed in 330 Days or Less (OR-18)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	100	86	One case missed the metric because the case included an investigation to determine whether willfulness was involved on the part of licensee employees.
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		

## OPERATING REACTORS

Percentage of Investigations That Developed Sufficient Information To Reach a Conclusion on Wrongdoing Completed in 12 Months or Less (OR-19)			
Fiscal Year	Target	Actual	Comment
FY 2015	80	98	
FY 2016	80	95	
FY 2017	80	97	
FY 2018	80	95	
FY 2019	85	92	
FY 2020	85		
FY 2021	85		

Percentage of Investigations Completed in Time To Initiate Civil and/or Criminal Enforcement Action (OR-20)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		

Number of Final Significance Determinations Issued More Than 255 Days from the Start Date for All Potentially Greater-Than-Green Findings (OR-13.1)			
Fiscal Year	Target	Actual	Comment
			New indicator in FY 2021
FY 2021	<1		This is a new indicator for FY 2021 and replaces OR-13.
<p>This metric applies to all findings for which a preliminary determination that the finding is potentially greater than Green (e.g., to be determined, apparent violation, or preliminary greater-than-Green finding) is transmitted to the licensee, regardless of final significance. The 255-day timeframe is based on the identification date of the issue of concern (i.e., the date an issue of concern was self-revealed or the date the NRC became aware of the underlying condition leading to the issue of concern) and is the target the agency strives for when conducting significance determination process reviews.</p> <p>The 90-day timeframe referenced in OR-13 was based on the date of initial licensee notification of the preliminary significance in an inspection report, or the date the item was otherwise documented in an inspection report as an apparent violation or finding pending completion of a significance determination. Because of the low number of potentially greater-than-Green findings in the past several years, and the agency's decision to extend the period to perform reviews when voluminous documentation is submitted, one review extending beyond 90 days exceeds the 90 percent target for OR-13. The replacement of OR-13.1 accounts for the low number of potential greater-than-Green reviews the agency conducts in a year, based on its experience over the past several years.</p>			

RESEARCH

Combined Score on a Scale of 1 to 5 for the Technical Quality of Agency Research Technical Products* (OR-23)			
Fiscal Year	Target	Actual	Comment
FY 2015	3.75	4.66	
FY 2016	3.75	4.43	
FY 2017	3.75	4.50	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	4.0	4.26	Reintroduced in FY 2019. The Technical Quality Survey was discontinued in FY 2018 because of the low response rate. The agency reexamined its performance indicators and believes the Technical Quality Survey indicator provides the best quality measure for research products. The agency is focused on improving the response rate for the surveys and will explore revising the survey questions to enhance the value of this tool.
FY 2020	4.0		
FY 2021	4.0		

\*The NRC has developed a process to measure the quality of research products on a five-point scale using surveys of end users to determine the usability and added value of the products. As appropriate, the NRC will develop and add other mechanisms to this process to measure the quality of research products.

DISCONTINUED INDICATORS

Number of Licensing Actions Completed* (OR-02)			
Fiscal Year	Target	Actual	Comment
FY 2015	900	792	736 license amendment requests were submitted in FY 2015.
FY 2016	900	837	754 license amendment requests were submitted in FY 2016.
FY 2017	900	967	905 license amendment requests were submitted in FY 2017.
FY 2018	700	861	835 license amendment requests were submitted in FY 2018.
FY 2019	700	847	824 license amendment requests were submitted in FY 2019.
FY 2020	Discontinued		The timeliness metrics associated with licensing actions are better indicators of staff performance. This metric is dependent on the number of licensing actions submitted by licensees in the prior year and not solely on staff performance. Given that the NRC expects up to 10 plants to shut down over the next 4 years, combined with the potential implementation of the decommissioning rulemaking (which could reduce the number of licensing actions required to transition to decommissioning), the number of actions that will be submitted cannot be estimated with sufficient accuracy.

\*As limited by the number of licensing action requests submitted or accepted during the previous fiscal year.

## OPERATING REACTORS

Percentage of Licensing Actions Completed in 1 Year or Less* (OR-03)			
Fiscal Year	Target	Actual	Comment
FY 2015	95	88	Because of the redirection of resources to process the Fukushima-related licensing actions and other licensing tasks, which had completion schedules extending into 2017, the indicator target was not met. The NRC developed a staffing strategy to identify resources and critical skills needed to address the gap between the budgeted number of staff and those who are currently on board.
FY 2016	95	95	
FY 2017	95	96	
FY 2018	95	98	
FY 2019	95	95	
FY 2020	95		
FY 2021	Discontinue		This indicator was consolidated into OR-27, which includes the timeliness of all requested activities of the Commission by licensees or applicants in the Operating Reactor Business line that involves a final safety evaluation for all actions accepted after July 13, 2019.

\*Excludes improved Standard Technical Specification conversions, licensing actions associated with the Fukushima NTF recommendations, and power uprates. Also excludes license amendment requests that are unusually complex.

Percentage Increase in the 12-Month Average Percent of Licensing Actions Less Than 1 Year Old for FY 2017 Compared with the Percent of Licensing Actions Less Than 1 Year Old on September 30, 2016* (OR-05)			
Fiscal Year	Target	Actual	Comment
			New indicator in FY 2016
FY 2016	2	7	
FY 2017	2	N/A	The target does not apply because the inventory is greater than 93 percent.
FY 2018	Discontinued		Indicator was for tracking progress in reducing licensing action backlogs that were present in previous fiscal years.
FY 2019	N/A		
FY 2020	N/A		

\*This target will not apply if the inventory of licensing actions that are less than 1 year old on September 30 is 93 percent or greater.

<b>Number of Other Licensing Tasks Completed* (OR-06)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	500	461	599 other licensing tasks were submitted in FY 2015.
FY 2016	500	641	597 other licensing tasks were submitted in FY 2016.
FY 2017	500	644	655 other licensing tasks were submitted in FY 2017.
			226 other licensing tasks were submitted in FY 2018.
			The NRC revised the definition of other licensing tasks during FY 2016 to more accurately reflect the Congressional Budget Justification definition, remove actions that the staff initiates, and keep actions that result from licensee submittals. This revision decreased the number of actions counted as other licensing tasks for FY 2017. The target for FY 2018 more accurately reflects other licensing tasks expected to be completed under this new definition.
FY 2018	300	362	
FY 2019	300	337	302 other licensing tasks were submitted in FY 2019.
			The timeliness metrics associated with licensing actions are better indicators of staff performance. This metric is dependent on the number of licensing actions submitted by licensees in the prior year and not solely on staff performance. Given that the NRC expects up to 10 plants to shut down over the next 4 years, combined with the potential implementation of the decommissioning rulemaking (which could reduce the number of licensing actions required to transition to decommissioning), the number of actions that will be submitted cannot be estimated with sufficient accuracy.
FY 2020	Discontinued		

\*As limited by the number of other licensing task requests submitted or accepted during the previous fiscal year.

<b>Percentage of Other Licensing Tasks Completed in 1 Year or Less* (OR-07)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
			Because of the redirection of resources to process the Fukushima-related licensing actions and other licensing tasks, which had completion schedules extending into 2017, the indicator target was not met. The NRC developed a staffing strategy to identify resources and critical skills needed to address the gap between the budgeted number of staff and those who are currently on board.
FY 2015	90	87	
FY 2016	90	90	
FY 2017	90	100	
FY 2018	90	98	
FY 2019	90	98	
FY 2020	90		
			This indicator was consolidated into OR-27, which includes the timeliness of all requested activities of the Commission by licensees or applicants in the Operating Reactor Business line that involve a final safety evaluation for all actions accepted after July 13, 2019.
FY 2021	Discontinue		

\*Excludes multiplant actions, licensing tasks associated with the Fukushima NTTF recommendations, and other unusually complex licensing tasks.

## OPERATING REACTORS

Percentage Increase in the 12-Month Average Percent of Other Licensing Tasks Less Than 1 Year Old for FY 2017 Compared with the Percent of Other Licensing Tasks Less Than 1 Year Old on September 30, 2016* (OR-09)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	2	3	
FY 2017	2	N/A	The target does not apply because the inventory is greater than 93 percent.
FY 2018	Discontinued		The indicator was for FY 2016 and FY 2017 only.
FY 2019	N/A		
FY 2020	N/A		
*This target will not apply if the inventory of licensing actions that are less than 1 year old on September 30 is 93 percent or greater.			

Number of Initial Operator Licensing Examination Sessions* (OR-10)			
Fiscal Year	Target	Actual	Comment
FY 2015	53	42	42 requests for examination sessions were received in FY 2015.
FY 2016	46	40	40 requests for examination sessions were received in FY 2016.
FY 2017	47	41	41 requests for examination sessions were received in FY 2017.
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		
*Targets are based upon the nuclear industry's projected demand for initial operator licensing examination sessions.			

Number of Generic Fundamentals Examination Sessions Administered (OR-11)			
Fiscal Year	Target	Actual	Comment
FY 2015	4	4	
FY 2016	4	4	
FY 2017	2	3	Three requests for examination sessions were received in FY 2017.
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

Number of Plants for which All Required Baseline Inspection Procedures Are Completed* (OR-12)			
Fiscal Year	Target	Actual	Comment
FY 2015	99	99	A fifth operating reactor entered the decommissioning phase at the beginning of FY 2015.
FY 2016	100	100	The increase from 99 to 100 is accounted for by the startup operation of Watts Bar Nuclear Plant, Unit 2, in FY 2016.
FY 2017	99	99	Fort Calhoun Station shut down, leaving 99 operating reactors.
FY 2018	Discontinued		Replaced by OR-12.1.
FY 2019	N/A		
FY 2020	N/A		
*The baseline inspection program metric includes the number of reactors in operation.			

<b>Percentage of Final Significance Determinations Made within 90 Days for All Potentially Greater-Than-Green Findings (OR-13)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	90	88	The target was not met because of the complexity of the flooding issues associated with Arkansas Nuclear One, Units 1 and 2.
FY 2016	90	100	
FY 2017	90	100	
FY 2018	90	83	The target was not met as a result of exceeding the 90-day target for a “White” finding at the Clinton Power Station. The agency decided to exceed the target by 2 weeks to allow the staff to conduct a thorough review of the high volume of additional information provided by the licensee.
FY 2019	90	67	The target was not met due to the extended review of the previously mentioned “White” finding at Clinton. Also, there are fewer greater-than-Green findings being processed during the year due to the overall decreasing trend in the number of inspection findings.
FY 2020	90		
FY 2021	Discontinue		Replaced with indicator OR-13.1. Because of the low number of potentially greater-than-Green findings over the past several years, and the agency’s decision to extend the period to perform reviews when voluminous documentation is submitted, one review extending beyond 90 days exceeds the 90 percent metric. OR-13.1 is expected to better account for the low number of potential greater-than-Green reviews the agency conducts in a year, based on its experience over the past several years.

<b>Percentage of Technical Allegation Reviews Completed in 150 Days or Less (OR-14)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	90	98	
FY 2016	90	97	
FY 2017	90	97	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

<b>Percentage of Proposed Final Rules Completed in Accordance with Schedules Approved by the Commission (OR-21)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
	New indicator in FY 2016		
FY 2016	80	100	
FY 2017	80	100	
FY 2018	80	100	
FY 2019	80	100	
FY 2020	Discontinued		Indicator tracked internally.

## OPERATING REACTORS

Percentage of Major Milestones for Critical Research Programs Completed on or Before Their Due Date* (OR-22)			
Fiscal Year	Target	Actual	Comment
FY 2015	90	100	
FY 2016	90	100	
FY 2017	90	100	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

\*Critical research programs typically respond to high-priority needs from the Commission and the NRC's licensing organizations. Critical research programs will be the highest priority needs identified at the beginning of each fiscal year.

Percentage Assessment of the Agency's Readiness to Respond to a Nuclear or Terrorist Emergency Situation or Other Events of National Interest* (OR-24)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	Discontinued		Indicator tracked internally.

\*This performance index provides a single overall performance indicator of the agency's readiness to respond to a nuclear or terrorist emergency situation or other events of national interest. The index measures several activities within the Incident Response Program that are critical to support the agency's preparedness and response ability.

Percentage of Information Assessment Team Advisories Issued Within 24 Hours of Notification (OR-25)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	90	100	No threat met the threshold for the issuance of an Information Assessment Team advisory for FY 2016.
FY 2017	90	100	No threat met the threshold for the issuance of an Information Assessment Team advisory for FY 2017.
FY 2018	90	100	No threat met the threshold for the issuance of an Information Assessment Team advisory for FY 2018.
FY 2019	90	100	No threat met the threshold for the issuance of an Information Assessment Team advisory for FY 2019.
FY 2020	Discontinued		This indicator is no longer useful, as the NRC has issued no Information Assessment Team advisories since 2014.



## NEW REACTORS

New Reactors by Product Line (Dollars in Millions)								
Product Line	FY 2019 Actuals		FY 2020 Enacted*		FY 2021 Request		Changes from FY 2020	
	\$ M	FTE	\$ M	FTE	\$ M	FTE	\$ M	FTE
International Activities	0.8	3.8	0.8	4.0	0.7	3.0	(0.1)	(1.0)
Licensing	35.1	145.5	32.0	132.0	29.0	107.0	(3.0)	(25.0)
Oversight	10.9	56.7	12.7	65.0	10.8	51.0	(1.9)	(14.0)
Research	15.3	40.4	19.3	47.0	16.8	37.0	(2.4)	(10.0)
Rulemaking	1.7	8.3	1.7	9.0	4.9	22.0	3.2	13.0
Mission Support and Supervisors	12.9	67.5	12.4	64.0	10.8	51.0	(1.6)	(13.0)
Training	2.1	6.3	3.1	11.0	4.7	14.0	1.5	3.0
Travel	1.6	0.0	2.2	0.0	2.3	0.0	0.1	0.0
<b>Total</b>	<b>\$80.3</b>	<b>328.4</b>	<b>\$84.1</b>	<b>332.0</b>	<b>\$80.0</b>	<b>285.0</b>	<b>\$(4.1)</b>	<b>(47.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, licensing activities within the New Reactors Business Line were funded \$0.4 million through the use of authorized prior-year carryover, which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

The New Reactors Business Line is responsible for licensing and overseeing the design, siting, and construction of new nuclear power reactors, including SMRs and advanced reactors. The new reactors activities ensure that new civilian nuclear power reactor facilities are developed in a manner consistent with NRC's public health and safety mission.

The NRC reviews new nuclear power reactor design certification (DC), combined license (COL), and (early site permit) ESP applications, consistent with 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." By issuing a COL, the NRC authorizes the licensee to construct and, with specified conditions, operate a nuclear power plant at a specific site.

The NRC also reviews construction permit and operating license applications for new nuclear power reactors, consistent with 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." The application process under 10 CFR Part 50, which was used for all currently operating reactors, involves separate applications for a construction permit and an operating license.

The NRC continues to perform technical reviews of large LWR and SMR applications and conduct regulatory oversight of construction activities. These activities include inspecting component suppliers and plants under construction. The NRC continues to interact with vendors about prospective SMR and advanced reactor applications and to refine regulatory processes to prepare for reviewing these potential applications.

### CHANGES FROM FY 2020 ENACTED BUDGET

Resources decrease primarily as a result of the following:

- Completion of the advanced boiling-water reactor (ABWR) DC (GE-Hitachi (GEH)) renewal application review (-\$0.2M, -1.2 FTE);
- Completion of the NuScale DC review (-\$4.9M, -25.0 FTE);
- Completion of the Clinch River ESP application review (-\$1.3M, -6.0 FTE);
- Decrease in workload for the U.S. advanced pressurized-water reactor (US-APWR) DC review (project is expected to be in the rulemaking phase) (-\$0.7M, -2.9 FTE);
- Reduction in NuScale topical report reviews (-\$0.4M, -2.2 FTE);
- Decrease in the areas of construction inspection, allegations and investigations, and vendor inspections as Vogtle Unit 3 is expected to transition to the ROP early in FY 2021 (-\$1.9M, -14 FTE);
- Decrease in resources allocated to new reactors research projects, such as standardized plant analysis risk models, safety and regulatory issues for advanced fuel designs, integral pressurized-water reactor severe accident review assistance (NuScale), modeling of flood-generating processes and scenarios, and code and model maintenance for GALE, HABIT, NRCDOSE, and RadTran (-\$1.1M, -3 FTE);
- Reduction in operator licensing (-\$0.9M, -5 FTE);
- Efficiencies gained from the merger of the Office of Nuclear Reactor Regulation and the Office of New Reactors (-\$3.4M, -15 FTE); and
- Reduced costs because of migration to the cloud, reduced operations and maintenance costs, and telecommunications savings for the resident inspector facilities (-\$2.3M).

These decreases are partially offset by increases primarily to support the following:

- Preapplication reviews (+\$2.7M, +11 FTE), the review of one advanced (nonlight-water) reactor custom COL application (OKLO) (+\$1.69M, +4.5 FTE), and one standard design approval (SDA) application for an SMR (NuScale) (+\$2.6M, +11 FTE);
- Rulemaking activities for security requirements for advanced reactors, 10 CFR Part 53, "Technology Inclusive Regulatory Framework," emergency preparedness, financial qualifications, NuScale DC, 10 CFR Part 50 and 10 CFR Part 52, and ABWR (GEH) DC renewal (+\$3.1M, +12.5 FTE);
- Regulatory infrastructure development for advanced reactors including micro reactors and non-LWR reactor environmental reviews (+\$0.6M, +3 FTE); and
- Entry-level hiring to support the agency's SWP (+\$1.0M, +5 FTE).

The resources for licensing activities decrease when compared to the FY 2020 total budget authority, which includes the use of \$0.4 million in authorized prior-year carryover to fund these activities. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," which provides a comparison of the FY 2021 request to the FY 2020 Budget Authority.

Generally, resources budgeted in the Licensing and Oversight Product Lines impact fees for service. All other resources impact annual fees.

## **MAJOR ACTIVITIES**

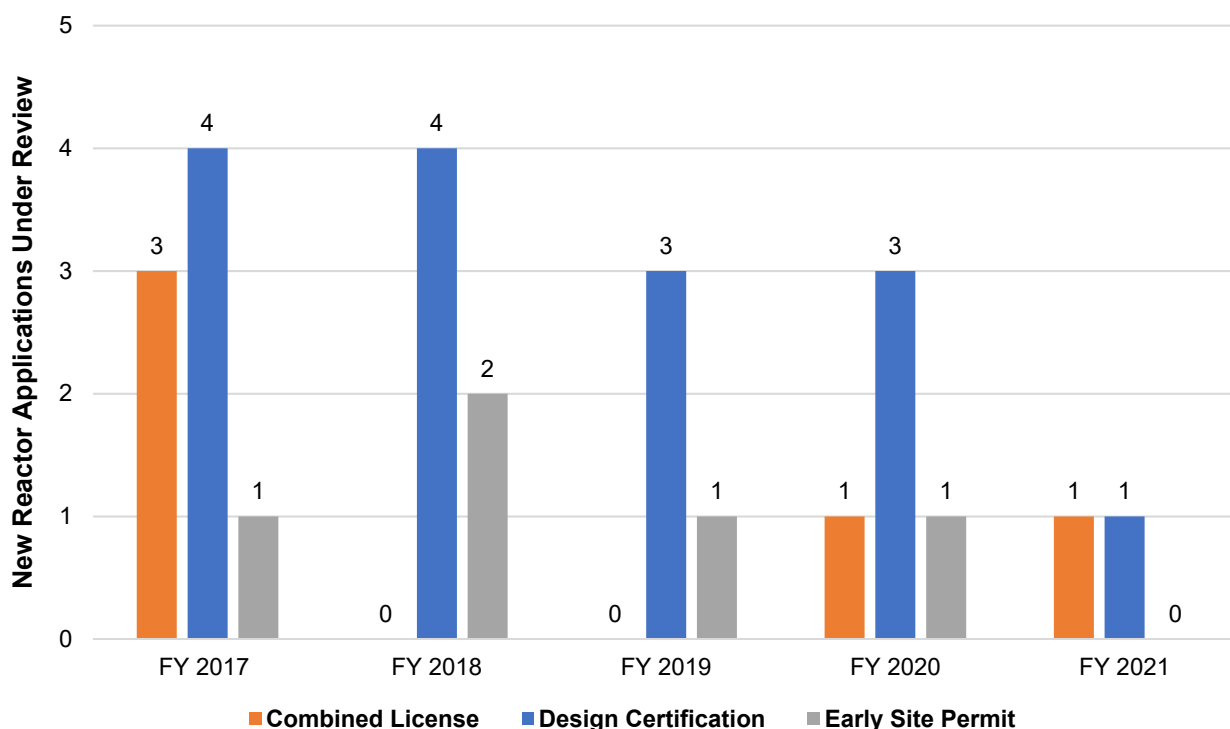
The major activities within the New Reactors Business Line include the following:

- Develop infrastructure for advanced reactors at a rate consistent with NRC projections for interest in new technologies and cognizance of the industry's plans (\$17.7M, 47 FTE).
- Continue to support construction oversight and inspection, test analyses, and acceptance criteria activities at Vogtle Units 3 and 4 (\$9.4M, 44 FTE).
- Begin the review of one advanced (non-light water) reactor custom COL (OKLO) (\$5.8M, 21 FTE).
- Review of one DC application for NuScale SDA (\$2.2M, 11 FTE).
- Conduct preapplication activities for one COL application (Utah Associated Municipal Power Systems (UAMPS)), one SDA application for an SMR (NuScale), one DC application for the GEH BWRX-300 SMR, and seven advanced reactor applicants (TerraPower MCFR, Terra Power TWR, Kairos KP-FHR, Terrestrial IMSR, General Atomics EM<sup>2</sup>, Westinghouse eVinci, and X-Energy XE-100) (\$4.6M, 21 FTE).
- Continue to review license amendments and other licensing actions for post-COL activities (\$2.4M, 12 FTE).
- Continue to inspect vendors supplying products and services as part of a formal agencywide program to monitor and evaluate counterfeit, fraudulent, and suspect items (\$2.0M, 8 FTE).
- Conduct four high-priority rulemakings and four medium-priority rulemakings as directed by the Commission and review petitions for rulemaking (\$3.2M, 14 FTE).
- Provide research support for large LWR and SMR DC reviews and analyses, including the development of new reactor plant risk models; seismic, geotechnical, and structural engineering studies; probabilistic seismic hazard assessments; tsunami studies; the probabilistic flood hazard assessment framework; an independent assessment of thermal-hydraulics system responses and severe accidents; and pipe rupture acceptance criteria. Resources also support the development of guidance for human factors reviews and efforts to maintain and develop codes and models (\$3.3M, 7 FTE).
- Continue to implement strategic multilateral cooperation on new reactor design and commissioning and bilateral cooperation on the regulatory oversight of AP1000 reactor construction. The program also supports IAEA activities, such as those related to

## NEW REACTORS

generic SMR issues, standards development, and consultancy meetings. In addition, the program supports Nuclear Energy Agency activities, such as those related to new reactor design and commissioning, advanced reactors, and continued participation in the Multinational Design Evaluation Program that will potentially enhance safety at U.S. sites through international exchanges of licensing, construction inspection, and commissioning activities (\$0.7M, 3 FTE).

- Acquire a simulator of the NuScale SMR at the NRC Technical Training Center. The simulator will be used to train NRC staff on the new reactor design and its operation to allow effective NRC licensing of reactor operators (\$1.0M).
- Maintain a highly qualified workforce through recruitment and staffing of entry-level positions to support the agency's SWP (\$1.4M, 7 FTE).
- Continue innovative approaches to update key guidance documents (e.g., regulatory guides, standard review plans) (\$1.6M, 7 FTE).



**Figure 4: New Reactor Applications under Review**

**New Reactor Applications under Review**

New Reactor Reviews	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
COL	<ul style="list-style-type: none"> <li>• Lee Station</li> <li>• North Anna</li> <li>• Turkey Point</li> </ul>			<ul style="list-style-type: none"> <li>• OKLO</li> </ul>	<ul style="list-style-type: none"> <li>• UAMPS<sup>1</sup></li> <li>• OKLO</li> </ul>
DC	<ul style="list-style-type: none"> <li>• US-APWR</li> <li>• ABWR</li> <li>• KHNP (APR-1400)</li> <li>• NuScale</li> </ul>	<ul style="list-style-type: none"> <li>• US-APWR</li> <li>• ABWR</li> <li>• KHNP (APR-1400)</li> <li>• NuScale</li> </ul>	<ul style="list-style-type: none"> <li>• US-APWR</li> <li>• ABWR</li> <li>• NuScale</li> </ul>	<ul style="list-style-type: none"> <li>• US-APWR</li> <li>• ABWR</li> <li>• NuScale</li> <li>• NuScale SDA<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• NuScale SDA</li> <li>• GEH BWRX-300 SMR<sup>1</sup></li> <li>• TerraPower MCFR<sup>1,2</sup></li> <li>• TerraPower TWR<sup>1,2</sup></li> <li>• Kairos<sup>1,2</sup></li> <li>• Terrestrial<sup>1,2</sup></li> <li>• General Atomics EM2<sup>1,2</sup></li> <li>• Westinghouse eVinci<sup>1,2</sup></li> <li>• X-Energy<sup>1,2</sup></li> </ul>
ESP	<ul style="list-style-type: none"> <li>• TVA Clinch River</li> </ul>	<ul style="list-style-type: none"> <li>• Blue Castle</li> <li>• TVA Clinch River</li> </ul>	<ul style="list-style-type: none"> <li>• TVA Clinch River</li> </ul>	<ul style="list-style-type: none"> <li>• TVA Clinch River</li> </ul>	

<sup>1</sup>Preapplication review

<sup>2</sup>Type of application not yet specified

### SIGNIFICANT ACCOMPLISHMENTS IN FY 2019

The significant accomplishments within the New Reactors Business Line include the following:

- Published the direct final rule for the Advanced Power Reactor-1400 (APR 1400) Design Certification. This rulemaking amended the NRC's regulations to incorporate the APR 1400 standard plant design. This action allows applicants intending to construct and operate a nuclear power plant to reference this design certification rule in future applications. The new regulations became effective on August 16, 2019.
- Issued the Final Environmental Impact Statement for the Tennessee Valley Authority Early Site Permit Application in April 2019 and the Final Safety Evaluation Report (SER) in June 2019.
- Completed the Clinch River Nuclear Site ESP application mandatory hearing on August 14, 2019.
- Completed a significant number of reviews for license amendments, Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Closure Notifications, and Uncomplete ITAAC Notifications for Vogtle.
- Established and maintained an up-to-date Integrated Project Plan that combines the Vogtle construction schedule with the NRC's inspection, oversight, and licensing activities.
- Completed Phase 2, "Advanced Supplemental SER with No Open Items," for the ABWR DC renewal on June 28, 2019.
- Completed three of six phases in the NuScale Design Certification application review.
- Established an Advanced Reactors Export Working Group, with participation by DOE, Department of Commerce, and DOS to evaluate the barriers in export licensing of non-LWRs and to develop an effective outreach tool to vendors of advanced reactors.
- Issued "Guidance for a Technology-Inclusive, Risk-Informed, and Performance-Based Methodology to Inform the Licensing Basis and Content of Applications for Licenses, Certifications, and Approvals for Non-Light Water Reactors," for public comment in the *Federal Register*.
- Issued Draft Regulatory Guide 1353, "Guidance for a Technology Inclusive, Risk-Informed, and Performance-Based Methodology to inform the Licensing Basis and Content of Applications for Licenses, Certifications, and Approvals for Non-Light Water Reactors," in April 2019.

## OTHER INDICATORS

## LICENSING

LWR Application Review Timeliness and Quality* (NR-20)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2020		Consolidated indicators NR-02, NR-04, NR-06, and NR-14.
FY 2020	85		
FY 2021	85		
*Percentage of LWR application review milestones (for ESPs, COLs, DCs, and license amendment requests) completed in accordance with the schedules and quality standards agreed upon with the applicants (within the NRC's control). This indicator only includes light-water reactor application reviews that were accepted prior to July 13, 2019.			

Percentage of Timely Completion of Final Safety Evaluations by the Generic Milestone Date for All Requested Activities of the Commission, as Identified by NEIMA, from a Licensee or Applicant (NR-21)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2021		
FY 2021	100		
*Includes all requested activities of the Commission from licensees or applicants that involve the issuance of a final safety evaluation accepted after July 13, 2019, for this business line. This includes design certifications, licenses, permits, license amendments, license renewals, certificates of compliance, power uprates, and any other requested activity, as applicable, that involves the issuance of a final safety evaluation processed under this business line.			

## RESEARCH

Acceptable Technical Quality of Agency Research Technical Products* (NR-18)			
Fiscal Year	Target	Actual	Comment
FY 2015	3.75	N/A	No technical quality surveys requested in FY 2015.
FY 2016	3.75	4.31	
FY 2017	3.75	4.42	
FY 2018	Discontinued		Indicator tracked internally.
			Reintroduced in FY 2019. The Technical Quality Survey was discontinued in FY 2018 because of the low response rate. The agency reexamined its performance indicators and believes the Technical Quality Survey indicator provides the best quality measure for research products. The agency is focused on improving the response rate for the surveys and will explore revising the survey questions to enhance the value of this tool.
FY 2019	4.0	4.68	
FY 2020	4.0		
FY 2021	4.0		
*The NRC has developed a process to measure the quality of research products on a five-point scale using surveys of end users to determine the usability and added value of the products. As appropriate, the NRC will develop and add other mechanisms to this process to measure the quality of research products.			

## NEW REACTORS

### DISCONTINUED INDICATORS

Percentage of ESP Review Interim Milestones Completed on Time (NR-02)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	85	100	
FY 2017	85	100	
FY 2018	85	100	
FY 2019	85	100	
FY 2020	Discontinued		This indicator was consolidated into NR-20 to streamline indicators for timeliness of LWR application reviews.

Percentage of DC Review Interim Milestones Completed on Time (NR-04)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	85	100	
FY 2017	85	100	
FY 2018	85	100	
FY 2019	85	75	This target was not met after missing the Phase 2 milestone for NuScale SMR review.
FY 2020	Discontinued		This indicator was consolidated into NR-20 to streamline indicators for timeliness of LWR application reviews.

Percentage of Milestones for COL Application Reviews Completed in Accordance with the Schedules Agreed Upon with the Applicants (NR-06)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	85	100	
FY 2017	85	100	
FY 2018	85	100	
FY 2019	85	No Data	
FY 2020	Discontinued		This indicator was consolidated into NR-20 to streamline indicators for timeliness of LWR application reviews.

Percentage of Interim Milestones for SMR DC Reviews That Are Completed in Accordance with the Schedules Agreed Upon with the Applicants (NR-08)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	85	NA	No reactor design submitted for review.
FY 2017	85	100	
FY 2018	Discontinued		Indicator was consolidated with NR-04.
FY 2019	N/A		
FY 2020	N/A		



Identify and Resolve Policy and Key Technical Issues Facing the Review of SMR Applications and Implement Resolutions through Rule Changes or Guidance Development (NR-09)			
Fiscal Year	Target	Actual	Comment
FY 2015	Complete 100% of milestones necessary to support the resolution of policy and key technical issues. In addition, complete milestones necessary to support implementation of resolutions.	All milestones completed as appropriate.	
FY 2016		100	
FY 2017		100	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

Percentage of SMR Preapplication Review Interim Milestones Completed in Accordance with the Schedule Agreed Upon with the Applicants for Two DC Applications (NR-11)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	85	N/A	No milestones associated with preapplication reviews.
FY 2017	85	N/A	No SMR preapplication activities during FY 2017.
FY 2018	Discontinued		SMR preapplication review timeliness tracked internally.
FY 2019	N/A		
FY 2020	N/A		

Percentage of Interim Milestones for SMR COL and CP Application Reviews Completed in Accordance with the Schedule Agreed Upon with the Applicants (NR-13)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	85	N/A	The NRC had no SMR COL or construction permit applications for review during FY 2016.
FY 2017	85	N/A	The NRC had no SMR COL or construction permit applications for review during FY 2017.
FY 2018	Discontinued		Indicator was consolidated with NR-06.
FY 2019	N/A		
FY 2020	N/A		

## NEW REACTORS

Percentage of License Amendment Reviews Completed on the Schedules Agreed Upon with the Licensee (Within the NRC's Control) (NR-14)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	85	100	
FY 2017	85	100	
FY 2018	85	80	Although the NRC was meeting tracked dates, the agency conservatively considered the metric as "not met" because of a lack of supporting documentation on the determination of the schedule. In September 2018, the NRC developed a new process that better documents discussions about the feasibility of dates.
FY 2019	85	100	
FY 2020	Discontinued		This indicator was consolidated with NR-20 to streamline indicators for timeliness of LWR application reviews.

Number of Domestic and International Vendor Inspections Completed (NR-15)			
Fiscal Year	Target	Actual	Comment
FY 2015	30	39	
FY 2016	30	34	
FY 2017	35	37	The target was increased based on increased workload.
FY 2018	30	25	Fewer inspections were performed as a result of reduced nuclear construction activity.
FY 2019	20	20	The target was decreased based on decreased workload.
FY 2020	Discontinued		Workload is expected to decrease. Indicator tracked internally.

Percent of Proposed Final Rules Completed in Accordance with the Schedule Approved by the Commission (NR-16)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	80	N/A	There were no final rulemakings in FY 2016.
FY 2017	80	N/A	There were no final rulemakings in FY 2017.
FY 2018	80	100	
FY 2019	80	100	
FY 2020	Discontinued		Rulemaking tracked with a different indicator internally.

Timeliness of Completing Actions on Critical Research Program* (NR-17)			
Fiscal Year	Target	Actual	Comment
FY 2015	90% of major milestones met on or before their due date.	N/A	No critical research program actions completed in FY 2015.
FY 2016	90% of major milestones met on or before their due date.	N/A	No critical milestones were associated with the research activities conducted in this business line in FY 2016; thus, there are no performance data to report.
FY 2017	90% of major milestones met on or before their due date.	N/A	No critical milestones were associated with the research activities conducted in this business line in FY 2017; thus, there are no performance data to report.
FY 2018	Discontinued		
FY 2019	N/A		
FY 2020	N/A		

\*Critical research programs typically respond to high-priority needs from the Commission and the NRC's licensing organizations. Critical research programs will be the highest priority needs identified at the beginning of each fiscal year.

<b>Non-LWR Licensing Application Review Timeliness and Quality* (NR-19)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
	New indicator in FY 2019		
FY 2019	85	No Data	There were no new non-LWR licensing applications for review in FY 2019.
FY 2020	85		
FY 2021	Discontinue		
<p>*Percentage of interim milestones supporting non-LWR regulatory engagement plans and license application reviews that are completed on time in accordance with the schedules and quality standards agreed upon with reactor designers and applicants (within the NRC's control). This indicator only includes non-light water reactor licensing applications that were accepted prior to July 13, 2019.</p>			



**NUCLEAR MATERIALS AND WASTE SAFETY**

<b>Nuclear Materials and Waste Safety</b>								
(Dollars in Millions)								
<b>Business Line</b>	<b>FY 2019 Actuals</b>		<b>FY 2020 Enacted*</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$ M</b>	<b>FTE</b>	<b>\$ M</b>	<b>FTE</b>	<b>\$ M</b>	<b>FTE</b>	<b>\$ M</b>	<b>FTE</b>
Spent Fuel Storage and Transportation	27.1	104.2	22.9	102.0	28.1	102.0	5.2	0.0
Nuclear Materials Users	58.2	206.7	56.2	205.0	55.5	201.0	(0.7)	(4.0)
Decommissioning and Low-Level Waste	23.7	92.8	21.8	93.0	22.8	86.0	1.0	(7.0)
High-Level Waste	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Facilities	20.7	87.9	19.2	81.0	19.3	73.0	0.0	(8.0)
<b>Total</b>	<b>\$129.7</b>	<b>491.8</b>	<b>\$120.2</b>	<b>481.0</b>	<b>\$125.6</b>	<b>462.0</b>	<b>\$5.4</b>	<b>(19.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, research, licensing, oversight, rulemaking, state, tribal, and federal programs, and mission support activities within the Spent Fuel Storage and Transportation, Nuclear Materials Users, Decommissioning and Low-Level Waste, and Fuel Facilities Business Lines were funded \$1.5 million, \$2.9 million, \$1.1 million, and \$0.4 million, respectively, through the use of authorized prior-year carryover, which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

The Nuclear Materials and Waste Safety Program encompasses the NRC’s licensing and oversight of nuclear materials in a manner that adequately protects public health and safety. This program provides assurance of the physical security of the materials and waste and protection against radiological sabotage, theft, or diversion of nuclear materials. Through this program, the NRC regulates uranium processing and fuel facilities; research and pilot facilities; nuclear materials users (medical, industrial, research, and academic); spent fuel storage; spent fuel material transportation and packaging; decontamination and decommissioning of facilities; and low-level and high-level radioactive waste. The program contributes to the NRC’s safety and security strategic goals through the activities of the Spent Fuel Storage and Transportation, Nuclear Materials Users, Decommissioning and Low-Level Waste, High-Level Waste, and Fuel Facilities Business Lines.

Overall resources requested in the FY 2021 budget for the Nuclear Materials and Waste Safety Program are \$125.6 million, including 462 FTE. This budget does not include funding for the proposed Yucca Mountain deep geologic repository for the disposal of SNF and other high-level radioactive waste. NRC will continue to use unobligated carryover funds appropriated from the Nuclear Waste Fund to address the remand by the U.S. Court of Appeals for the District of Columbia Circuit in the case *In re Aiken County* regarding the licensing process for the U.S. Department of Energy’s Yucca Mountain license application. This funding level represents an increase of \$5.4 million, yet includes 19 fewer FTE, when compared to the FY 2020 Enacted Budget.



**SPENT FUEL STORAGE AND TRANSPORTATION**

<b>Spent Fuel Storage and Transportation by Product Line</b>								
<b>(Dollars in Millions)</b>								
<b>Product Line</b>	<b>FY 2019 Actuals</b>		<b>FY 2020 Enacted*</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$ M</b>	<b>FTE</b>	<b>\$ M</b>	<b>FTE</b>	<b>\$ M</b>	<b>FTE</b>	<b>\$ M</b>	<b>FTE</b>
International Activities	0.4	1.0	0.4	2.0	0.2	1.0	(0.2)	(1.0)
Licensing	15.9	62.4	13.9	61.0	16.6	61.0	2.7	0.0
Oversight	2.9	16.1	2.5	13.0	2.7	13.0	0.3	0.0
Research	1.9	1.5	1.1	3.0	2.7	4.0	1.6	1.0
Rulemaking	2.2	7.4	1.1	6.0	1.3	6.0	0.1	0.0
Mission Support and Supervisors	3.2	16.0	3.0	16.0	3.2	15.0	0.1	(1.0)
Training	0.1	0.0	0.3	1.0	0.7	2.0	0.4	1.0
Travel	0.5	0.0	0.6	0.0	0.6	0.0	0.1	0.0
<b>Total</b>	<b>\$27.1</b>	<b>104.2</b>	<b>\$22.9</b>	<b>102.0</b>	<b>\$28.1</b>	<b>102.0</b>	<b>\$5.2</b>	<b>0.0</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, licensing activities within the Spent Fuel Storage and Transportation Business Line were funded \$1.5 million through the use of authorized prior-year carryover, which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

The Spent Fuel Storage and Transportation Business Line activities support the safe and secure storage of SNF and the safe and secure transport of radioactive materials. These activities include conducting safety, security, and environmental reviews of license applications for SNF storage casks and independent spent fuel storage installations (ISFSIs), as well as performing safety and security reviews of radioactive material transportation packages. This work also includes reviewing storage system and ISFSI renewal applications, developing and updating related regulations and guidance, conducting safety inspections of transportation package and storage cask vendors and fabricators, observing ISFSI operations, and performing security inspections of ISFSIs.

# SPENT FUEL STORAGE AND TRANSPORTATION

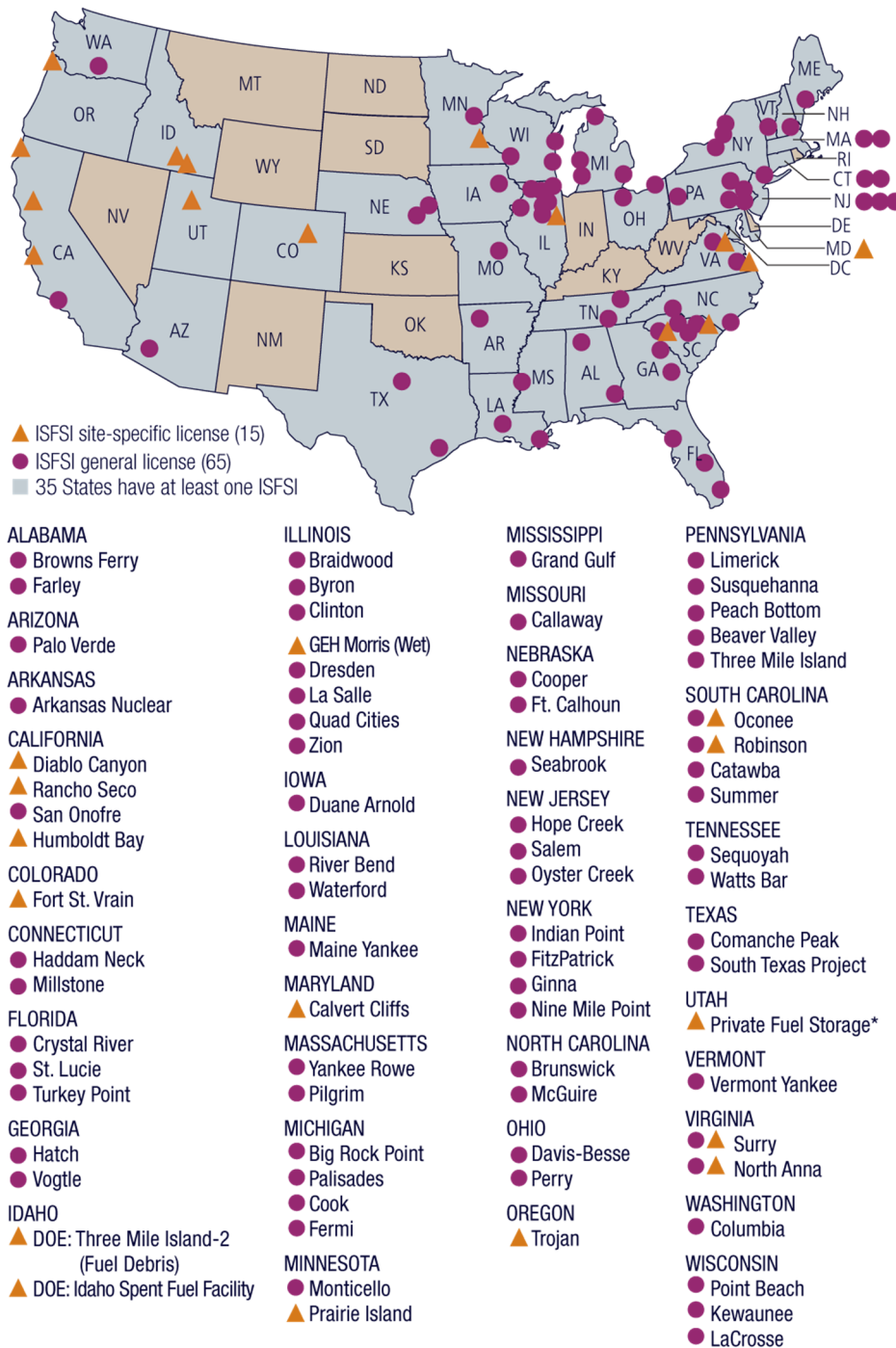


Figure 5: Anticipated Licensed and Operating ISFSIs by State in FY 2021



**CHANGES FROM FY 2020 ENACTED BUDGET**

Resources increase primarily as a result of the following:

- Development of technical bases for the review of transportation packages loaded with batch quantities of fresh ATF (+\$0.7M, +1 FTE);
- Development of regulatory guidance and infrastructure to conduct safety reviews for high-burnup and enrichment extension fuel designs that may be submitted in future license applications (+\$0.9M); and
- Entry-level hiring to support the agency’s ongoing SWP (+0.2M, +1 FTE).

In FY 2020, licensing activities were funded \$1.5 million through the use of authorized prior-year carryover, which is not reflected in the FY 2020 Enacted budget. Please refer to Appendix L, “FY 2020 Total Budget Authority Comparison,” which provides a comparison of the FY 2021 request to the FY 2020 Budget Authority.

Generally, resources budgeted within the Licensing and Oversight Product Lines impact fees for service. All other resources impact annual fees.

**MAJOR ACTIVITIES**

The major activities within the Spent Fuel Storage and Transportation Business Line include the following:

- Perform safety, security, and environmental reviews, which may include adjudicatory hearing activities for two consolidated interim storage facility applications (\$4.0M, 12 FTE).
- Perform safety, security, and environmental reviews for approximately 10 license amendments (\$2.3M, 11 FTE), four general license applications for storage (\$1.7M, 8 FTE), and 69 transportation package reviews, including development and updates of related regulations and guidance (\$3.2M, 11 FTE).
- Develop technical bases for the review of transportation packages loaded with batch quantities of fresh ATF and for the development of regulatory guidance and infrastructure for future license applications (\$1.7M, 1 FTE).
- Review seven storage renewal applications (\$0.8M, 4 FTE).
- Perform security-related activities, such as security plan reviews and transportation security route approvals, which include supporting physical security inspections of ISFSI operations, reviewing security for onsite storage, and issuing ISFSI security orders for new facilities (\$1.0M, 5 FTE).
- Conduct safety inspections of ISFSI pad construction, dry-run operations, and initial loading operations (\$0.4M, 2 FTE).

## SPENT FUEL STORAGE AND TRANSPORTATION

- Conduct two high-priority and one medium priority rulemakings, as directed by the Commission, and support the development and maintenance of regulatory analysis guidance and rulemaking infrastructure (\$1.3M, 6 FTE).
- Satisfy international treaty and convention obligations as well as statutory mandates, including the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. Coordinate with IAEA to compare regulatory frameworks, share research information on storage and transportation matters, and harmonize the certification of transport packages and the licensing of storage cask designs with international standards (\$0.2M, 1 FTE).
- Maintain a highly qualified workforce through recruitment and staffing of entry-level positions to support the agency's SWP (\$0.4M, 2 FTE).
- Perform transformation and innovation initiatives, including updating regulatory guidance to incorporate new technical information as it becomes available and to apply risk insights for the continued safe management of SNF (\$0.2M, 1 FTE).

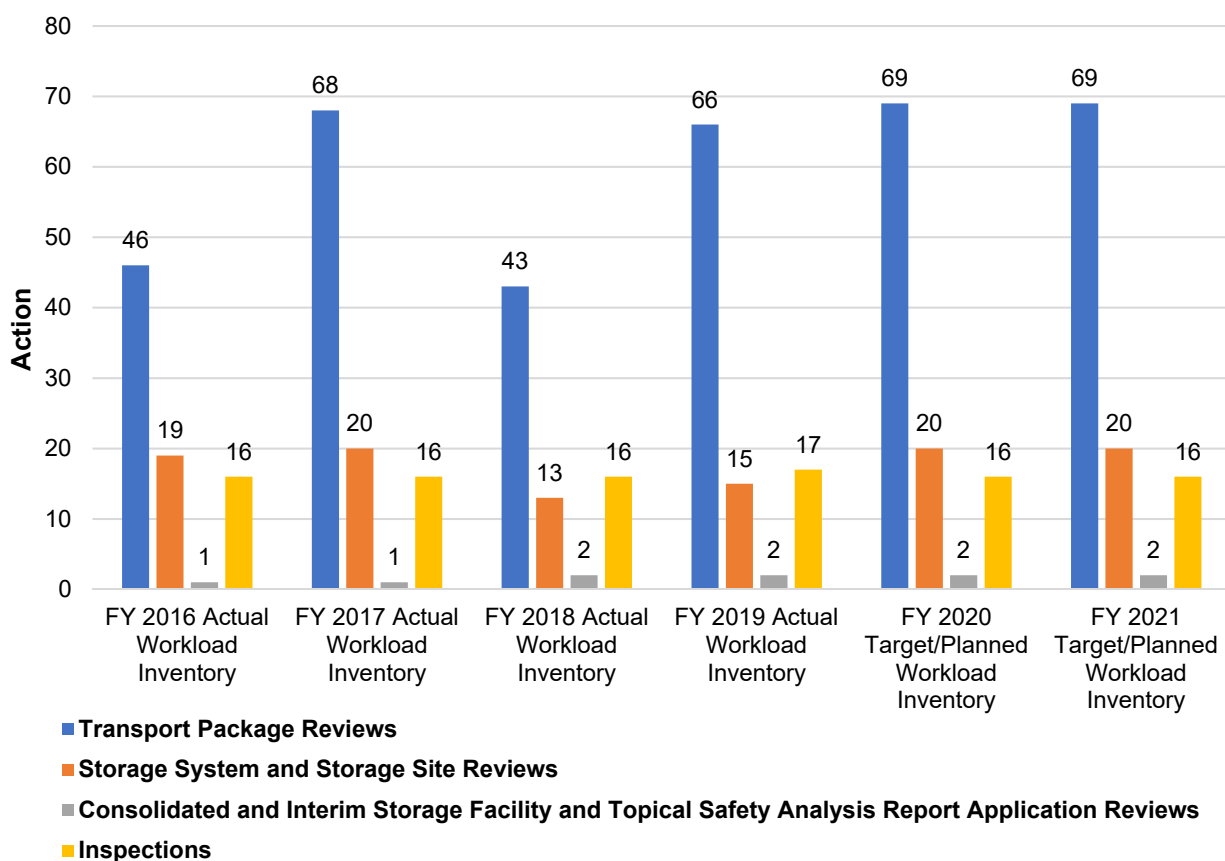


Figure 6: Spent Fuel Storage and Transportation Workload

**SIGNIFICANT ACCOMPLISHMENTS IN FY 2019**

The significant accomplishments within the Spent Fuel Storage and Transportation Business Line include the following:

- Completed all aging management inspections under Temporary Instruction 2690-011, “Review of Aging Management Programs at Independent Spent Fuel Installations,” to evaluate, through inspection, whether spent fuel storage licensees have adequate processes or procedures, either planned or in place, to implement aging management programs for renewed specific licenses or renewed certificates of compliance for storage system designs.
- Provided oversight of the San Onofre Nuclear Generating Station and Holtec canister misalignment and associated scratching issues, including issuing two enforcement actions to: (1) Holtec International for problems related to their design control process and (2) Southern California Edison for failures to report the cask misalignment event in a timely manner and provide redundant cask drop protection.
- Launched an ISFSI Oversight program enhancement initiative to assess the NRC’s existing ISFSI inspection program and develop a clearer, more risk-informed, comprehensive, and consistent approach to ISFSI inspections.
- Conducted site audits in support of the review of two applications for consolidated interim storage facilities from Holtec International and Interim Storage Partners.
- Completed the reviews for renewal of two ISFSI licenses: SNM-2509 for the Trojan ISFSI for an additional 40 years to March 2059 and SNM-2508 for the Three Mile Island, Unit 2 ISFSI (at Idaho National Laboratory) for an additional 20-year term to March 2039.
- Addressed an exigent request requiring coordination with the DOE to review and approve a one-time shipment of a breached radioactive source capsule from the University of Washington, Harborview Training & Research Building in Seattle, Washington to the Pacific Northwest National Laboratory in Richland, Washington.
- Issued NUREG–2214, “Managing Aging Processes in Storage (MAPS) Report,” which provides guidance to the NRC staff for the safety review of renewal applications for the dry storage of spent nuclear fuel, identifies credible aging mechanisms, and includes example Aging Management Plans for the period of extended operation.
- Contracted with Oak Ridge National Laboratory to publish NUREG/CR-7251, “Margins for Uncertainty in the Predicted Spent Fuel Isotopic Inventories for BWR Burnup Credit,” an assessment describing research to support a technical basis to expand fuel burnup credit to boiling water reactors.
- Reviewed and authorized the Westinghouse Traveller transportation package to allow a onetime shipment of fresh ATF lead test assemblies to Byron Generating Station for data collection, research, and demonstration of in-reactor fuel performance.

## SPENT FUEL STORAGE AND TRANSPORTATION

### OTHER INDICATORS

#### LICENSING

Percentage of Spent Fuel Storage and Transportation Container and Installation Design Reviews, Renewals, and Major Licensing Actions Completed in 3 Years or Less* (SF-10)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2020		Consolidated indicators SF-01, SF-02, SF-03, and SF-04.
FY 2020	85		
FY 2021	85		
*This indicator will include all spent fuel storage container and installation design reviews previously captured under SF-01 and SF-02; spent fuel transportation container design reviews previously captured under SF-03 and SF-04; renewals; and major licensing actions, including the review of two consolidated interim storage facilities. This indicator only includes spent fuel storage and transportation container and installation design reviews, renewals, and major licensing actions that were accepted prior to July 13, 2019.			

Percentage of Timely Completion of Final Safety Evaluations by the Generic Milestone Date for All Requested Activities of the Commission, as Identified by NEIMA, from a Licensee or Applicant (SF-12)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2021		
FY 2021	100		
*Includes all requested activities of the Commission from licensees or applicants that involve the issuance of a final safety evaluation accepted after July 13, 2019, for this business line. This includes design certifications, licenses, permits, license amendments, license renewals, certificates of compliance, power uprates, and any other requested activity, as applicable, that involves the issuance of a final safety evaluation processed under this business line.			

#### OVERSIGHT

Number of Spent Fuel Storage and Transportation Inspections Completed (SF-06)			
Fiscal Year	Target	Actual	Comment
FY 2015	16	19	
FY 2016	16	16	
FY 2017	16	16	
FY 2018	16	17	
FY 2019	16	17	
FY 2020	16		
FY 2021	16		

**SPENT FUEL STORAGE AND TRANSPORTATION**

**DISCONTINUED INDICATORS**

<b>Percentage of Storage Container and Installation Design Reviews Completed in 13 Months or Less* (SF-01)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	80	84	
FY 2016	80	89	
FY 2017	80	63	The target was not met as a result of insufficient staffing to support design reviews. Management developed staffing strategies to address timeliness.
FY 2018	80	100	
FY 2019	80	93	
FY 2020	Discontinued		This indicator was consolidated and tracked under SF-10.
*Modified from 12.6 months to 13 months in FY 2018 to simplify the measurement period.			

<b>Percentage of Storage Container and Installation Design Reviews Completed in 2 Years or Less (SF-02)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	100	100	
FY 2016	100	95	The NRC developed a revised work prioritization strategy to improve this metric.
FY 2017	100	100	
FY 2018	90	100	The target was reduced to allow for a few complex cases that are expected to take significantly longer than 2 years to complete.
FY 2019	90	93	
FY 2020	Discontinued		This indicator was consolidated and tracked under SF-10.

<b>Percentage of Transportation Container Design Reviews Completed in 8 Months or Less* (SF-03)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	80	90	
FY 2016	80	93	
FY 2017	80	96	
FY 2018	80	88	
FY 2019	80	94	
FY 2020	Discontinued		This indicator was incorporated and captured under SF-10 for spent fuel transportation design reviews and SF-11 for non-spent-fuel transportation design reviews.
*Modified from 7.4 months to 8 months in FY 2018 to simplify the measurement period.			

<b>Percentage of Transportation Container Design Reviews Completed in 2 Years or Less (SF-04)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	90	100	The target was reduced to allow for a few complex cases that are expected to take significantly longer than 2 years to complete.
FY 2019	90	97	
FY 2020	Discontinued		This indicator was incorporated and captured under SF-10 for spent fuel transportation design reviews and SF-11 for non-spent-fuel transportation design reviews.

## SPENT FUEL STORAGE AND TRANSPORTATION

Percentage of Major Milestones for Critical Research Programs Completed On or Before Their Due Date* (SF-08)			
Fiscal Year	Target	Actual	Comment
FY 2015	90	N/A	No critical milestones were associated with the research activities conducted in this business line in FY 2014, FY 2015, FY 2016, and FY 2017.
FY 2016	90	N/A	
FY 2017	90	N/A	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

\*Critical research programs typically respond to high-priority needs from the Commission and the NRC's licensing organizations. Critical research programs for the highest priority needs are identified at the beginning of the fiscal year.

Combined Score on a Scale of 1 to 5 for the Technical Quality of Agency Research Technical Products* (SF-09)			
Fiscal Year	Target	Actual	Comment
FY 2015	3.75	5.0	
FY 2016	3.75	4.68	
FY 2017	3.75	5.0	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

\*The NRC has developed a process to measure the quality of research products on a five-point scale using surveys of end users to determine the usability and added value of the products. As appropriate, the NRC will develop and add other mechanisms to this process to measure the quality of research products.

Percentage of Non-Spent-Fuel Transportation Container Design Reviews Completed in 1 Year or Less* (SF-11)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2020		Previously part of SF-04.
FY 2020	85		
FY 2021	Discontinue		This indicator was consolidated into SF-12, which includes the timeliness of all requested activities of the Commission by licensees or applicants accepted after July 13, 2019, in the Spent Fuel Storage and Transportation Business line that involves a final safety evaluation.

\*This indicator will account for and track non-spent-fuel transportation container design reviews that were previously tracked under SF-04. The timeframe is being decreased from 2 years to 1 year to specify that this indicator will only capture non-spent-fuel transportation container design reviews, which generally take less time.

NUCLEAR MATERIALS USERS

Nuclear Materials Users by Product Line								
(Dollars in Millions)								
Product Line	FY 2019 Actuals		FY 2020 Enacted*		FY 2021 Request		Changes from FY 2020	
	\$ M	FTE	\$ M	FTE	\$ M	FTE	\$ M	FTE
Event Response	0.4	2.1	0.5	3.0	0.6	3.0	0.0	0.0
Generic Homeland Security	9.7	10.6	10.2	15.0	7.5	14.0	(2.8)	(1.0)
International Activities	8.2	12.7	7.8	12.0	7.6	12.0	(0.2)	0.0
Licensing	8.3	47.1	8.1	43.0	8.9	43.0	0.8	0.0
Oversight	12.4	51.9	9.0	47.0	10.7	46.0	1.7	(1.0)
Research	0.4	1.8	0.9	2.0	0.4	2.0	(0.5)	0.0
Rulemaking	1.3	7.6	2.4	12.0	2.2	10.0	(0.2)	(2.0)
State, Tribal and Federal Programs	4.6	23.0	4.4	24.0	4.7	23.0	0.3	(1.0)
Mission Support and Supervisors	8.7	47.0	8.3	43.0	8.8	44.0	0.5	1.0
Training	1.6	2.9	1.7	4.0	1.7	4.0	0.0	0.0
Travel	2.6	0.0	2.8	0.0	2.4	0.0	(0.4)	0.0
<b>Total</b>	<b>\$58.2</b>	<b>206.7</b>	<b>\$56.2</b>	<b>205.0</b>	<b>\$55.5</b>	<b>201.0</b>	<b>\$(0.7)</b>	<b>(4.0)</b>

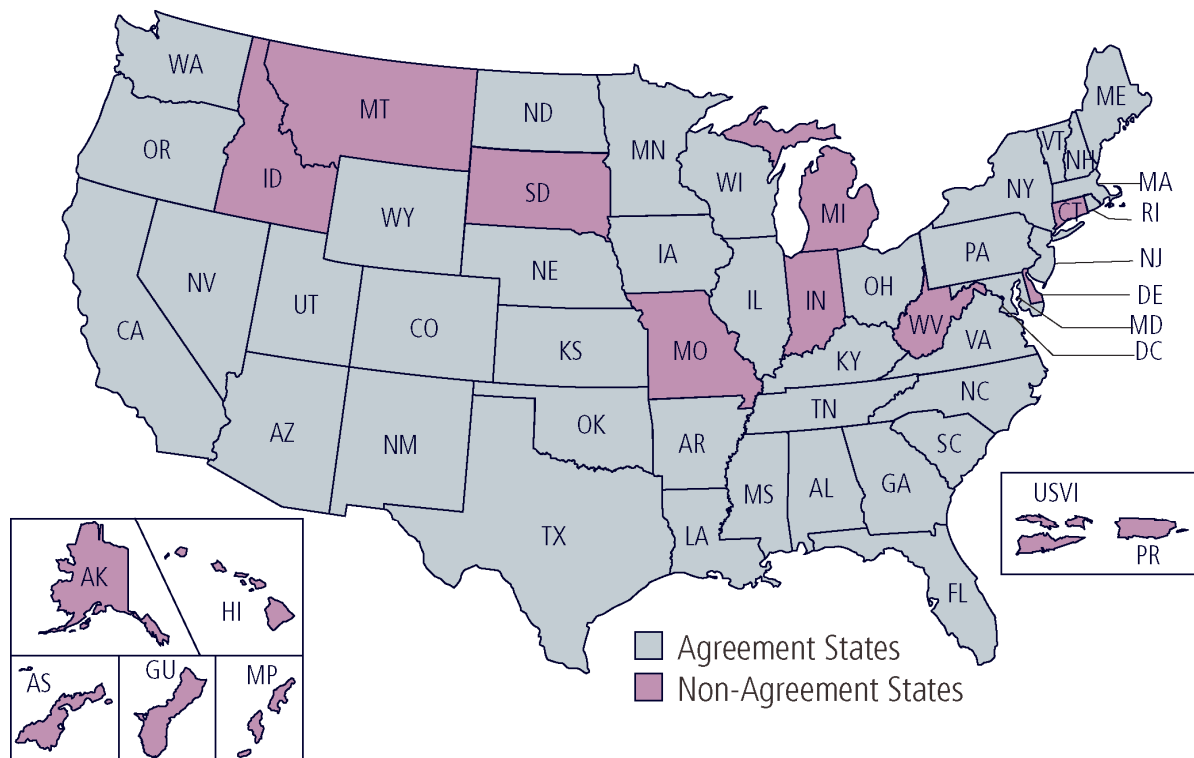
\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, licensing, rulemaking, state, tribal, and federal programs, and mission support activities within the Nuclear Materials Users Business Line were funded \$2.9 million through the use of authorized prior-year carryover, which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

The Nuclear Materials Users Business Line activities support licensing, inspection, event response and evaluation, research, allegations review, enforcement, import and export authorizations, rulemaking, the Integrated Materials Performance Evaluation Program (IMPEP), and programmatic support of Agreement States. Activities also include intergovernmental communication and coordination, implementation of the Tribal Policy Statement and coordination with other Federal agencies on Tribal matters, and maintenance of major information technology (IT) systems to support the regulatory safety and security infrastructure needed to track the possession and use of nuclear materials.

Agreement States are those States that have signed an agreement with the NRC in accordance with Section 274.b of the AEA, which authorizes the NRC to discontinue and the State to assume, regulatory authority over certain materials cited in the AEA. With respect to Agreement States, the NRC has programmatic oversight responsibility to periodically review the State programs to ensure adequacy and compatibility. The most recent agreement, with the State of Vermont, became effective on September 30, 2019, resulting in a total of 39 Agreement States.

## NUCLEAR MATERIALS USERS



**Figure 7: Agreement States in FY 2021**

Security activities in the Nuclear Materials Users Business Line include the implementation of a national registry to ensure the control of radioactive sources of concern<sup>5</sup> and to prevent their malevolent use. The Integrated Source Management Portfolio integrates three core systems: the National Source Tracking System, Web-Based Licensing, and the License Verification System. These systems provide one management mechanism to license and track sources and other radioactive materials. Security-related activities also include inspecting materials facilities with radioactive materials in quantities of concern and performing precicensing reviews of new materials license applicants.

### CHANGES FROM FY 2020 ENACTED BUDGET

Resources decrease primarily as a result of the following:

- Improved budget estimates that are better aligned with projected workload for generic homeland security; licensing; rulemaking; and State, Tribal, and Federal programs (-\$1.9M, -4 FTE);
- A one-time reduction in contract support resources for the Integrated Source Management Portfolio. The agency will minimize the impact by reanalyzing the system requirements (-\$2.6M); and

<sup>5</sup> "Radioactive sources of concern" refers to sources with quantities of radioactive material meeting or exceeding the Category 1 and Category 2 activity levels contained in 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Materials."



- Reduced costs as a result of migration to the cloud and other programmatic efficiencies (-\$0.7M).

These decreases are partially offset by increases primarily due to the following:

- Changes in functionality for Web-Based Licensing to better support use by external stakeholders (+\$0.2M) and
- Entry-level hiring to support the agency's ongoing SWP (+\$0.2M, +1 FTE).

The resources for licensing, rulemaking, state, tribal, and federal programs, and mission support activities decrease when compared to the FY 2020 total budget authority, which includes the use of \$2.9 million in authorized prior-year carryover to fund these activities. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," which provides a comparison of the FY 2021 request to the FY 2020 Budget Authority.

Generally, for the Nuclear Materials Users Business Line, budgeted resources impact annual fees.

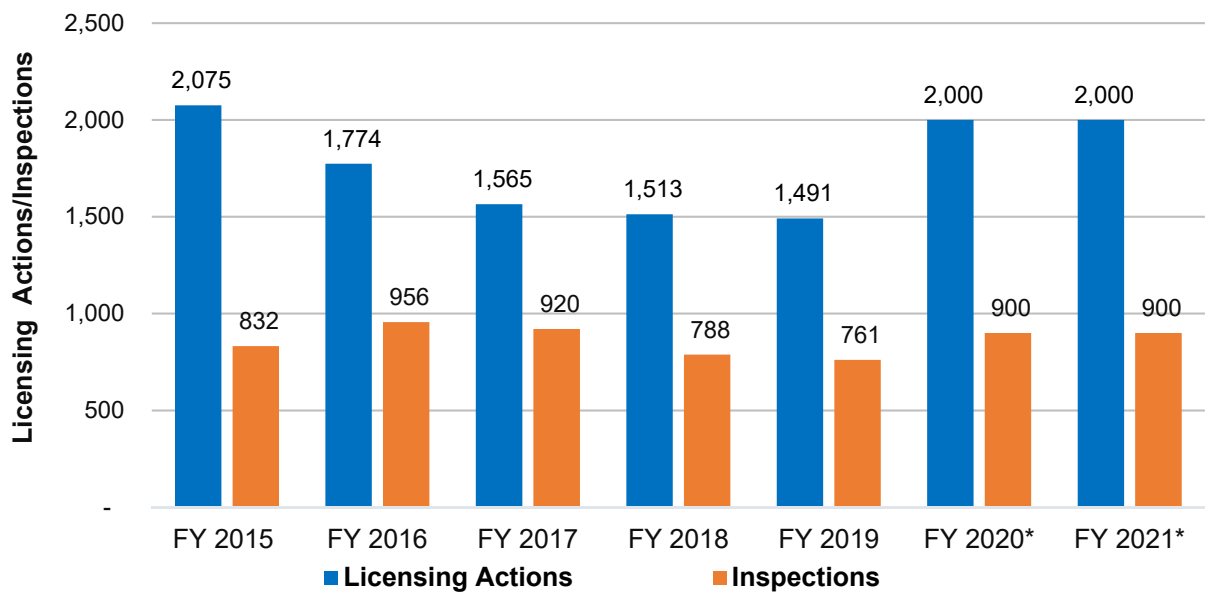
## **MAJOR ACTIVITIES**

The major activities within the Nuclear Materials Users Business Line include the following:

- Complete reviews of approximately 2,000 materials licensing actions (new applications, amendments, renewals, and terminations) and approximately 900 routine health, safety, and security inspections, as well as reciprocity and reactive inspections (\$9.7M, 50 FTE).
- Oversee and support the Agreement States' regulation of approximately 17,000 specific and 150,000 general licenses, conduct IMPEP reviews, and review Agreement State reported incidents and events (\$4.0M, 20 FTE).
- Implement the agency's Tribal Policy Statement, including outreach, guidance development, and staff training; coordinate with other Federal agencies on Tribal matters and NRC projects involving Tribal consideration; and update Tribal contact databases and mapping tools (\$0.6M, 3 FTE).
- Coordinate and serve as liaison for homeland security regulatory initiatives, control and track imports and exports of sources, and develop and implement the Integrated Source Management Portfolio (\$7.4M, 14 FTE).
- Conduct three high-priority and one medium priority rulemakings, as directed by the Commission (\$1.2M, 6 FTE).
- Satisfy international treaty and convention obligations, as well as statutory mandates. This includes implementing the Code of Conduct on the Safety and Security of Radioactive Sources (\$1.3M, 7 FTE).
- Support international programs and activities to develop or enhance global controls over radioactive sources, consistent with the Code of Conduct on the Safety and Security of Radioactive Sources (\$6.3M, 5 FTE).

## NUCLEAR MATERIALS USERS

- Maintain a highly qualified workforce through recruitment and staffing of entry-level positions to support the agency’s SWP (\$0.2M, 1 FTE).
- Conduct transformation and innovation initiatives, including modernization efforts for the Web-Based Licensing system to support electronic submission of materials license applications and amendments for all NRC and Agreement States users and use the Web-Based Licensing system in innovative ways, such as inspection and IMPEP planning. In rulemaking, apply risk insights and operational experience to provide additional flexibility in the regulatory approaches to support the safe use of new technologies in the industrial, academic, and medical areas.



\* Values provided for FY 2020–FY 2021 are projections.

**Figure 8: Nuclear Materials Users Workload**

## **SIGNIFICANT ACCOMPLISHMENTS IN FY 2019**

The significant accomplishments within the Nuclear Materials Users Business Line include the following:

- Finalized the agreement authorizing the State of Vermont to become an Agreement State as of September 30, 2019, and to assume regulatory authority over byproduct materials as defined in AEA Section 11e.(1), 11e.(3), and 11e.(4), source materials, and special nuclear materials in quantities not sufficient to form a critical mass.
- Led the development of and submitted the 2018 Radiation Source Protection and Security Task Force Report to Congress and the President, which provided an interagency consensus conclusion that there are no significant gaps in the area of radioactive source protection and security.
- Formalized the National Materials Program (NMP) framework to promote consensus on regulatory priorities with the Agreement States, promote consistent exchange of information, and establish an NRC Champion for the NMP.
- Hosted the biennial National State Liaison Officers Conference which was attended by over 30 State Liaison Officers, and included several discussion panel sessions on Reactor Decommissioning, Risk-Informed Decision-Making, State Liaison Officers & their Environment, Congressional Coordination, and an optional training session on perspectives on reactor safety.
- Published two revised guidance documents, Volume 9, “Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Medical Use Licenses, Final Report,” and Volume 13, “Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Commercial Radiopharmacy Licenses, Final Report,” of the NUREG-1556 series, “Consolidated Guidance about Materials Licenses,” which provide guidance to inform applicants in preparing license applications for the possession and use of radioactive materials.
- Organized and conducted Tribal Workshops to provide NRC and external participants opportunities to better understand Tribal perspectives, and to better inform future interactions with Tribal governments during the NRC’s regulatory activities.
- Prioritized licensing and inspection activities and coordinated with DOE to ensure an outcome of the safe and timely transportation and disposition of a breached cesium chloride source capsule from the University of Washington, Harborview Training & Research Building in Seattle, WA.
- Coordinated internationally and domestically to enhance nuclear safety and security through the regulatory oversight of radioactive sources, including participation in numerous meetings of technical and legal experts on IAEA’s Code of Conduct for the Safety and Security of Radioactive Sources.
- Led bilateral and regional (Africa, Latin America and the Caribbean, and Eastern Europe) regulatory assistance efforts, including the continued development and completion of verified national registries of radioactive sources through the NRC’s Radioactive Sources Regulatory Partnership.

## NUCLEAR MATERIALS USERS

- Provided technical support to U.S. executive branch agencies and participated in negotiations to enter into new, and implement existing, bilateral agreements between the U.S. Government and the governments of several countries establishing the framework for cooperation in the peaceful uses of nuclear energy that must be in place for the NRC to approve exports of reactor-related technology, major reactor equipment, and reactor fuel.
- Completed 95 export licenses, all of which met legal and regulatory requirements (increase of >10 percent from FY 2018).
- Provided nuclear safety and security assistance, through bilateral and multilateral efforts, to regulators in over 100 countries.
- Implemented Web-Based Licensing for export licenses, streamline the review and approval of export license applications and eliminate cumbersome paper records.

## OTHER INDICATORS

### EVENT RESPONSE

Emergency Response Performance Index (ERPI)* (NM-22)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2021		
FY 2021	100		New for FY 2021. This indicator is being added because a new subindicator, "Critical Incident Response Positions," is being included as part of the rollup to the ERPI, which provides a more accurate measure for maintaining the NRC's readiness.
*Ensures the NRC maintains its readiness to respond to incidents and emergencies involving NRC-licensed facilities and radioactive materials and other events of domestic and international interest. The specific subindicators that will be included under this indicator will be evaluated and updated on an annual basis to reflect the agency's readiness to respond. Examples may include (1) training and qualifications of the different incident response teams, to ensure enough personnel are trained and qualified for different incident response positions and (2) communications systems at NRC Headquarters and in the backup location are properly maintained and tested to ensure licensees and other stakeholders can report incidents consistent with the NRC's regulatory requirements.			

LICENSING

Percentage of Licensing Application Reviews for New Materials Licenses and License Amendments (Excluding Change of Control Amendments)* Completed in 90 Days or Less (NM-01)			
Fiscal Year	Target	Actual	Comment
FY 2015	92	95	
FY 2016	92	95	
FY 2017	92	93	
FY 2018	92	96	
FY 2019*	92	97	
FY 2020*	92		
FY 2021*	92		

\*Beginning in FY 2019, this indicator description excludes change of control amendments. The process for reviewing change of control amendments involves public notification and legal steps that are more complex and require more time than for other typical amendment reviews. Change of control amendments are now captured under NM-03.

Percentage of Licensing Application Reviews for New Materials Licenses and License Amendments (Excluding Change of Control Amendments)* Completed in 2 Years or Less (NM-02)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019*	100	100	
FY 2020*	100		
FY 2021*	100		

\*Beginning in FY 2019, change of control amendments are captured under NM-04.

Percentage of Licensing Application Reviews for Materials License Renewals and Sealed Source and Devices Reviews and Associated Licensing Actions, and Change of Control Amendments* Completed in 180 Days or Less (NM-03)			
Fiscal Year	Target	Actual	Comment
FY 2015	92	94	
FY 2016	92	94	
FY 2017	92	96	
FY 2018	92	100	
FY 2019*	92	99	
FY 2020*	92		
FY 2021*	92		

\*Change of control amendments were added to this indicator description beginning in FY 2019. As of FY 2019, change of control amendments that were being captured in NM-01 are captured under NM-03.

Percentage of Licensing Application Reviews for Materials License Renewals and Sealed Source and Devices Reviews and Associated Licensing Actions, and Change of Control Amendments* Completed in 2 Years or Less (NM-04)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019*	100	100	
FY 2020*	100		
FY 2021*	100		

\*Change of control amendments were added to this indicator description beginning in FY 2019. As of FY 2019, change of control amendments that were being captured in NM-02 are captured under NM-04.

## NUCLEAR MATERIALS USERS

### OVERSIGHT

Percentage of Safety Inspections of Materials Licensees Completed on Time (NM-05)			
Fiscal Year	Target	Actual	Comment
FY 2015	98	99	
FY 2016	98	100	
FY 2017	98	100	
FY 2018	98	99	
FY 2019	98	100	
FY 2020	98		
FY 2021	98		

Percentage of Technical Allegation Reviews Completed in 180 Days or Less* (NM-07)			
Fiscal Year	Target	Actual	Comment
FY 2015	95	100	
FY 2016	95	95	
FY 2017	95	100	
FY 2018	95	100	
FY 2019	95	100	
FY 2020	95		
FY 2021	95		

\*This indicator also includes technical allegation reviews for Decommissioning and Low-Level Waste.

Percentage of Technical Allegation Reviews Completed in 360 Days or Less**(NM-08)			
Fiscal Year	Target	Actual	Comment
FY 2015*	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		

\*This corrects the error in the FY 2015 Congressional Budget Justification that listed FY 2013 through FY 2015 targets as 330 days.  
 \*\*This target also includes the calculations for Decommissioning and Low-Level Waste for the same indicator and is reported under Nuclear Materials Users.

Percentage of Enforcement Actions Where No Investigation Is Involved Completed in 160 Days or Less (NM-09)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	100	
FY 2016	100	96	The staff focused on the early identification of enforcement cases that were likely to involve complex technical, legal, or policy issues that needed to be resolved across multiple program offices to ensure timely resolution.
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		

<b>Percentage of Enforcement Actions in which Investigation Is Involved Completed in 330 Days or Less (NM-10)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	86	One action was completed beyond the target date because of the challenging nature of the issues involved.
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		

<b>Percentage of Investigations That Developed Sufficient Information To Reach a Conclusion on Wrongdoing Completed within 12 Months or Less (NM-11)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	85	95	
FY 2016	85	88	
FY 2017	85	89	
FY 2018	85	87	
FY 2019	85	94	
FY 2020	85		
FY 2021	85		

<b>Percentage of Investigations Completed in Time To Initiate Civil Enforcement and/or Criminal Prosecution Action (NM-12)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		

**STATE, TRIBAL, AND FEDERAL PROGRAMS**

<b>Number of Integrated Materials Performance Evaluation Program Review Reports Not Completed within 30 Days of the Management Review Board Meeting (NM-21)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
	New indicator in FY 2018		
FY 2018	<2	1	
FY 2019	<2	0	
FY 2020	<2		
FY 2021	<2		

## NUCLEAR MATERIALS USERS

### DISCONTINUED INDICATORS

Percentage of Technical Allegation Reviews Completed in 150 Days or Less (NM-06)			
Fiscal Year	Target	Actual	Comment
FY 2015	90	96	
FY 2016	90	94	
FY 2017	90	100	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

Percentage of Major Milestones for Critical Research Programs Completed On or Before Their Due Date* (NM-15)			
Fiscal Year	Target	Actual	Comment
FY 2015	90	N/A	No critical milestones were associated with the research activities conducted in this business line in FY 2015.
FY 2016	90	N/A	No critical milestones were associated with the research activities conducted in this business line in FY 2016.
FY 2017	90	N/A	No critical milestones were associated with the research activities conducted in this business line in FY 2017.
FY 2018	Discontinued		The projected level of research for this business line is not expected to meet the criteria for this indicator.
FY 2019	N/A		
FY 2020	N/A		

\*Critical research programs typically respond to high-priority needs from the Commission and the NRC's licensing organizations. Critical research programs on the highest priority needs are identified at the beginning of the fiscal year.

Combined Score on a Scale of 1 to 5 for the Technical Quality of Agency Research Technical Products* (NM-16)			
Fiscal Year	Target	Actual	Comment
FY 2015	3.75	N/A	No research products were produced for this business line during FY 2015.
FY 2016	3.75	N/A	No research products were produced for this business line during FY 2016.
FY 2017	3.75	4.0	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

\*The NRC has developed a process to measure the quality of research products on a five-point scale using surveys of end users to determine the usability and added value of the products. As appropriate, the NRC will develop and add other mechanisms to this process to measure the quality of research products.

Percentage Assessment of the Agency's Readiness To Respond to a Nuclear or Terrorist Emergency Situation or Other Event of National Interest (NM-17)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	Discontinued		Indicator tracked internally.



<b>Percentage of Information Assessment Team Advisories Issued within 24 Hours of Notification (NM-18)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
	New indicator in FY 2016		
FY 2016	90	100	
FY 2017	90	100	
FY 2018	90	100	
FY 2019	90	100	
FY 2020	Discontinued		This indicator is no longer useful, as the NRC has issued no Information Assessment Team advisories since 2014.

<b>Percentage of IMPEP Review Reports Completed within 30 Days of the Management Review Board Meeting (NM-20)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
	New indicator in FY 2016		
FY 2016	85	75	The NRC increased management oversight to ensure the timeliness of reports and will continue to monitor.
FY 2017	85	100	
FY 2018	Discontinued		Replaced by the number of IMPEP review reports that were not completed within 30 days of the Management Review Board meeting (NM-21).
FY 2019	N/A		



**DECOMMISSIONING AND LOW-LEVEL WASTE**

<b>Decommissioning and Low-Level Waste by Product Line</b>								
(Dollars in Millions)								
Product Line	FY 2019 Actuals		FY 2020 Enacted*		FY 2021 Request		Changes from FY 2020	
	\$ M	FTE	\$ M	FTE	\$ M	FTE	\$ M	FTE
International Activities	0.5	2.7	0.8	4.0	0.7	3.0	(0.1)	(1.0)
Licensing	11.7	46.6	10.0	43.0	10.6	39.0	0.6	(4.0)
Oversight	4.9	23.5	4.9	23.0	4.8	21.0	(0.2)	(2.0)
Research	0.8	1.8	0.5	1.0	0.8	1.0	0.3	0.0
Rulemaking	1.5	5.6	1.6	8.0	1.5	7.0	(0.0)	(1.0)
Mission Support and Supervisors	2.6	12.6	2.4	13.0	2.7	13.0	0.3	0.0
Training	0.8	0.0	0.8	1.0	0.9	2.0	0.1	1.0
Travel	0.8	0.0	0.7	0.0	0.8	0.0	0.1	0.0
<b>Total</b>	<b>\$23.7</b>	<b>92.8</b>	<b>\$21.8</b>	<b>93.0</b>	<b>\$22.8</b>	<b>86.0</b>	<b>\$1.0</b>	<b>(7.0)</b>

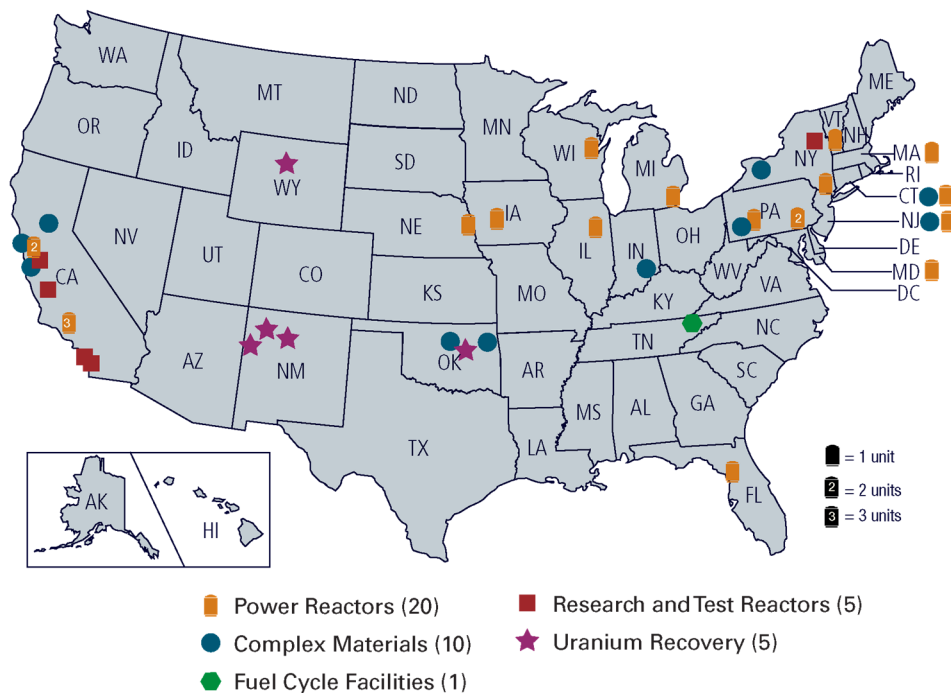
\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, licensing activities within the Decommissioning and Low-Level Waste Business Line were funded \$1.1 million through the use of authorized prior-year carryover, which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

The Decommissioning and Low-Level Waste Business Line activities support the licensing and oversight of uranium recovery facilities and sites undergoing decommissioning. This Business Line also oversees the national LLW program and monitors DOE's WIR activities at the Savannah River Site and the Idaho National Laboratory consistent with the NRC's responsibilities under the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005. Other business line activities include interfacing with licensees, applicants, Federal and State agencies, Tribal governments, and the public.

Decommissioning is the safe removal of a nuclear facility from service and the reduction of residual radioactivity to a level that permits the termination of the NRC license. The NRC has established site release criteria and provides for unrestricted or, under certain conditions, restricted release of a site. The NRC regulates the decommissioning of complex materials sites, fuel cycle facilities, uranium recovery facilities, power reactors, and research and test reactors, with the goal of license termination.

## DECOMMISSIONING AND LOW-LEVEL WASTE



**Figure 9: Anticipated Locations of NRC-Regulated Sites Undergoing Decommissioning in FY 2021**

### CHANGES FROM FY 2020 ENACTED BUDGET

Resources increase primarily as a result of the following:

- Support transition of the Duane Arnold Energy Center from operations to the power reactor decommissioning program (+\$0.2M, +1 FTE) and
- Entry-level hiring to support the agency's ongoing SWP (+\$0.2M, +1 FTE).

These increases are offset by decreases primarily to support the following:

- Reductions within the Uranium Recovery Program (-\$1.6M, -6 FTE) and the Materials Decommissioning Program (-\$0.8M, -2 FTE).

The resources for licensing activities decrease when compared to the FY 2020 total budget authority, which includes the use of \$1.1 million in authorized prior-year carryover to fund these activities. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," which provides a comparison of the FY 2021 request to the FY 2020 Budget Authority.

Generally, resources budgeted in the Licensing and Oversight Product Lines impact fees for service. All other resources impact annual fees.

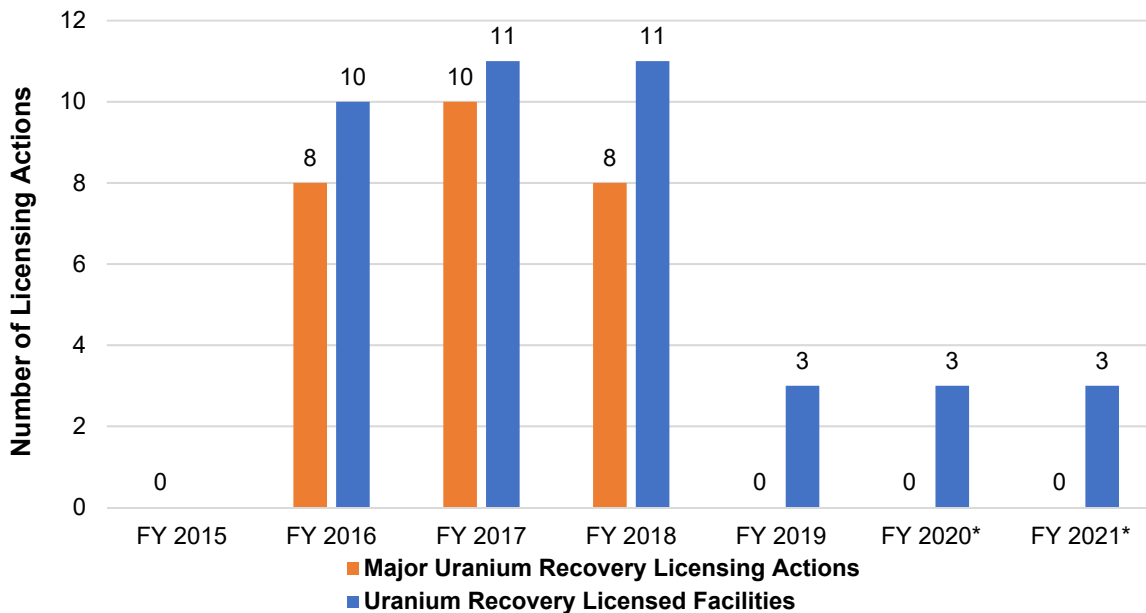
## **MAJOR ACTIVITIES**

The major activities within the Decommissioning and LLW Business Line include the following:

- Perform licensing and oversight activities for decommissioning five research and test reactors (\$0.5M, 1 FTE).
- Perform licensing and oversight activities for 20 power reactors within the power reactor decommissioning program, including the addition of Duane Arnold Energy Center (\$2.7M, 12 FTE).
- Perform licensing and oversight associated with ground water restoration activities at one licensed uranium recovery facility and two licensed, but not yet constructed, uranium recovery facilities (\$0.6M, 3 FTE).
- Perform licensing and oversight of 10 complex materials sites undergoing decommissioning and depleted uranium sites. Perform activities under the memorandum of understanding with the U.S. Department of Defense to minimize dual regulation and duplicative regulatory requirements at military sites with radioactive materials under the Defense Environmental Restoration Program (\$1.7M, 7 FTE).
- Perform licensing and oversight of five private uranium mill sites undergoing decommissioning (\$1.1M, 6 FTE).
- Conduct oversight of 30 decommissioned Uranium Mill Tailings Radiation Control Act (UMTRCA) Title I sites and eight decommissioned UMTRCA Title II sites that are under long-term care and maintenance by DOE (\$0.3M, 1 FTE).
- Coordinate the National Low-Level Waste Program, including developing guidance, supporting IMPEP evaluations in the LLW area, and responding to inquiries from Agreement States (\$1.1M, 5 FTE).
- Conduct two high-priority and one medium-priority rulemakings, as directed by the Commission, review one petition for rulemaking, conduct environmental reviews for the three individual rulemakings, and develop and maintain regulatory analysis guidance and rulemaking infrastructure (\$1.6M, 7 FTE).
- Provide oversight of the activities related to WIR, including monitoring activities at the DOE Savannah River Site and Idaho National Laboratory (\$1.0M, 4 FTE).
- Conduct research activities to support the application of new technologies at complex sites and analytical tools used in decommissioning reviews (\$0.8M, 1 FTE).
- Support cooperative programs to exchange information with regulatory counterparts bilaterally and multilaterally on decommissioning issues, the licensing of uranium recovery facilities, the development of regulations for the handling and disposal of LLW, and the decommissioning process for power reactors and other nuclear facilities (\$0.4M, 2 FTE).

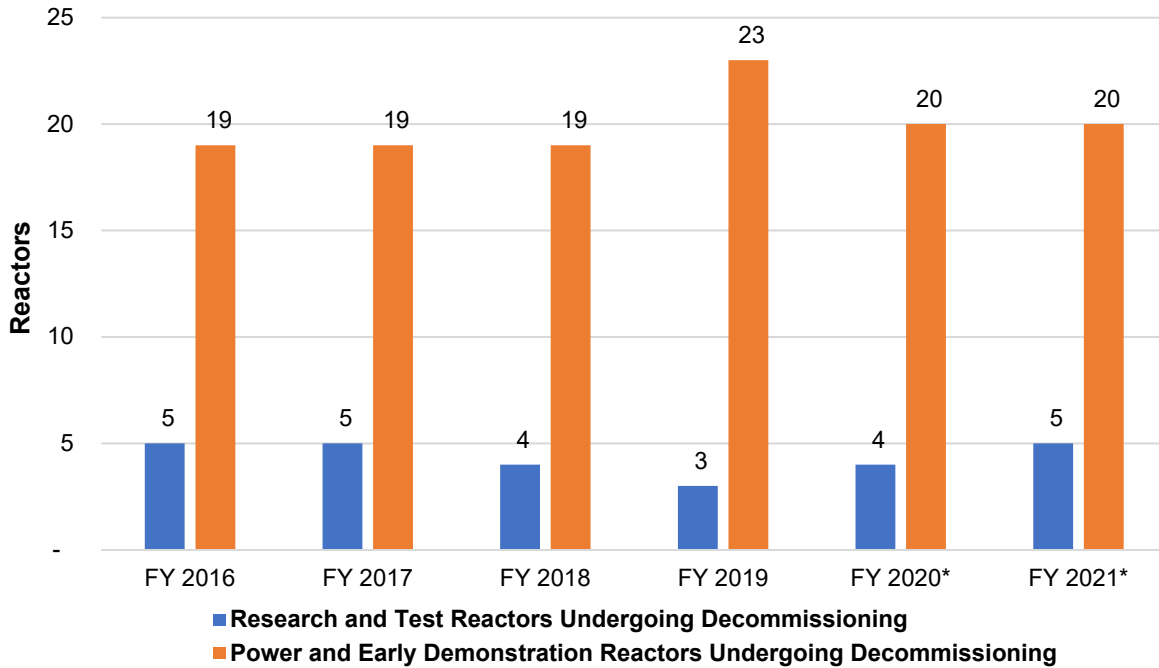
## DECOMMISSIONING AND LOW-LEVEL WASTE

- Satisfy international treaty and convention obligations as well as statutory mandates, including the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (\$0.3M, 1 FTE).
- Maintain a highly qualified workforce through recruitment and staffing of entry-level positions to support the agency's SWP (\$0.2M, 1 FTE).
- Conduct updates of key guidance documents related to uranium recovery, decommissioning, and waste programs for clarity and technological changes (\$1.3M, 6 FTE).



\* Values provided for FY 2020–FY 2021 are projections.

**Figure 10: Uranium Recovery Licensed Facilities and Major Licensing Actions**



\* Values provided for FY 2020–FY 2021 are projections.

**Figure 11: Research and Test Reactors and Power and Early Demonstration Reactors Undergoing Decommissioning**

**SIGNIFICANT ACCOMPLISHMENTS IN FY 2019**

The significant accomplishments within the Decommissioning and LLW Business Line include the following:

- Completed the termination of a special nuclear material license for General Atomics located in San Diego, CA.
- Approved the direct transfer of the Oyster Creek license from Exelon to Holtec as part of a sales agreement to purchase the plant and spent fuel.
- Completed partial site releases for General Electric Vallecitos and two parcels of land at Fort Calhoun.
- Approved the La Crosse License Termination Plan and issued the Order approving the license transfer from LaCrosseSolutions to Dairyland Power.
- Completed eight NEIMA Section 108 public meetings and one webinar to obtain input on the Best Practices for Community Advisory Boards for the report to Congress.
- Completed identification efforts for the non-military radium program by dispositioning the 47 originally identified sites and an additional 11 sites identified as part of coordinated efforts with States. Remediation continues for remaining sites with contamination.

## DECOMMISSIONING AND LOW-LEVEL WASTE

- Published “Draft Regulatory Basis for the Disposal of GTCC [Greater-Than-Class C] and TRU [Transuranic] Waste” for public comments and provided two opportunities for stakeholder participation (a public webinar and public workshop in Austin, TX) during the comment period.
- Submitted a report to Congress in accordance with NEIMA Section 201 requirements describing (1) the duration of uranium recovery license issuance and amendment reviews and (2) recommendations to improve efficiency and transparency of uranium recovery license issuance and amendment reviews.

## OTHER INDICATORS

### LICENSING

Percentage of Licensing Actions Including Interim Milestones Completed as Scheduled (DL-05)			
Fiscal Year	Target	Actual	Comment
FY 2015	Yes	Yes	
FY 2016	90	100	The target was changed to a percentage beginning in FY 2016 to provide a more informative indicator.
FY 2017	90	98	
FY 2018	90	94	
FY 2019	90	97	
FY 2020	90		
FY 2021	90		
This indicator only includes decommissioning and low-level waste licensing actions that were accepted prior to July 13, 2019.			

Percentage of Timely Completion of Final Safety Evaluations by the Generic Milestone Date for All Requested Activities of the Commission, as Identified by NEIMA, from a Licensee or Applicant (DL-10)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2021		
FY 2021	100		
*Includes all requested activities of the Commission from licensees or applicants that involve the issuance of a final safety evaluation accepted after July 13, 2019, for this business line. This includes design certifications, licenses, permits, license amendments, license renewals, certificates of compliance, power uprates, and any other requested activity, as applicable, that involves the issuance of a final safety evaluation processed under this business line.			



**DISCONTINUED INDICATORS**

<b>Percentage of Environmental Reviews and Environmental Review Documents Completed as Scheduled (DL-01)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	Discontinued		Completion of environmental reviews associated with licensing actions is reported as a part of DL-05. The discontinuation of this indicator reduces the duplication of reporting requirements, as environmental reviews are an interim step of a licensing action.

<b>Percentage of Time Saved in Completing Safety Evaluation Reports through Use of Presubmission Audits (DL-03)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	10	No data	There were not enough licensing actions to conduct a presubmission audit.
FY 2016	10	25	
FY 2017	10	22	
FY 2018	10	No data	There were not enough licensing actions to conduct a presubmission audit.
FY 2019	Discontinued		Given market conditions and the cost of uranium, the NRC does not anticipate any applications, so conducting additional presubmission audits will not be possible in the foreseeable future.
FY 2020	N/A		

<b>Percentage of Review or Monitoring Plan Activities for WIR That Are Completed as Scheduled (DL-07)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
	New indicator in FY 2016		
FY 2016	80	100	
FY 2017	80	100	
FY 2018	80	86	
FY 2019	Discontinued		The NRC does not have regulatory or enforcement authority over DOE for monitoring activities associated with WIR. For all DOE WIR consultations with the NRC, the NRC serves in an advisory capacity and its advice does not constitute regulatory approval. The potential impact of not achieving the target is considered to be low; therefore, it has been discontinued.
FY 2020	N/A		

<b>Percentage of Major Milestones for Critical Research Programs Completed On or Before Their Due Date* (DL-08)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	90	N/A	No critical milestones were associated with the research activities conducted in this business line in FY 2013, FY 2014, FY 2015, FY 2016, or FY 2017.
FY 2016	90	N/A	
FY 2017	90	N/A	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

\*Critical research programs typically respond to high-priority needs from the Commission and the NRC's licensing organizations. Critical research programs for the highest priority needs are identified at the beginning of the fiscal year.

## DECOMMISSIONING AND LOW-LEVEL WASTE

Combined Score on a Scale of 1 to 5 for the Technical Quality of Agency Research Technical Products* (DL-09)			
Fiscal Year	Target	Actual	Comment
FY 2015	3.75	5.0	
FY 2016	3.75	4.75	
FY 2017	3.75	N/A	No critical milestones were associated with the research activities.
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		
*The NRC has developed a process to measure the quality of research products on a five-point scale using surveys of end users to determine the usability and added value of the products. As appropriate, the NRC will develop and add other mechanisms to this process to measure the quality of research products.			

## FUEL FACILITIES

Fuel Facilities by Product Line (Dollars in Millions)								
Product Line	FY 2019 Actuals		FY 2020 Enacted*		FY 2021 Request		Changes from FY 2020	
	\$ M	FTE	\$ M	FTE	\$ M	FTE	\$ M	FTE
Event Response	0.3	1.6	0.4	2.0	0.4	2.0	0.0	0.0
Generic Homeland Security	2.4	2.9	2.4	3.0	2.7	3.0	0.3	0.0
International Activities	1.4	7.2	1.3	7.0	1.4	7.0	0.1	0.0
Licensing	4.9	23.5	4.2	18.5	4.9	19.0	0.7	0.5
Oversight	6.0	31.3	5.4	28.5	5.6	26.0	0.2	(2.5)
Rulemaking	0.5	2.6	0.6	3.0	0.2	1.0	(0.4)	(2.0)
Mission Support and Supervisors	3.8	18.8	3.5	19.0	2.8	14.0	(0.7)	(5.0)
Training	0.6	0.0	0.5	0.0	0.5	1.0	(0.0)	1.0
Travel	0.8	0.0	1.1	0.0	0.8	0.0	(0.3)	0.0
<b>Total</b>	<b>\$20.7</b>	<b>87.9</b>	<b>\$19.2</b>	<b>81.0</b>	<b>\$19.3</b>	<b>73.0</b>	<b>\$0.0</b>	<b>(8.0)</b>

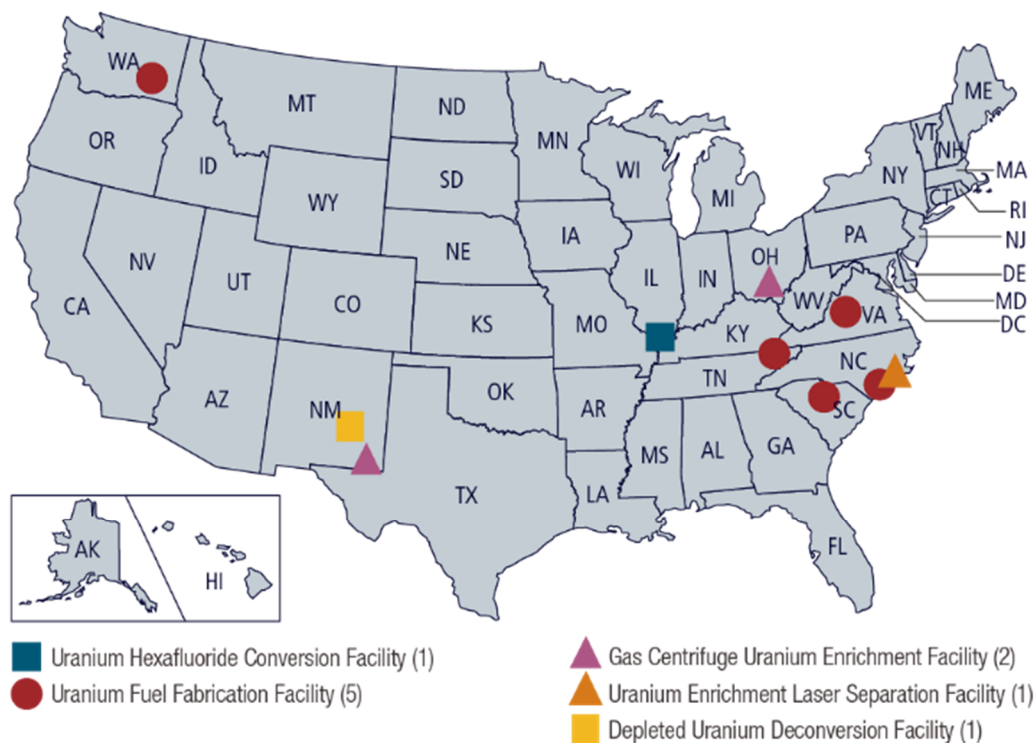
\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, oversight activities within the Fuel Facilities Business Line were funded \$0.4 million through the use of authorized prior-year carryover, which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

The Fuel Facilities Business Line encompasses the licensing and oversight of fuel cycle facilities in a manner that adequately protects public health and safety and promotes the common defense and security. The uranium fuel cycle begins with uranium ore that is mined and then milled to extract uranium from the ore. The uranium continues through processes for conversion, enrichment, and fuel fabrication. Conversion of the uranium changes it into a form suitable for enrichment. The enrichment process makes uranium suitable for use as nuclear fuel.

The Fuel Facilities Business Line also provides licensing and oversight support for a number of additional licensees that possess greater than critical mass quantities of special nuclear material (SNM), such as universities and research and test facilities.

## FUEL FACILITIES



**Figure 12: Locations of Licensed Fuel Cycle Facilities**

Some licensed fuel facilities possess SNM, such as plutonium and enriched uranium. Those licensees verify and document their inventories and material transfers in the Nuclear Materials Management and Safeguards System database. This database is operated by DOE's Office of Nuclear Materials Integration and is jointly supported by DOE and the NRC under the Fuel Facilities Business Line. Fuel Facilities Business Line activities also include implementation of international safeguards in the United States at NRC-licensed facilities and NRC representation on multiple interagency safeguards groups. In addition, the Fuel Facilities Business Line supports interactions with the Nuclear Materials Information Program (NMIP) and the interagency agreement with DOE for the certification and accreditation of classified computer systems at enrichment facilities.

The NMIP is an interagency effort managed by DOE's Office of Intelligence and Counterintelligence, in close coordination with the U.S. Departments of State, Defense, Homeland Security, and Justice, as well as the NRC and agencies under the Director of National Intelligence. The goal of the NMIP is to consolidate information from all sources pertaining to worldwide nuclear materials holdings and their security status into an integrated and continuously updated information management system.

Other activities supported by the Fuel Facilities Business Line include licensing action reviews, inspections, allegation and enforcement, rulemaking, development and implementation of security requirements, emergency preparedness, international cooperation and assistance, IAEA missions, and import and export licensing.

## **CHANGES FROM FY 2020 ENACTED BUDGET**

Resources decrease primarily as a result of the following:

- The reduction of resources for hearings and associated legal support related to new facility submittals (-\$0.4M, -2 FTE); and
- Efficiencies associated with organizational restructuring within the NRC's Office of Nuclear Material Safety and Safeguards (-\$1.0M, -6 FTE).

These decreases are partially offset by increases primarily to support the following:

- Environmental review for a major fuel manufacturing facility license application (+\$0.7M, +1.5 FTE) and
- Entry-level hiring to support the agency's ongoing SWP (+\$0.2M, +1 FTE).

The resources for oversight activities decrease when compared to the FY 2020 total budget authority, which includes the use of \$0.4 million in authorized prior-year carryover to fund these activities. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," which provides a comparison of the FY 2021 request to the FY 2020 Budget Authority.

Generally, resources budgeted in the Licensing and Oversight Product Lines impact fees for service. All other resources impact annual fees.

## **MAJOR ACTIVITIES**

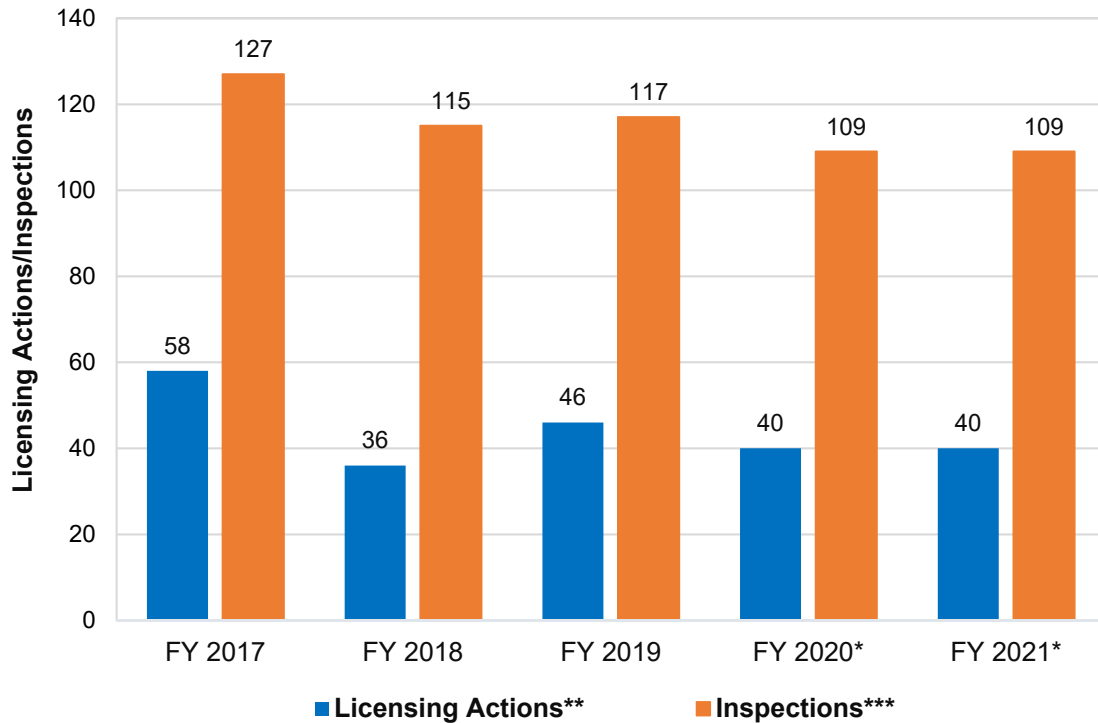
The major activities within the Fuel Facilities Business Line include the following:

- Conduct licensing, oversight, and regulatory activities for 10 major fuel facilities and 12 greater-than-critical-mass SNM licensees (\$9.7M, 43 FTE).
- Review one new fuel facility license application, including environmental review (\$0.8M, 2 FTE).
- Maintain the Nuclear Materials Management and Safeguards Systems for SNM (\$2.5M, 2 FTE).
- Conduct two high-priority rulemakings, as directed by the Commission, for fuel facilities (\$0.2M, 1 FTE).
- Support national obligations related to nonproliferation (\$1.0M, 6 FTE).
- Support U.S. nonproliferation activities by implementing international safeguards and licensing the import and export of nuclear materials and equipment (\$1.0M, 5 FTE).
- Support the NRC's work with international counterparts, including activities involving obligation tracking, approvals, and treaty compliance; 10 CFR Part 810, "Assistance to Foreign Atomic Energy Activities"; and review of the import and export of nuclear materials, technology, and equipment. Support bilateral visits with other countries possessing or obtaining U.S.-origin SNM with regard to physical protection and material

## FUEL FACILITIES

control and accounting. Provide technical assistance to IAEA and support U.S. initiatives to enhance international safeguards and verification programs (\$0.4M, 2 FTE).

- Maintain a highly qualified workforce through recruitment and staffing of entry-level positions to support the agency's SWP (\$0.2M, 1 FTE).



\* Values provided for FY 2020–FY 2021 are projections.

\*\* Only license amendment reviews are included under Licensing Actions. License renewals and new license applications are excluded.

\*\*\* Total number of inspection procedures completed. Multiple inspection procedures are typically performed during an inspection.

**Figure 13: Fuel Facilities Workload**

## **SIGNIFICANT ACCOMPLISHMENTS IN FY 2019**

The significant accomplishments within the Fuel Facilities Business Line include the following:

- Launched a two-prong initiative to improve the fuel cycle licensing and oversight programs called “Building A Smarter Way to Safety.” Held four public meetings with industry and public stakeholders to provide areas for potential improvement.
- Completed a comprehensive review of the current regulatory framework for conducting licensing reviews for fuel cycle facilities to support industry deployment of ATF/High Assay Low Enriched Uranium by 2023.
- Issued a new greater than critical mass license (SNM-7004) for the Johns Hopkins University Applied Physics Laboratory in Laurel, MD.
- Coordinated with licensees in Puerto Rico to complete the first annual reporting of inventories of source and special nuclear material for the U.S. Caribbean Territories. Results were reported to the IAEA under the U.S.-IAEA Agreement.
- Issued Regulatory Issue Summary (RIS) 2019-1, “Clarification of Export Reporting Requirements for Nuclear Facilities, Equipment, and Non-nuclear Material.” The RIS provides guidance on the requirements for reporting under the terms of the Protocol Additional to the Agreement between the United States and the IAEA.
- Completed updates to the Design Information Questionnaires and Transitional Facility Attachments (design and operational information) for the four IAEA-selected fuel cycle facilities and provided the information to the IAEA for review, in support of the U.S.-IAEA Safeguards Agreement.

## FUEL FACILITIES

### OTHER INDICATORS

#### EVENT RESPONSE

Emergency Response Performance Index (ERPI)* (FF-12)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2021		
FY 2021	100		New for FY 2021. This indicator is being added because a new subindicator, "Critical Incident Response Positions," is being included as part of the rollup to the ERPI, which provides a more accurate measure for maintaining the NRC's readiness.
*Ensures the NRC maintains its readiness to respond to incidents and emergencies involving NRC-licensed facilities and radioactive materials and other events of domestic and international interest. The specific subindicators that will be included under this indicator will be evaluated and updated on an annual basis to reflect the agency's readiness to respond. Examples may include (1) training and qualifications of the different incident response teams, to ensure enough personnel are trained and qualified for different incident response positions and (2) communications systems at NRC Headquarters and in the backup location are properly maintained and tested to ensure licensees and other stakeholders can report incidents consistent with the NRC's regulatory requirements.			

Percentage of Timely Completion of Final Safety Evaluations by the Generic Milestone Date for All Requested Activities of the Commission, as Identified by NEIMA, from a Licensee or Applicant* (FF-13)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2021		
FY 2021	100		
*Includes all requested activities of the Commission from licensees or applicants that involve the issuance of a final safety evaluation accepted after July 13, 2019, for this business line. This includes design certifications, licenses, permits, license amendments, license renewals, certificates of compliance, power uprates, and any other requested activity, as applicable, that involves the issuance of a final safety evaluation processed under this business line.			

### LICENSING

Percentage of Fuel Cycle Licensing Reviews Completed in 1.5 Years or Less* (FF-05)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	98	One licensing action exceeded the 1.5-year metric because of a significantly expanded scope from the initial review of the action. Improvement plans include reviewing licensing guidance to determine whether updates are needed, sharing lessons learned, and communicating with licensees about potential impacts to schedules as issues arise or changes are requested.
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		
*This indicator only includes fuel cycle licensing reviews that were accepted prior to July 13, 2019.			



OVERSIGHT

Percentage of Technical Allegation Reviews Completed in 180 Days or Less* (FF-07)			
Fiscal Year	Target	Actual	Comment
FY 2015	95	100	
FY 2016	95	100	
FY 2017	95	100	
FY 2018	95	100	
FY 2019	95	100	
FY 2020	95		
FY 2021	95		

\*This target also includes the calculations for Spent Fuel Storage and Transportation for the same indicator and is reported under Fuel Facilities.

Percentage of Technical Allegation Reviews Completed in 360 Days or Less* (FF-08)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		

\*This target also includes the calculations for Spent Fuel Storage and Transportation for the same indicator and is reported under Fuel Facilities.

Percentage of Operating Fuel Facilities for which the Core Inspection Program Was Completed as Planned during the Most Recently Ended Inspection Cycle (FF-09)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	100		
FY 2021	100		

DISCONTINUED INDICATORS

Percentage of Fuel Cycle Licensing Reviews Completed in 150 Days or Less (FF-04)			
Fiscal Year	Target	Actual	Comment
FY 2015	80	77	Eleven licensing actions exceeded the 150-day performance metric because of complex licensing issues. Improvement plans include sharing lessons learned, evaluating the licensing tracking process, and increasing management oversight.
FY 2016	80	91	
FY 2017	80	90	
FY 2018	80	100	
FY 2019	80	96	
FY 2020	80		
FY 2021	Discontinue		This indicator was consolidated into FF-13, which includes the timeliness of all requested activities of the Commission by licensees or applicants in the Fuel Facilities Business line that involve a final safety evaluation.

## FUEL FACILITIES

Percentage of Technical Allegation Reviews Completed in 150 Days or Less (FF-06)			
Fiscal Year	Target	Actual	Comment
FY 2015	90	100	
FY 2016	90	100	
FY 2017	90	100	
FY 2018	Discontinued		Indicator tracked internally.
FY 2019	N/A		
FY 2020	N/A		

Percentage Assessment of the Agency's Readiness to Respond to a Nuclear or Terrorist Emergency Situation or Other Events of National Interest* (FF-10)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	100	100	
FY 2019	100	100	
FY 2020	Discontinue		Indicator tracked internally.

\*This performance index provides a single overall performance indicator of the agency's readiness to respond to a nuclear or terrorist emergency situation or other event of national interest. The index measures several activities in the Incident Response Program that are critical for supporting the agency's preparedness and response ability.

Percentage of Information Assessment Team Advisories Issued within 24 Hours of Notification (FF-11)			
Fiscal Year	Target	Actual	Comment
	New indicator in FY 2016		
FY 2016	90	100	
FY 2017	90	100	
FY 2018	90	100	
FY 2019	90	100	
FY 2020	Discontinue		This indicator is no longer useful because the NRC has not issued Information Assessment Team advisories since 2014.

## CORPORATE SUPPORT

Corporate Support by Product Line (Dollars in Millions)								
Product Line	FY 2019 Actuals		FY 2020 Enacted*		FY 2021 Request		Changes from FY 2020	
	\$M	FTE	\$ M	FTE	\$ M	FTE	\$ M	FTE
Administrative Services	75.6	67.2	86.2	78.0	73.6	71.0	(12.6)	(7.0)
Financial Management	34.9	95.7	29.9	96.0	32.9	93.0	3.0	(3.0)
Human Resource Management	18.9	44.6	20.3	44.0	20.2	43.0	(0.2)	(1.0)
IT/IM Resources	113.0	175.6	91.1	179.0	94.9	174.0	3.8	(5.0)
Outreach	3.5	11.8	3.2	13.0	3.2	13.0	0.1	0.0
Policy Support	26.7	116.7	29.3	137.0	29.8	133.0	0.5	(4.0)
Training	4.2	13.1	4.2	13.0	3.9	12.0	(0.3)	(1.0)
Acquisitions	14.4	45.8	15.2	51.0	12.9	49.0	(2.3)	(2.0)
<b>Total</b>	<b>\$291.2</b>	<b>570.5</b>	<b>\$279.4</b>	<b>611.0</b>	<b>\$271.4</b>	<b>588.0</b>	<b>(8.0)</b>	<b>(23.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*In FY 2020, administrative services and IT/IM activities within the Corporate Support Business Line were funded \$6.4 million and \$6.8 million, respectively, through the use of authorized prior-year carryover, which is not reflected in the FY 2020 Enacted Budget. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," for details.

The NRC's Corporate Support Business Line involves centrally managed activities that are necessary for agency programs to accomplish the agency's mission. These activities include administrative services, financial management, human resource management, IT/information management (IM), outreach, policy support, training, and acquisitions.

The FY 2021 resources requested for the Corporate Support Business Line constitute 31 percent of the agency's total budget authority with a \$8.0 million decrease, including 23 FTE, when compared to the FY 2020 Enacted Budget. The FY 2021 budget request supports continuing efforts to modernize IT to increase productivity and security, leverage data as a strategic asset, share quality services, leverage common contracts and best practices to drive cost reductions and efficiencies, improve outcomes through Federal IT spending transparency, better manage major acquisitions, increase the efficiency and effectiveness of administrative services, develop the agency workforce, focus on the highest value work, and improve the customer experience with Federal services.

### CHANGES FROM FY 2020 ENACTED BUDGET

Resources decrease primarily as a result of the following:

- Elimination of the planned restack and renovation of two floors in the OWFN building (-\$5.6M);
- Planned release of the 3WFN conference space and a floor of the TWFN building (-\$1.5M);
- Energy efficiencies gained from building improvements (-\$0.6M);
- Efficiencies and improved budget estimates that better align projected workload with activities related to administrative support services, facilities management, and physical and personnel security (-\$3.0M, -7 FTE);
- Training efficiencies from course streamlining and learning modernization efforts, resulting in additional course consolidations and blended learning solutions (-\$0.3M, -1 FTE);
- Declining workload as a result of the increased use of shared services and realization of automation within various processes across financial management (-\$0.1M, -3 FTE);
- Reduced support for modernization of IT tools and services, including help desk support and service delivery (-\$0.7M, -4 FTE);
- Reduced agency content management system costs and infrastructure costs (-\$2.9M);
- Reduced cost of telecommunication technologies and transition to governmentwide shared services (-\$2.4M);
- Replacement of video teleconferencing services with an in-house alternative solution (-\$0.5M);
- Decreased support for agency telecommunication moves (-\$0.7M);
- Reduced costs as a result of integrating the agency's financial and procurement systems (-\$2.8M); and

These decreases are partially offset by increases primarily as a result of the following:

- Investment in streamlining agency IT service delivery (+\$0.6M);
- Enhanced cybersecurity oversight services internal to the agency, including the implementation of program and policy changes (+\$0.8M);
- Support for the agency's transition to cloud-hosted environments (+\$0.8M);
- Implementation of the capability to electronically invoice licensees and allow for the submission of electronic payments (+\$0.7M); and

- Migration of the agency's acquisition system to a native capability within the accounting system (+\$2.2M).

The resources for IT/IM activities decrease when compared to the FY 2020 total budget authority, which includes the use of \$6.8 million in authorized prior-year carryover to fund these activities. Please refer to Appendix L, "FY 2020 Total Budget Authority Comparison," which provides a comparison of the FY 2021 request to the FY 2020 Budget Authority.

## **MAJOR ACTIVITIES**

The major activities within the Corporate Support Business Line include the following:

- Provide rent and utilities for NRC Headquarters, regional offices, and the Technical Training Center, as well as subsidized rent and utilities for the space in 3WFN occupied by the U.S. Food and Drug Administration; building operations and maintenance; general building alterations; furniture and workstation modifications; labor and custodial services; guard services; security investigations; drug testing; security equipment and support; insider threat program; administrative helpdesk; transportation services; transit subsidies; print and publication services; transcription and adjudicatory hearing support; technical editing; graphic design; audiovisual services; postage and mail services; and office supplies (\$73.6M, 71 FTE).
- Maintain and operate the agency's financial systems and manage budget development and execution, agency financial services, accounting and reporting activities, development of the annual fee rule, and administration of the internal control program (\$32.9M, 93 FTE).
- Conduct human resource management activities, work-life services, employee and labor relations, enhanced strategic workforce planning, and permanent change-of-station, including resident inspector moves (\$20.2M, 43 FTE).
- Manage the IT/IM portfolio, including the following (\$94.9M, 174 FTE):
  - Maintain cost-effective enterprise solutions and secure infrastructure technologies and services to enable the agency's mission and corporate functions.
  - Promote mobility to respond to mission needs.
  - Ensure effective management and appropriate dissemination of physical and electronic information and records.
  - Promote public access to agency information and support involvement in the agency's regulatory activities to ensure transparency.
  - Support essential information collections and implementation of the Freedom of Information Act and Privacy Act.
  - Develop and implement cybersecurity policies and standards to mitigate cybersecurity vulnerabilities, threats, and incidents.

## **CORPORATE SUPPORT**

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- Prevent unauthorized disclosure of NRC information and protect classified and controlled unclassified information.
- Support Enterprise Architecture, capital planning, IT governance, and other functions of the Chief Information Officer.
- Improve outcomes through Federal IT spending transparency.
- Make targeted investments in transformational activities to enable new capabilities and yield future cost savings or avoidance, such as modernizing IT to increase productivity and security; support disaster recovery and continuity of operations planning, testing, and management; and move from the current tape library backup system to a cloud backup solution.
- Maintain the civil rights complaints process; promote affirmative employment, diversity, and inclusion; ensure compliance with small business laws; provide the maximum practicable prime and subcontract opportunities for small businesses; and continue efforts to implement the NRC's Outreach and Compliance Coordination Program (\$3.2M, 13 FTE).
- Provide agencywide policy formulation and guidance; legal advice and appellate adjudicatory support; independent evaluations of agency programs and implementation of Commission policy directives; conduct congressional, protocol, and public affairs activities, management and oversight of agency programs; and the operation of the Commissioners' offices (\$29.8M, 133 FTE).
- Maintain the agency's corporate support training infrastructure, including operation of the Professional Development Center, organizational development, training systems, and corporate-related external training (\$3.9M, 12 FTE).
- Perform contract operations and oversight necessary to ensure that the agency obtains goods and services to support mission needs (\$13.3M, 49 FTE).

## SIGNIFICANT ACCOMPLISHMENTS IN FY 2019

The significant accomplishments within the Corporate Support Business Line include:

- Released approximately 47,000 square feet of office and related space in the 3WFN building, yielding savings in annual rent and security costs in FY 2019 and beyond. NRC also prepared to release an additional 55,000 square feet in the 3WFN building and approximately 24,000 square feet of warehouse space in FY 2020.
- Revised the FY 2021 budget formulation process to incorporate NEIMA mandates, including implementing a new annual fee calculation in the agency's budget formulation system, identifying funding amounts of requested activities of the Commission, and meeting the operating power reactors annual fee cap.
- Established an agencywide Data Quality Plan to comply with new OMB requirements under A-123 to improve NRC's control environment and to facilitate data analytics.
- Completed the annual Strategic Workforce Planning (SWP) process, which ensures that NRC considers insights from a 5-year workload forecast in its strategic planning, human capital management, and budget formulation activities. The results help NRC recruit and develop a workforce with the capacity and agility to accomplish NRC's mission.
- Implemented the U.S. Office of Personnel Management (OPM) Federal Shared Service Provider solution with USA Learning. This introduces new capabilities and an automated performance appraisal software module, which will replace the legacy manual processes and paper records.
- Completed the refresh of end-user workstations with new laptops two months ahead of schedule to increase employees' mobility options and to utilize a number of IT modernization options designed to facilitate collaboration and information sharing.
- Continued to transition to Microsoft Office 365; specifically, the agency migrated data center-hosted personal drives to cloud-based OneDrive and data center-hosted SharePoint to cloud-based SharePoint Online.
- Digitized more than 34 percent of NUDOCS microforms using artificial intelligence and computer visioning. Initiated digitization of legacy records; specifically, completed set-up of digitization environment to ingest more than 42 million images of Atomic Energy Commission and NUDOCS microforms and paper to improve access and streamline retrievability of power reactor and materials licensing and design basis information.
- Established a cloud strategy for the agency, completed cloud architecture for infrastructure as a service to accept projects/applications into the cloud, and continued to transition to cloud-based data solutions.
- Received the 2019 Federal Information Technology Acquisition Reform Act Most Improved Agency Award.
- Received an "A" Small Business Procurement Scorecard. This marked the 7<sup>th</sup> consecutive year that the Small Business Administration has recognized the NRC for meeting its goal.

## CORPORATE SUPPORT

### OTHER INDICATORS

#### ADMINISTRATIVE SERVICES

NRC-Leased Space Compared to the Agency's FY 2015 Freeze the Footprint Baseline (1,079,543 Usable Square Feet (USF)—Total NRC Portfolio)* (CS-18)			
Fiscal Year	Target	Actual	Comment
	New in FY 2020		
FY 2020	619,000 USF**		This was a new indicator for FY 2020 and replaced CS-05.
FY 2021	1,005,000 USF***		
<p>*The 1,033,171 USF referenced in the title of this indicator for the FY 2020 Congressional Budget Justification only included the agencywide office portfolio. The 1,079,543 USF referenced for FY 2021 is the total agency office and warehouse real property footprint.</p> <p>**The FY 2020 target represents only the White Flint Campus office portfolio goal.</p> <p>***The FY 2021 target was amended to include the entire agency portfolio goal, including the regions.</p>			

#### HUMAN RESOURCE MANAGEMENT

Percentage of Key Human Capital Indicators Met* (CS-16)			
Fiscal Year	Target	Actual	Comment
FY 2015	≥75	75	
FY 2016	≥75	75	
FY 2017	≥75	75	
FY 2018	≥75	75	
FY 2019	≥75	100	
FY 2020	≥75		
FY 2021	>75		
<p>*The specific subindicators that will be included under this indicator will be evaluated and updated on an annual basis to reflect agency needs. Examples may include the percentage of time that informal complaints and investigations of formal complaints of discrimination are within time guidelines; whether agency staffing levels are equal to or less than the agency FTE ceiling; the NRC's averaged index scores for employee engagement, global satisfaction, and new IQ (diversity and inclusion); the number of training assessments completed for efficiency and effectiveness gains using blended learning solutions; and the percentage of strategic workforce planning and competency activities planned that are successfully implemented.</p>			

#### FINANCIAL MANAGEMENT

Percentage of Collections Achieved When Compared with Projected Collections (CS-06)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	99.6	
FY 2016	100	98.4	
FY 2017	100	98.1	
FY 2018	>98	98.9	The target was reduced to 98 percent to comply with the regulatory requirement to collect "approximately" 90 percent of the agency's appropriation.
FY 2019	>98	99	
FY 2020	≥98		
FY 2021*	≥98		
<p>*The NRC will implement NEIMA in FY 2021. Indicator will track the percentage of statutory fee collection requirements to recover 100 percent of the relevant budget authority of the Commission less the "Excluded Activities" to the maximum extent practicable.</p>			



Percentage of Fee Transformation Items Planned That Are Successfully Implemented (CS-19)			
Fiscal Year	Target	Actual	Comment
	New in FY 2020		
FY 2020	≥80		
FY 2021	Discontinue		The project is anticipated to be completed by the end of FY 2020.

## INFORMATION TECHNOLOGY/INFORMATION MANAGEMENT

The NRC's Score on the Annual American Customer Satisfaction Index for Federal Web Sites (CS-10)			
Fiscal Year	Target	Actual	Comment
FY 2015	73	79	
FY 2016	73	81	
FY 2017	73	78	
FY 2018	73	78	
FY 2019	73	80	
FY 2020	73		
FY 2021	76		Target adjusted to better reflect actual performance in this area.

Percentage of Projects within Schedule and within Budget Based on Information Collected for Major IT Investments Reported to the OMB IT Dashboard (CS-13)			
Fiscal Year	Target	Actual	Comment
FY 2019	≥ 80% projects on schedule and on budget	95	
FY 2020	≥ 85% of projects within schedule, and ≥ 80% of projects within budget		Based on experience using this indicator in FY 2018, the targets for schedule and budget are being separated to provide increased transparency for the information from the OMB IT Dashboard. In addition, the target for projects within schedule is being adjusted to continue the focus on improving agency performance.
FY 2021	≥ 85% of projects within schedule, and ≥ 80% of projects within budget		

## ACQUISITIONS

Percentage of Spend Under Management* (CS-03)			
Fiscal Year	Target	Actual	Comment
FY 2019	38	52	
FY 2020	40		Target will be equal to the target set for Chief Financial Officers Act of 1990 agencies by the President's Management Council for FY 2020.
FY 2021	TBD		Target will be equal to the target set for Chief Financial Officers Act of 1990 agencies by the President's Management Council for FY 2021.
*Spend under management is a key measure of an agency's use of smart buying practices, such as strong strategic leadership and oversight, and the collection and sharing of critical data, including terms and conditions, performance, and prices paid.			

## CORPORATE SUPPORT

### DISCONTINUED INDICATORS

Percentage of Eligible Service Contracting Dollars (Contracts over \$25,000) That Use Performance-Based Contracting Techniques during the Fiscal Year (CS-01)			
Fiscal Year	Target	Actual	Comment
FY 2015	65	68	
FY 2016	65	63	The annual metric for performance-based contracting ran 1.8 percent less than the annual target, which is within the margin of error.
FY 2017	65	62	Many contracts awarded by the NRC were not suitable to be performance-based contracts.
FY 2018	Discontinued		Not all services must be awarded as performance-based contracts. Therefore, this indicator did not provide useful information on the effectiveness of the NRC's acquisition organization and was discontinued.
FY 2019	N/A		
FY 2020	N/A		

Percentage of Required Synopses for Acquisitions That Are Posted on the Governmentwide Point-of-Entry Web Site (www.FedBizOpps.gov) during the Fiscal Year (CS-02)			
Fiscal Year	Target	Actual	Comment
FY 2015	100	100	
FY 2016	100	100	
FY 2017	100	100	
FY 2018	Discontinued		The Federal Acquisition Regulation requires the posting of synopses on FedBizOpps for procurements over a certain dollar value. Posting required synopses has never been a challenge at the NRC, and the goal of 100 percent has been met every year. Because this indicator did not provide useful information on the effectiveness of the NRC's acquisition organization, it was discontinued.
FY 2019	N/A		
FY 2020	N/A		

Percentage of Time Physical Security Responds to Incidents That Result in Harm to Occupants, Damage to NRC Property, or Loss of Protected Information within 15 Minutes of Notification (CS-04)			
Fiscal Year	Target	Actual	Comment
FY 2014	New indicator in		
FY 2015	FY 2016		
FY 2016	90	100	
FY 2017	90	100	
FY 2018	90	100	
FY 2019	Discontinued		This indicator is tracked by alarm response logs that the security guards maintain to ensure that the requirement to respond to an alarm in specific agency rooms, such as secure or other limited-access areas, within 15 minutes of an alarm is met. Given this level of operational detail, this is now maintained as an internal agency indicator.
FY 2020	N/A		

Percentage of NRC-Leased Space Compared to the Agency's FY 2012 Freeze the Footprint Baseline (1,170,242 USF) (CS-05)			
Fiscal Year	Target	Actual	Comment
FY 2015	N/A		
FY 2016	N/A		
FY 2017	N/A		
FY 2018	N/A		
FY 2019	96	89	New indicator for FY 2019.
FY 2020	Discontinued		Replaced with indicator CS-18. For FY 2020, the percentage is based upon the 2015 Reduce the Footprint office space baseline of 1,033,171 USF.

Percentage of Annual Billings That Are Past Due Accounts Receivable (CS-07)			
Fiscal Year	Target	Actual	Comment
FY 2015	1	1	
FY 2016	1	0.7	
FY 2017	1	1.6	The target was not met as a result of \$3,720,089 in invoices that were only 2 days overdue, and \$966,210 in invoices protected by the Westinghouse Electric Company, LLC, bankruptcy filing.
FY 2018	<1	0.7	
FY 2019	<1	0.5	
FY 2020	Discontinued		Indicator is tracked internally to support streamlining corporate support indicator reporting.

Percentage of Nonsalary Payments Made Electronically and Accurately within Established Schedule (CS-08)			
Fiscal Year	Target	Actual	Comment
FY 2015	98	98	
FY 2016	98	98	
FY 2017	98	99.6	
FY 2018	98	99	
FY 2019	98	99	
FY 2020	Discontinued		Indicator is tracked internally to support streamlining corporate support indicator reporting.

Number of Targets Met Out of Four for Key Information Dissemination Channels (Freedom of Information Act, Public Meetings Notices, and Public Document Release Timeframe)* (CS-09)			
Fiscal Year	Target	Actual	Comment
FY 2015	3	3	
FY 2016	3	4	
FY 2017	4	5	
FY 2018	4	4	
FY 2019	Discontinued		Most of the targets associated with this indicator are either tracked at the agency level or subject to other external reporting, or both. As such, this indicator will continue to be tracked internally to ensure that the agency is meeting the multiple dissemination targets.
FY 2020	N/A		

\*Targets: (1) Percentage of time the NRC responds to Freedom of Information Act requests within 20 working days (75 percent), (2) percentage of Category 1, 2, and 3 meetings on regulatory issues for which the NRC posted a meeting notice on the public meeting notice Web site at least 10 days in advance of the meeting (90 percent), (3) percentage of nonsensitive, unclassified regulatory documents generated by the NRC and sent to the agency's Document Processing Center that are released to the public by the sixth working day after the date of the document (90 percent), and (4) percentage of nonsensitive, unclassified regulatory documents received by the NRC that are released to the public by the sixth working day after the document is added to the Agencywide Documents Access and Management System main library (90 percent).

Percentage of Agency Investments That Are Green per OMB's IT Dashboard (CS-11)			
Fiscal Year	Target	Actual	Comment
FY 2015	80	Target met	The OMB Exhibit 300 score indicator "IT Investment Management—Average Score on a Scale of 1–10 for All NRC IT Investments on the OMB IT Dashboard," was replaced with "Percentage of Agency Investments That Are Green per OMB's IT Dashboard," beginning in FY 2015.
FY 2016	80	90	
FY 2017	80	84	
FY 2018	80	85	
FY 2019	Discontinued		Replaced for FY 2019 with indicator CS-13, which provides more quantitative information.
FY 2020	N/A		

## CORPORATE SUPPORT

<b>Satisfactory Rating Achieved for the NRC's Cybersecurity Program Effectiveness Based upon the Annual Inspector General Federal Information Security Management Act (FISMA) Audit (CS-12)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	Yes	Yes	OIG did not report any material weaknesses in its evaluation report (OIG-16-A-01).
FY 2016	Yes	Yes	OIG did not report any material weaknesses in its evaluation report (OIG-17-A-01).
FY 2017	Yes	Yes	OIG did not report any material weaknesses in its evaluation report (OIG-18-A-01).
FY 2018	Discontinued		This indicator does not measure the impact or effectiveness of the cybersecurity program. The Cybersecurity Performance Index will be substituted, which will demonstrate the change in cybersecurity posture year over year, with results reported internally.
FY 2019	N/A		
FY 2020	N/A		

<b>The NRC's Annual Average Rank among Top Agencies across the U.S. Office Personnel Management (OPM) Human Capital Indices on the Federal Employee Viewpoint Survey (FEVS) (CS-14)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	≤5	4	Based on the 2016 FEVS results from OPM, the NRC was ranked seventh overall. To ensure an engaged workforce, the NRC implemented an agencywide action plan aimed at cultivating an NRC culture that fosters a greater climate of trust, as well as office-specific plans. Action leads have been encouraged to revise plans, as needed, in accordance with current FEVS results.
FY 2016	≤5	7	
FY 2017	≤5	9	
FY 2018	Discontinued		Replaced with indicator CS-15.
FY 2019	N/A		
FY 2020	N/A		

<b>The NRC's Averaged Index Scores for Employee Engagement, Global Satisfaction, and New IQ (Diversity and Inclusion) Remain at Least 7.5 Percent Above the FEVS Governmentwide Average Score (CS-15)</b>			
<b>Fiscal Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comment</b>
FY 2015	N/A		
FY 2016	N/A		
FY 2017	N/A		
FY 2018	≥7.5	10	New indicator for FY 2018.
FY 2019	≥7.5	6.76	The NRC's average FEVS indices measuring employee engagement, global satisfaction, and New IQ fell short of the high standard set forth. The agency is investing in improving future FEVS scores.
FY 2020	Discontinued		This indicator is tracked internally to support streamlining corporate support indicator reporting.

**INTEGRATED UNIVERSITY PROGRAM**

<b>Integrated University Program</b> (Dollars in Millions)								
<b>Business Line</b>	<b>FY 2019 Actuals</b>		<b>FY 2020 Enacted</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>
Integrated University Program	\$14.8	0.0	\$16.0	0.0	\$0.0	0.0	\$(16.0)	0.0
<b>Total</b>	<b>\$14.8</b>	<b>0.0</b>	<b>\$16.0</b>	<b>0.0</b>	<b>\$0.0</b>	<b>0.0</b>	<b>\$(16.0)</b>	<b>0.0</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

The Integrated University Program provides grants to academic institutions to support education in nuclear science and engineering and related fields. The NRC has provided funding for university research and development as well as for scholarships, fellowships, and faculty development. In addition, the agency strives to include minority-serving institutions as part of the program through the competitive grant selection process.

**CHANGES FROM FY 2020 ENACTED**

Integrated University Program resources are not included in the FY 2021 President’s Budget.

**SIGNIFICANT ACCOMPLISHMENTS IN FY 2019**

The NRC awarded 45 grants totaling nearly \$15 million in grants to 33 academic institutions for scholarships, fellowships, and faculty development in 19 states and Puerto Rico, including minority serving institutions.



## **ANNUAL PERFORMANCE PLAN**

The NRC published its [strategic plan](#) (NUREG-1614, Volume 7) for FY 2018–FY 2022 in February 2018. The plan lists the agency’s strategic goals and their associated objectives. This chapter of the NRC’s Performance Budget provides the performance goals and performance indicators and criteria associated with the NRC’s strategic plan.

The Government Performance and Results Act (GPRA) Modernization Act of 2010 requires a more integrated framework for planning and performance management that demonstrates a governance structure showing better connection of plans, programs, and performance information in the Performance Budget. More specifically, the law requires an agency to describe how the performance goals contained in its performance plan contribute to the goals and objectives established in the agency’s strategic plan. The performance indicators in this section reflect these goals and objectives.<sup>6</sup>

The NRC’s mission is to license and regulate the Nation’s civilian use of radioactive materials to provide reasonable assurance of adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. Therefore, the trends for progress on the agency’s strategic goals and objectives are to be at either zero or very low levels. The agency works to prevent or minimize the outcomes tracked by the safety and security performance indicators.

### **FY 2021 Strategic Goals**

**Goal 1:** *Safety: Ensure the safe use of radioactive materials.*

*Safety Objective 1: Prevent, mitigate, and respond to accidents and ensure radiation safety.*

**Goal 2:** *Security: Ensure the secure use of radioactive materials.*

*Security Objective 1: Ensure protection of nuclear facilities and radioactive materials.*

*Security Objective 2: Ensure protection of classified and Controlled Unclassified Information.*

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<sup>6</sup> On July 20, 2011, OMB exempted the NRC from the GPRA Modernization Act of 2010 requirement for establishing agency or cross-agency priority goals because of the NRC’s statutory mission to be an independent regulator of the civilian use of radioactive materials. Thus, this narrative includes no such goals.

## ANNUAL PERFORMANCE PLAN

### RELATING RESOURCES TO GOALS

The following table shows the alignment of the NRC’s fully costed Nuclear Reactor Safety Program and Nuclear Materials and Waste Safety Program with the safety and security goals. The full cost includes an allocation of the agency’s infrastructure and support costs to specific programs.

<b>Alignment of Resources to NRC Goals</b> (Dollars in Millions) (Excludes Office of the Inspector General)						
<b>Major Programs</b>	<b>FY 2020 Enacted*</b>			<b>FY 2021 Request</b>		
	<b>Safety \$M</b>	<b>Security \$M</b>	<b>Total \$M</b>	<b>Safety \$M</b>	<b>Security \$M</b>	<b>Total \$M</b>
Nuclear Reactor Safety	661.0	2.5	663.5	665.1	2.6	667.7
Nuclear Materials and Waste Safety	164.0	14.8	178.7	169.9	12.2	182.2
<b>Total</b>	<b>\$808.9</b>	<b>\$17.3</b>	<b>\$842.2</b>	<b>\$835.1</b>	<b>\$14.8</b>	<b>\$849.9</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*FY 2020 Enacted does not include \$40 million of authorized prior-year carryover.

### PERFORMANCE INDICATORS: FY 2018–FY 2022

The NRC developed the following performance indicators in conjunction with the development of the agency’s FY 2018–2022 Strategic Plan.

<b><u>Safety Objective 1:</u></b>	<i>Prevent, mitigate, and respond to accidents and ensure radiation safety.</i>
<b>Performance Goal 1:</b>	Prevent radiation exposures that significantly exceed regulatory limits.
<b>Performance Indicator:</b>	Number of radiation exposures that meet or exceed Abnormal Occurrence (AO) Criteria I.A.1 (unintended radiation exposure to an adult), I.A.2 (unintended radiation exposure to a minor), or I.A.3 (radiation exposure that has resulted in unintended permanent functional damage to an organ or physiological system) <sup>7</sup>
<b>Timeframe:</b>	Annual

<sup>7</sup> All references to the AO criteria in this section refer to the criteria approved by the Commission in SRM-SECY-17-0019, “Staff Requirements—SECY-17-0019—Final Revision to Policy Statement on Abnormal Occurrence Reporting Criteria,” dated August 24, 2017.



Business Line		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Operating Reactors	Target	0	0	0	0	0	0
Operating Reactors	Actual	0	0	0	0		
New Reactors	Target	0	0	0	0	0	0
New Reactors	Actual	0	0	0	0		
Fuel Facilities	Target	0	0	0	0	0	0
Fuel Facilities	Actual	0	0	0	0		
Decommissioning and Low-Level Waste	Target	0	0	0	0	0	0
Decommissioning and Low-Level Waste	Actual	0	0	0	0		
Spent Fuel Storage and Transportation	Target	0	0	0	0	0	0
Spent Fuel Storage and Transportation	Actual	0	0	0	0		
Nuclear Materials Users	Target	< 3	< 3	< 3	< 3	< 3	< 3
Nuclear Materials Users	Actual	2	0	1	1		

**Performance Goal 2:** Prevent releases of radioactive materials that significantly exceed regulatory limits.

**Performance Indicator:** Number of releases of radioactive materials that meet or exceed AO Criterion I.B (discharge or dispersal of radioactive material from its intended place of confinement)

**Timeframe:** Annual

Business Line		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Operating Reactors	Target	0	0	0	0	0	0
Operating Reactors	Actual	0	0	0	0		
New Reactors	Target	0	0	0	0	0	0
New Reactors	Actual	0	0	0	0		
Fuel Facilities	Target	0	0	0	0	0	0
Fuel Facilities	Actual	0	0	0	0		
Decommissioning and Low-Level Waste	Target	0	0	0	0	0	0
Decommissioning and Low-Level Waste	Actual	0	0	0	0		
Spent Fuel Storage and Transportation	Target	0	0	0	0	0	0
Spent Fuel Storage and Transportation	Actual	0	0	0	0		
Nuclear Materials Users	Target	0	0	0	0	0	0
Nuclear Materials Users	Actual	0	0	0	0		

**Performance Goal 3:** Prevent the occurrence of any inadvertent criticality events.

**Performance Indicator:** Number of instances of unintended nuclear chain reactions involving NRC-licensed radioactive materials

**Timeframe:** Annual

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Business Line		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Operating Reactors	Target	0	0	0	0	0	0
Operating Reactors	Actual	0	0	0	0		
Fuel Facilities	Target	0	0	0	0	0	0
Fuel Facilities	Actual	0	0	0	0		
Decommissioning and Low-Level Waste	Target	0	0	0	0	0	0
Decommissioning and Low-Level Waste	Actual	0	0	0	0		

**Performance Goal 4:** Prevent accident precursors and reductions of safety margins at commercial nuclear power plants (operating or under construction) that are of high safety significance.

**Performance Indicator:** Number of malfunctions, deficiencies, events, or conditions at commercial nuclear power plants (operating or under construction) that meet or exceed AO Criteria II.A–II.E (commercial nuclear power plant licensees)

**Timeframe:** Annual

Business Line		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Operating Reactors	Target	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3
Operating Reactors	Actual	0	0	0	0		
New Reactors	Target	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3
New Reactors	Actual	0	0	0	0		

**Performance Goal 5:** Prevent accident precursors and reductions of safety margins at nonreactor facilities or during transportation of nuclear materials that are of high safety significance.

**Performance Indicator:** Number of malfunctions, deficiencies, events, or conditions at nonreactor facilities or during transportation of nuclear materials that meet or exceed AO Criteria III.A or III.B (events at facilities other than nuclear power plants and all transportation events)

**Timeframe:** Annual

Business Line		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Fuel Facilities	Target	0	0	0	0	0	0
Fuel Facilities	Actual	1*	0	0	0		
Decommissioning and Low-Level Waste	Target	0	0	0	0	0	0
Decommissioning and Low-Level Waste	Actual	0	0	0	0		
Spent Fuel Storage and Transportation	Target	0	0	0	0	0	0
Spent Fuel Storage and Transportation	Actual	0	0	0	0		

\*Reported in the FY 2018 Congressional Budget Justification. As referenced in NUREG-0090, Volume 39, "Report to Congress on Abnormal Occurrences, Fiscal Year 2016," dated May 2, 2017 (Agencywide Documents Access and Management System Accession No. ML17103A289), an event occurred at the Westinghouse Columbia Fuel Fabrication Facility, Columbia, SC (NRC16-03).

**Security Objective 1:** *Ensure protection of nuclear facilities and radioactive materials.*

**Performance Goal 1:** Prevent sabotage, theft, diversion, or loss of risk-significant quantities of radioactive material.

**Performance Indicator:** Number of instances of sabotage, theft, diversion, or loss of risk-significant quantities of radioactive material that meet or exceed AO Criteria I.C.1 (stolen, abandoned, or unrecovered lost), I.C.2 (radiological sabotage), or I.C.3 (substantiated case of actual theft, diversion, or loss of a formula quantity of SNM or inventory discrepancy)

**Timeframe:** Annual

Business Line		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
All Business Lines	Target	0	0	0	0	0	0
All Business Lines	Actual	0	0	0	1*		

\*In 2019, an NRC Agreement State reported the theft of three industrial radiography cameras that were recovered by law enforcement within hours (Event Number: 54033).

**Performance Goal 2:** Prevent substantial breakdowns of physical security, cybersecurity, or material control and accountability.

**Performance Indicator:** Number of substantial breakdowns of physical security, cybersecurity, or material control and accountability that meet or exceed AO Criteria I.C.4 (substantial breakdown of physical security, cybersecurity, or material control and accountability), or I.C.3 (substantiated case of actual theft, diversion, or loss of a formula quantity of SNM or an inventory discrepancy)

**Timeframe:** Annual

Business Line		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
All Business Lines	Target	≤1	≤1	≤1	≤1	≤1	≤1
All Business Lines	Actual	0	0	0	0		

**Security Objective 2:** *Ensure protection of classified and Controlled Unclassified Information.*

**Performance Goal 3:** Prevent significant unauthorized disclosures of classified or Safeguards Information.

**Performance Indicator:** Number of significant unauthorized disclosures of classified or Safeguards Information by licensees as defined by AO Criterion I.C.5 (significant unauthorized disclosures of classified information or Safeguards Information) and by NRC employees or contractors, as defined by NRC internal criteria

**Timeframe:** Annual

Business Line		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
All Business Lines	Target	0	0	0	0	0	0
All Business Lines	Actual	0	0	0	0		

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### VERIFICATION AND VALIDATION OF PERFORMANCE INDICATORS

**Goal 1: Safety:** *Ensure the safe use of radioactive materials.*

#### Nuclear Reactor Safety

**Safety Objective 1:** *Prevent, mitigate, and respond to accidents and ensure radiation safety.*

#### **Performance Indicators:**

<b>FY 2016–2021:</b>	<b>Performance Goal 1:</b> Number of radiation exposures that meet or exceed AO Criteria I.A.1 (unintended radiation exposure to an adult), I.A.2 (unintended radiation exposure to a minor), or I.A.3 (radiation exposure that has resulted in unintended permanent functional damage to an organ or physiological system)
<b>Reactor Safety Target:</b>	Zero
<b>Verification:</b>	Licensees report overexposures through the licensee event report (LER) process, and the reports are then entered into a searchable database. The database is used to identify those LERs that report overexposures. NRC resident inspectors stationed at each nuclear power plant provide a high degree of assurance that all events meeting reporting criteria are reported to the NRC. In addition, the NRC conducts inspections if there is any indication that an exposure exceeded, or could have exceeded, a regulatory limit. Finally, areas of the facility that may be subject to radiation contamination have monitors that record radiation levels. These monitors would immediately reveal any instances in which high levels of radiation exposure occurred.
<b>Validation:</b>	Given the nature of the process of using radioactive materials to generate power, overexposure to radiation is a potential danger from the operation of nuclear power plants. Such exposure to radiation in excess of the applicable regulatory limits may potentially occur through either a nuclear accident or other malfunctions at the plant. Consequently, tracking the number of overexposures that occur at nuclear reactors is an important indicator of the degree to which safety is being maintained.

<b>FY 2016–2021:</b>	<b>Performance Goal 2:</b> Number of releases of radioactive materials that meet or exceed AO Criterion I.B (discharge or dispersal of radioactive material from its intended place of confinement)
<b>Reactor Safety Target:</b>	Zero
<b>Verification:</b>	Licensees report environmental releases of radioactive materials that are in excess of regulations or license conditions through the LER process, and the reports are then entered into a searchable database. The database is used to identify those LERs reporting

	releases, and the number of reported releases is then applied to this indicator. The NRC also conducts periodic inspections of licensees to ensure that they properly monitor and control releases to the environment through effluent pathways. In addition, onsite monitors record any occasions when a plant releases radiation into the environment. If the inspections or the monitors reveal any indication that an accident or inadvertent release has occurred, the NRC conducts follow-up inspections.
<b>Validation:</b>	The generation of nuclear power creates radioactive materials that are released into the environment in a controlled manner. These radioactive discharges are subject to regulatory controls that limit the amount discharged and the resultant dose to members of the public. Consequently, the NRC tracks all releases of radioactive materials in excess of regulatory limits as a performance indicator because large releases in excess of regulatory limits have the potential to endanger public safety or harm the environment. The NRC inspects every nuclear power plant for compliance with regulatory requirements and specific license conditions related to radiological effluent releases. The inspection program includes enforcement actions for violations of the regulations or license conditions, based on the severity of the event. This performance indicator includes the public dose limits in 10 CFR Part 20, "Standards for Protection against Radiation."

<b>FY 2016–2021:</b>	<b>Performance Goal 3:</b> Number of instances of unintended nuclear chain reactions involving NRC-licensed radioactive materials
<b>Reactor Safety Target:</b>	Zero
<b>Verification:</b>	<p>An accidental criticality is defined in 10 CFR 70.52(a). Each NRC program office or region reviews event documents for its specific program area to identify events as potential AOs.</p> <p>The program office or regional AO coordinators will assess an event to determine whether it meets the AO criteria. If an event meets the AO criteria, the program office or regional AO coordinator will develop a potential AO event description. The potential AO event description will include the applicable AO criteria and contain the information specified in Section 208 of the Energy Reorganization Act of 1974, such as the nature and probable consequences of the event. The AO coordinator in the NRC’s Office of Nuclear Regulatory Research coordinates with the program office and regional AO coordinators about incidents and events identified as potential AOs that generate interest from the Executive Director for Operations.</p>
<b>Validation:</b>	The agency is required to submit a "Report to Congress on Abnormal Occurrences" each FY for those events that, by Commission determination, meet the AO criteria. The staff has developed and revised these AO criteria over several decades, with extensive review by both the Commission and the public. In SECY-95-083, "Revised Abnormal Occurrence Criteria," dated

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	<p>April 5, 1995, the staff describes the basis of the AO criteria as follows:</p> <p><i>The AO reporting policy has been developed to comply with the legislative intent of Section 208 of the Energy Reorganization Act of 1974, as amended, to keep Congress and the public informed of unscheduled incidents or events which the Commission considers significant from the standpoint of public health and safety.... The thresholds are generally above the normal level of reporting events by licensees to NRC to exclude those events which involve some variance from regulatory limits, but are not significant enough from the standpoint of public health and safety to be reported to Congress.</i></p> <p>For each event that meets the AO criteria, the NRC includes in the report a description of the incident or event, as well as any action taken to prevent recurrence. Such actions include those taken by licensees, as well as more programmatic actions deemed necessary by the Commission to prevent recurrence across a class or classes of licensees. Establishing performance indicators at the threshold levels described by the AO criteria is appropriate and consistent with the principle that the NRC's regulatory processes (e.g., licensing, oversight, enforcement) are adequate to address a wide scope of infractions against regulatory requirements and do not generally warrant a focused reevaluation of the programs associated with those processes for every infraction. Therefore, only significant deviations from the regulatory requirements or unacceptable frequencies of occurrence of such deviations should be indicators of the need to reevaluate regulatory strategies and programs. This principle has been central to the staff's selection of performance goals and performance indicator thresholds for determining whether the NRC's performance in reasonably ensuring the safe and secure use of radioactive material has been adequate.</p>
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<b>FY 2016–2021:</b>	<b>Performance Goal 4:</b> Number of malfunctions, deficiencies, events, or conditions at commercial nuclear power plants (operating or under construction) that meet or exceed AO Criteria II.A–II.E (commercial nuclear power plant licensees)
<b>Reactor Safety Target:</b>	Zero
<b>Verification:</b>	The data for this performance indicator are collected in two ways as part of the NRC's ROP. NRC inspectors report inspection findings at a minimum on a quarterly basis. Inspectors use formal detailed inspection procedures to review plant operations and maintenance. NRC managers review inspection findings to assess their significance as part of the ROP's significance determination process. Licensees collect the data for performance indicators and submit them to the NRC quarterly. The significance of the data is determined by thresholds for each indicator. The NRC conducts inspections of licensee processes

	<p>for collecting and submitting the data to ensure completeness, accuracy, consistency, timeliness, and validity.</p> <p>The NRC enhances the quality of its inspections through inspector feedback and periodic reviews of inspection results. The NRC inspectors are trained through a rigorous qualification program. The quality of performance indicators is improved through continuous feedback from licensees and inspectors that is incorporated into guidance documents. The NRC publishes the inspection findings and performance indicators on the agency's Web <a href="#">site</a> and incorporates feedback received from all stakeholders, as appropriate.</p>
<b>Validation:</b>	<p>The inspection findings and performance indicators that the ROP uses cover a broad range of plant operations and maintenance. NRC managers review significant issues that are identified, and inspectors conduct supplemental inspections of selected aspects of plant operations, as appropriate. On an annual basis, senior agency managers review a self-assessment of the ROP and review plants that are identified as having performance issues and report the results to the Commission.</p>

**Nuclear Materials and Waste Safety**

**Safety Objective 1:**            *Prevent, mitigate, and respond to accidents and ensure radiation safety.*

**Performance Indicators:**

<b>FY 2016–2021:</b>	<b>Performance Goal 1:</b> Number of radiation exposures that meet or exceed AO Criteria I.A.1 (unintended radiation exposure to an adult), I.A.2 (unintended radiation exposure to a minor), or I.A.3 (radiation exposure that has resulted in unintended permanent functional damage to an organ or physiological system)
<b>Materials Safety Target (Fuel Facilities, Nuclear Materials Users, and Spent Fuel Storage and Transportation):</b>	Less than or equal to three
<b>Waste Safety Target (Decommissioning and Low-Level Waste):</b>	Zero
<b>Verification:</b>	This performance indicator includes any event involving licensed radioactive materials that results in significant radiation exposures to members of the public or occupational workers that exceed the dose limits in the AO reporting criteria. Because of the extremely high doses used during medical applications of radioactive materials, it is also appropriate to use a radiation exposure that results in unintended permanent functional damage to an organ or a physiological system to a radiation

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	<p>therapy patient, as determined by a physician, as a criterion for this indicator. AO Criterion I.A.3 is used as the basis for this indicator.</p> <p>Should an event meeting this threshold occur, it would be reported to the NRC or Agreement States, or both, through a number of sources but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders.</p> <p>The processes used in the Fuel Facilities, Nuclear Materials Users, Spent Fuel Storage and Transportation, and Decommissioning and LLW Business Lines contain elements to verify the completeness and accuracy of licensee reports. IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and entering them into the Nuclear Material Events Database (NMED).</p> <p>The NRC promotes timely and effective reviews of materials event data. Agency processes include an assessment of the NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training at NRC Headquarters, the regions, and Agreement States; and discussions at Agreement State and Conference of Radiation Control Program Directors meetings.</p>
<p><b>Validation:</b></p>	<p>The NRC provides regulatory controls that limit or prevent radiation exposures to the public and occupational workers from radioactive material that exceed AO Criterion I.A. An incident or event is considered an AO if it involves a major reduction in the degree of protection of public health or safety.</p> <p>Events of this magnitude are rare. In the unlikely event that an AO should occur, the NRC or Agreement State technical specialists will confirm whether the criteria were met, with input from expert consultants as necessary.</p> <p>The NRC does not statistically sample data to determine results. Rather, the staff reviews all event data to determine whether the performance indicator has been met. There are two important data limitations in determining this performance indicator: (1) delay time for receiving information and (2) failure to inform the NRC of an event that causes significant radiation exposures to the public or occupational workers. The NRC regulations associated with event reporting include specific requirements for timely notifications; a lag time separates the occurrence of an event and its known consequences.</p>



	<p>The NRC believes the probability of not being aware of an event that causes significant radiation exposures to the public or occupational workers is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known. If such an event occurred, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings during which staff and management validate the occurrence of these events.</p>
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<p><b>FY 2016–2021:</b></p>	<p><b>Performance Goal 2:</b> Number of releases of radioactive materials that meet or exceed AO Criterion I.B (discharge or dispersal of radioactive material from its intended place of confinement)</p>
<p><b>Materials and Waste Safety Target:</b></p>	<p>Zero</p>
<p><b>Verification:</b></p>	<p>This performance indicator is defined as any release to the environment from the activities of the Fuel Facilities, Nuclear Materials Users, Spent Fuel Storage and Transportation, and Decommissioning and LLW Business Lines that exceed applicable regulations, as defined in 10 CFR 20.2203(a)(3). In accordance with Federal requirements, a 30-day written report is required on such releases.</p> <p>Should an event meeting this threshold occur, it would be reported to the NRC or Agreement States, or both, through a number of sources but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders.</p> <p>The fuel facilities, nuclear materials users, spent fuel storage and transportation, and decommissioning and LLW programs contain elements that verify the completeness and accuracy of licensee reports. IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events, as received from the licensees, and entering them into NMED.</p> <p>The NRC promotes timely and effective reviews of materials event data. Agency processes include an assessment of the NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training at NRC Headquarters, the regions, and Agreement States; and discussions at Agreement State and Conference of Radiation Control Program Directors meetings.</p>

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<p><b>Validation:</b></p>	<p>The NRC provides regulatory controls to limit radiation releases to ensure protection of the environment. The regulations in 10 CFR Part 20 provide standards for protection against radiation. Releases subject to a 30-day reporting requirement in 10 CFR 20.2203(a)(3)(ii) serve as a performance indicator for ensuring the protection of the environment. The NRC's regulatory process, including licensing, inspection, guidance, regulations, and enforcement activities, is sufficient to ensure that releases of radioactive materials that exceed regulatory limits are infrequent.</p> <p>In the unlikely event that a release to the environment exceeds regulatory limits, the NRC or Agreement State technical specialists will confirm whether the criteria were met, with input from expert consultants as necessary.</p> <p>The NRC does not statistically sample data to determine results; rather, the staff reviews all event data to determine whether the performance indicator has been met. There are two important data limitations in determining this performance indicator: (1) delay time for receiving information and (2) the failure to inform the NRC of an event that causes environmental impacts. The NRC regulations associated with event reporting include specific requirements for timely notifications. A lag time separates the occurrence of an event and its known consequences.</p> <p>The NRC believes the probability of not being aware of an event that causes a radiological release to the environment that exceeds applicable regulations is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.</p> <p>If such an event occurred, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings during which staff and management validate the occurrence of these events.</p>
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<p><b>FY 2016–2021:</b></p>	<p><b>Performance Goal 3:</b> Number of instances of unintended nuclear chain reactions involving NRC-licensed radioactive materials</p>
<p><b>Materials and Waste Safety Target:</b></p>	<p>Zero</p>
<p><b>Verification:</b></p>	<p>An accidental criticality is defined in 10 CFR 70.52(a). Each NRC office reviews event documents for its specific program area to identify events that meet or exceed AO Criterion III.A.1 (accidental criticality).</p>

	<p>The program office or regional AO coordinators will assess an event to determine whether it meets the AO criteria. If an event meets the AO criteria, the program office or regional AO coordinator will develop a potential AO event description. The potential AO event description will include the applicable AO criteria and contain the information specified in Section 208 of the Energy Reorganization Act of 1974, such as the nature and probable consequences of the event.</p> <p>The AO coordinator in the NRC’s Office of Nuclear Regulatory Research coordinates with the program office and regional AO coordinators on incidents and events identified as potential AOs.</p>
<p><b>Validation:</b></p>	<p>The agency is required to submit a “Report to Congress on Abnormal Occurrences” each FY for those events that, by Commission determination, meet the AO criteria. The staff has developed and revised these AO criteria over several decades with extensive review by both the Commission and the public. In SECY-95-083, the staff describes the basis of the AO criteria as follows:</p> <p><i>The AO reporting policy has been developed to comply with the legislative intent of Section 208 of the Energy Reorganization Act of 1974, as amended, to keep Congress and the public informed of unscheduled incidents or events which the Commission considers significant from the standpoint of public health and safety.... The thresholds are generally above the normal level of reporting events by licensees to NRC to exclude those events which involve some variance from regulatory limits, but are not significant enough from the standpoint of public health and safety to be reported to Congress.</i></p> <p>For each event that meets the AO criteria, the NRC includes in the report a description of the incident or event, as well as any action taken to prevent recurrence. Such actions include those taken by licensees, as well as more programmatic actions deemed necessary by the Commission to prevent recurrence across a class or classes of licensees. Establishing performance indicators at the threshold levels described by the AO criteria is appropriate and consistent with the principle that the NRC’s regulatory processes (e.g., licensing, oversight, enforcement) are adequate to address a wide scope of infractions against regulatory requirements and do not generally warrant a focused reevaluation of the programs associated with those processes for every infraction. Therefore, only significant deviations from the regulatory requirements or unacceptable frequencies of occurrence of such deviations should be indicators of the need to reevaluate regulatory strategies and programs. This principle has been central to the staff’s selection of performance goals and performance indicator thresholds for determining whether</p>

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	the NRC’s performance in ensuring the safe and secure use of radioactive material has been adequate.
<b>FY 2016–2021:</b>	<b>Performance Goal 5:</b> Number of malfunctions, deficiencies, events, or conditions at nonreactor facilities or during transportation of nuclear materials that meet or exceed AO Criteria III.A (events at facilities other than nuclear power plants) or III.B (all transportation events)
<b>Materials and Waste Safety Target:</b>	Zero
<b>Verification:</b>	<p>Each NRC office reviews event documents for its specific program area to identify events as potential AOs.</p> <p>The program office or regional AO coordinators will assess an event to determine whether it meets the AO criteria. If an event meets the AO criteria, the program office or regional AO coordinator will develop a potential AO event description. The potential AO event description will include the applicable AO criteria and contain the information specified in Section 208 of the Energy Reorganization Act of 1974, such as the nature and probable consequences of the event.</p> <p>The AO coordinator of the NRC’s Office of Nuclear Regulatory Research coordinates with the program office and regional AO coordinators on incidents and events identified as potential AOs.</p>
<b>Validation:</b>	<p>The agency is required to submit a “Report to Congress on Abnormal Occurrences” each FY for those events that the Commission has determined to meet the AO criteria. The staff has developed and revised these AO criteria over several decades with extensive review by both the Commission and the public. In SECY-95-083, the staff describes the basis of the AO criteria as follows:</p> <p><i>The AO reporting policy has been developed to comply with the legislative intent of Section 208 of the Energy Reorganization Act of 1974, as amended, to keep Congress and the public informed of unscheduled incidents or events which the Commission considers significant from the standpoint of public health and safety.... The thresholds are generally above the normal level of reporting events by licensees to NRC to exclude those events which involve some variance from regulatory limits, but are not significant enough from the standpoint of public health and safety to be reported to Congress.</i></p> <p>For each event that meets the AO criteria, the NRC includes in the report a description of the incident or event, as well as any action taken to prevent recurrence. Such actions include those taken by licensees, as well as more programmatic actions deemed necessary by the Commission to prevent recurrence across a class or classes of licensees. Establishing performance</p>

	<p>indicators at the threshold levels described by the AO criteria is appropriate and consistent with the principle that the NRC’s regulatory processes (e.g., licensing, oversight, enforcement) are adequate to address a wide scope of infractions against regulatory requirements and do not generally warrant a focused reevaluation of the programs associated with those processes for every infraction. Therefore, only significant deviations from the regulatory requirements or unacceptable frequencies of occurrence of such deviations should be indicators of the need to reevaluate regulatory strategies and programs. This principle has been central to the staff’s selection of performance goals and performance indicator thresholds for determining whether the NRC’s performance in ensuring the safe and secure use of radioactive material has been adequate.</p>
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**Goal 2: Security:** *Ensure the secure use of radioactive materials.*

**Nuclear Reactor and Nuclear Materials and Waste Security**

**Security Objective 1:** *Ensure protection of nuclear facilities and radioactive materials.*

**Performance Indicators:**

<b>FY 2016–2021:</b>	<b>Performance Goal 1:</b> Number of instances of sabotage, theft, diversion, or loss of risk-significant quantities of radioactive material that meet or exceed AO Criteria I.C.1 (stolen, diverted, abandoned, or unrecovered lost), I.C.2 (radiological sabotage), or I.C.3 (substantiated case of actual theft, diversion, or loss of a formula quantity of SNM or an inventory discrepancy).
<b>Security Target:</b>	Zero
<b>Verification:</b>	<p>Under AO Criterion I.C.1, the agency counts any stolen, diverted, abandoned, or unrecovered lost radioactive material that meets or exceeds the thresholds listed in Appendix A, “Category 1 and Category 2 Radioactive Materials,” to 10 CFR Part 37, “Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material.” Excluded from reporting under this criterion are those events involving sources that are lost or abandoned under the following conditions: sources that have been lost and for which a reasonable attempt at recovery has been made without success, or irretrievable well logging sources as defined in 10 CFR 39.2, “Definitions.” These sources are only excluded if there is reasonable assurance that the doses from these sources have not exceeded, and will not exceed, the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 and the agency has determined that the risk of theft or diversion is acceptably low.</p> <p>Losses or thefts of radioactive material greater than or equal to 1,000 times the quantity specified in Appendix C, “Quantities of Licensed Material Requiring Labeling,” to 10 CFR Part 20 must</p>

	<p>be reported (in accordance with 10 CFR 20.2201(a)) by telephone to the NRC Headquarters Operations Center or Agreement State immediately (interpreted as within 4 hours) if the licensee believes that an exposure could result to persons in unrestricted areas. If an event meeting the thresholds described above occurs, it would be reported through a number of sources but primarily through this required licensee notification. The staff then enters publicly available information about events in NMED, which is used to collect, store, and track information on such events. Alternate methods are used to track events that are not publicly available. Additionally, licensees must meet the reporting and accounting requirements in 10 CFR Part 73, "Physical Protection of Plants and Materials," and 10 CFR Part 74, "Material Control and Accounting of Special Nuclear Material."</p> <p>The NRC's inspection programs are key elements in verifying the completeness and accuracy of licensee reports. IMPEP also provides a mechanism to verify that Agreement States and the NRC regions are consistently collecting and reporting such events as received from the licensees and are entering these events in NMED. In some cases, upon receiving a report, the NRC or Agreement State initiates an independent inspection that verifies the reliability of the reported information. When performed, these inspections enable the NRC or Agreement State to verify the accuracy of the reported data.</p> <p>The regulation at 10 CFR 20.2201(b) requires a 30-day written report for lost or stolen sources that are greater than or equal to 10 times the quantity specified in Appendix C to 10 CFR Part 20 if the source is still missing at that time. Furthermore, 10 CFR 20.2201(d) requires an additional written report within 30 days of a licensee learning any additional substantive information. The NRC interprets this requirement as including reporting the recovery of sources.</p> <p>The NRC issued guidance in RIS 2005-21, "Clarification of the Reporting Requirements in 10 CFR 20.2201," dated November 14, 2005, to clarify the current requirement in 10 CFR 20.2201(d) for reporting recovery of a risk-significant source. The NRC asked the Agreement States to send copies of RIS 2005-21 (or an equivalent document) to Agreement State licensees. The NRC issued the NSTS (National Source Tracking System) final rule in November 2006. On January 31, 2009, NRC licensees and Agreement State licensees were required to begin reporting information on source transactions to the NSTS. Implementation of this system creates an inventory of risk-significant sources. This rulemaking established reporting requirements for risk-significant sources (including reporting timeframes) by adding specific requirements to 10 CFR 20.2201, "Reports of Theft or Loss of Licensed Material," for</p>
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	risk-significant sources, including a requirement for licensees to report within 30 days the recovery of a risk-significant source.
<b>Validation:</b>	<p>Events collected under this performance indicator are actual losses, thefts, or diversions of materials described above. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are rare. The information reported under 10 CFR Part 73 and 10 CFR Part 74 is required so that the NRC is aware of events that could endanger public health and safety or national security. Any failures at the level of the strategic plan would result in immediate investigation and follow-up.</p> <p>If an event subject to the reporting requirements described above occurs, it would result in a prompt and thorough evaluation of the event, its consequences, its root causes, and the necessary actions by the licensee, the NRC, or an Agreement State to mitigate the situation and prevent recurrence.</p>

<b>Verification:</b>	<p>In AO Criterion I.C.2, radiological sabotage is as defined in 10 CFR 73.2, "Definitions." In AO Criterion I.C.3, "substantiated" means a situation in which there is an indication of loss, theft, or unlawful diversion, such as an allegation of diversion, report of lost or stolen material, or other indication of loss of material control or accountability that cannot be refuted following an investigation and requires further action on the part of the agency or other proper authorities. A formula quantity of SNM is defined in 10 CFR 70.4, "Definitions." Licensees subject to the requirements in 10 CFR Part 73 must call the NRC within 1 hour of an occurrence to report any breaches of security or other event that may potentially lead to theft or diversion of material or to sabotage at a nuclear facility. The NRC describes its safeguards requirements in 10 CFR 73.71, "Reporting of Safeguards Events"; Appendix G, "Reportable Safeguards Events," to 10 CFR Part 73; and 10 CFR 74.11, "Reports of Loss or Theft or Attempted Theft or Unauthorized Production of Special Nuclear Material."</p> <p>The information assessment team composed of NRC Headquarters and regional staff members would conduct an immediate assessment for any significant events to determine any further actions needed, including coordination with the intelligence community and law enforcement. In accordance with 10 CFR 73.71(d), the licensee must also file a written report within 60 days of the incident that describes the event and the steps that the licensee took to protect the nuclear facility. This information will enable the NRC to assess whether radiological sabotage has occurred.</p>
<b>Validation:</b>	Events subject to reporting requirements are those that endanger public health and safety and the environment through deliberate acts of theft or diversion of material or through sabotage directed

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	<p>against the nuclear facilities that the agency licenses. Events of this type are extremely rare. If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee or the NRC to mitigate the situation and prevent recurrence. The investigation ensures the validity of the information and assesses the significance of the event.</p>
<p><b>Verification:</b></p>	<p>Licensees must record events associated with AO Criterion I.C.3 within 24 hours of the identified event in a safeguards log that the licensee maintains. The licensee must retain the log as a record for 3 years after the last entry is made or until termination of the license. The NRC relies on its safeguards inspection program to ensure the reliability of recorded data. The NRC makes a determination of whether a substantiated breakdown has resulted in a vulnerability to radiological sabotage, theft, diversion, or unauthorized enrichment of SNM. When making substantiated breakdown determinations, the NRC evaluates the materials event data to ensure that licensees are reporting and collecting the proper event data.</p>
<p><b>Validation:</b></p>	<p>“Substantiated” means a situation that requires additional action by the agency or other proper authorities because of an indication of loss, theft, or unlawful diversion—such as an allegation of diversion, report of lost or stolen material, statistical processing difference, other system breakdown closely related to the material control and accounting program (such as an item control system associated with the licensee’s facility information technology system), or other indication of a loss of material control or accountability—that cannot be refuted following an investigation. A formula quantity of SNM is defined in 10 CFR 70.4.</p> <p>Events collected under this performance indicator may indicate a vulnerability to radiological sabotage, theft, diversion, or loss of SNM. Such events could compromise public health and safety, the environment, and the common defense and security. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and to determine whether a breakdown of a physical protection or material control and accounting system has actually resulted in a vulnerability.</p>
<p><b>FY 2016–2021:</b></p>	<p><b>Performance Goal 2:</b> Number of substantial breakdowns of physical security, cybersecurity, or material control and accountability that meet or exceed AO Criteria I.C.4 (substantial breakdown in physical security, cybersecurity, or material control and accountability) or I.C.3 (substantiated case of actual theft, diversion, or loss of a formula quantity of SNM or an inventory discrepancy)</p>
<p><b>Security Target:</b></p>	<p>Less than or equal to one</p>



<p><b>Verification:</b></p>	<p>AO Criterion I.C.4 defines a “substantial breakdown” as a red finding under the ROP in the physical security inspection program or any plant or facility determined to have overall unacceptable performance resulting in a determination of overall unacceptable performance or in a shutdown condition (inimical to the effective functioning of the Nation’s critical infrastructure). Radiological sabotage is defined in 10 CFR 73.2. Licensees are required to report to the NRC, immediately after the occurrence becomes known, any known breakdowns of physical security, based on the requirements in 10 CFR 73.71 and Appendix G to 10 CFR Part 73. If a licensee reports such an event, the headquarters operations officer prepares an official record of the initial event report. The NRC begins responding to such an event immediately upon notification with the activation of its information assessment team. A licensee must follow its initial telephone notification with a written report submitted to the NRC within 30 days.</p> <p>The licensee records breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of SNM or radioactive waste within 24 hours in a safeguards log that the licensee maintains. The licensee must retain the log as a record for 3 years after the last entry is made or until termination of the license. Licensees subject to 10 CFR Part 73 must also meet the reporting requirements detailed in 10 CFR 73.71. The NRC evaluates all of the reported events, based on the criteria in 10 CFR 73.71 and Appendix G to 10 CFR Part 73. The NRC also maintains and relies on its safeguards inspection program to ensure the reliability of recorded and reported data.</p>
<p><b>Validation:</b></p>	<p>Events assessed under this performance indicator are those that threaten nuclear activities by deliberate acts, such as radiological sabotage, directed against facilities. If a licensee reports such an event, the information assessment team evaluates and validates the initial report and determines any further actions that may be necessary. Tracking breakdowns of physical security indicates whether the licensee is taking the necessary security precautions to protect the public, given the potential consequences of a nuclear accident attributable to sabotage or the inappropriate use of nuclear material either in this country or abroad.</p> <p>Events collected under this performance indicator may indicate a vulnerability to radiological sabotage, theft, diversion, or loss of SNM or radioactive waste. Such events could compromise public health and safety, the environment, and the common defense and security. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and to determine whether a breakdown of a physical protection or material control and accounting system has actually resulted in a vulnerability.</p>

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**Security Objective 2:**      *Ensure protection of classified and Controlled Unclassified Information*

**Performance Indicators:**

<p><b>FY 2016–2021:</b></p>	<p><b>Performance Goal 3:</b> Number of significant unauthorized disclosures of classified or Safeguards Information by licensees, as defined by AO Criterion I.C.5 (significant unauthorized disclosures of classified information or Safeguards Information), and by NRC employees or contactors, as defined by NRC internal criteria</p>
<p><b>Security Target:</b></p>	<p>Zero</p>
<p><b>Verification:</b></p>	<p>In regard to AO Criterion I.C.5, any alleged or suspected violations by NRC licensees of the AEA, Espionage Act, or other Federal statutes related to classified or Safeguards Information must be reported to the NRC under the requirements in 10 CFR 95.57(a) (for classified information), 10 CFR Part 73 (for Safeguards Information), and NRC orders (for Safeguards Information subject to modified handling requirements). However, for performance reporting, the NRC would only count those disclosures or compromises that actually cause damage to national security or that threaten public health and safety.</p> <p>Such events would be reported to the cognizant security agency (i.e., the security agency with jurisdiction) and the Regional Administrator of the appropriate NRC regional office, as listed in Appendix A, “U.S. Nuclear Regulatory Commission Offices and Classified Mailing Addresses,” to 10 CFR Part 73. The Regional Administrator would then contact the Division of Security Operations at NRC Headquarters, which would assess the violation and notify other NRC offices and Government agencies, as appropriate. A determination would be made as to whether the compromise damaged national security or public health and safety. Any unauthorized disclosures or compromises of classified or Safeguards Information that damaged national security or public health and safety would result in immediate investigation and follow-up by the NRC. In addition, NRC inspections verify that licensees’ routine handling of classified information and Safeguards Information (including Safeguards Information subject to modified handling requirements) conforms to established security information management requirements.</p> <p>Any alleged or suspected violations of this performance indicator by NRC employees, contractors, or other personnel would be reported, in accordance with NRC procedures, to the Director of the Division of Facilities and Security at NRC Headquarters. The NRC maintains a strong system of controls over national security and Safeguards Information, including (1) annual required training for all employees, (2) safe and secure document storage,</p>

	and (3) physical access control in the form of guards and badged access.
<b>Validation:</b>	Events collected under this performance indicator are unauthorized disclosures of classified information or Safeguards Information that damage the national security or public health and safety. Events of this magnitude are not expected and would be rare. If such an event occurs, it would result in a prompt and thorough investigation, including consequences, root causes, and necessary actions by the licensees and the NRC to mitigate the consequences and prevent recurrence. NRC investigation teams also validate the materials event data to ensure that licensees are reporting and collecting the proper event data.

**MANAGEMENT PRIORITIES**

As stated in the NRC’s FY 2018–2022 Strategic Plan, the agency’s vision is to “Demonstrate the Principles of Good Regulation (independence, openness, efficiency, clarity, and reliability) in performing our mission.” The agency puts these principles into practice with effective, realistic, and timely regulatory actions to meet its safety and security goals and objectives. In addition, the NRC is committed to ensuring the stewardship of agency resources in implementing mission support functions, such as financial management, human resources management, acquisition planning and execution, IT/IM, and administrative support services. The NRC encourages all employees to identify ways of increasing effectiveness, efficiency, and innovation in conducting their work. Based on these efforts, the NRC has not identified any programs or management functions that have greater vulnerability to waste, fraud, abuse, and mismanagement, as defined by GPRA Modernization Act of 2010, to be major management challenges.

The NRC is committed to developing and maintaining a highly qualified workforce. The NRC provides a variety of position-specific training for technical and IT project managers who support the mission programs. The NRC is working with OPM on the Program Management Improvement Accountability Act to assess the Program/Project Manager competencies for the workforce as submitted in the November 2018 implementation plan.

In June 2014, the NRC launched an initiative called [Project Aim](#) to enhance the agency’s ability to plan and execute its mission while adapting in a timely and effective manner to a dynamic environment. The agency’s FY 2018–2022 Strategic Plan sustains the momentum by setting forth a number of specific strategies that emphasize continuous improvement of its processes and activities. The NRC has a number of ongoing efforts to make more effective and efficient use of resources. Some notable examples include the following:

- Taking actions to better integrate risk-informed and performance-based approaches into NRC regulatory processes to improve safety decision-making and regulatory efficiency.
- Using a “Common Prioritization of Rulemaking” process to manage rulemaking activities from across the agency in a consistent manner, with consideration of their contribution to the NRC’s strategic plan safety and security goals and supporting governmental and public priorities.

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- Enhancing IT systems by re-thinking how we access, create, and use data to better prepare the NRC for broader application of big data, data analytics, and artificial intelligence.
- Identifying operational changes to simplify or streamline internal processes that allow the NRC to focus resources on priority activities and potentially reduce future resource needs.
- Establishing a more consistent approach to identify and disposition existing or planned work to accommodate emerging needs and resource changes.
- Using the “InnovateNRC” effort to encourage new ideas among the staff.
- Implementing process changes to reduce costs and improve the delivery of services, including a greater use of shared services.
- Using the enhanced strategic workforce planning and competency model process to facilitate the agency’s ability to anticipate and address future workforce needs.
- Performing a multi-day, agencywide collaborative discussion in a virtual environment to allow an open exchange of thinking across the NRC on a variety of topics. Focus areas are being identified from this session that will be used to improve internal operations and communications.

## STRATEGIC PLAN STRATEGIES AND SUPPORTING BUSINESS LINES

The [NRC FY 2018–2022 Strategic Plan](#) identifies the strategies needed for the NRC to achieve its strategic goals and objectives. The following table shows which agency business lines support each strategy.

Strategy	Business Line
<b>Safety Strategy 1:</b> Maintain and enhance the NRC’s regulatory programs, using information gained from domestic and international operating experience, lessons learned, and advances in science and technology.	Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation
<b>Safety Strategy 2:</b> Further risk-inform the current regulatory framework in response to advances in science and technology, policy decisions, and other factors, including prioritizing efforts to focus on the most safety-significant issues.	Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation
<b>Safety Strategy 3:</b> Enhance the effectiveness and efficiency of licensing and certification activities to maintain both quality and timeliness of licensing and certification reviews.	Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation

Strategy	Business Line
<b>Safety Strategy 4:</b> Maintain effective and consistent oversight of licensee performance with a focus on the most safety-significant issues.	Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation
<b>Safety Strategy 5:</b> Maintain material safety through the National Materials Program in partnership with Agreement States.	Nuclear Materials Users, Decommissioning and LLW
<b>Safety Strategy 6:</b> Identify, assess, and resolve safety issues.	Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation
<b>Safety Strategy 7:</b> Ensure the NRC maintains its readiness to respond to incidents and emergencies involving NRC-licensed facilities and radioactive materials and other events of domestic and international interest.	Corporate Support, Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation
<b>Safety Strategy 8:</b> Verify that nuclear facilities are constructed and operated in accordance with permits and licenses and that the environmental and safety regulatory infrastructure is adequate to support the issuance of new licenses.	Fuel Facilities, New Reactors, Operating Reactors, Spent Fuel Storage and Transportation
<b>Security Strategy 1:</b> Maintain and further risk-inform the current regulatory framework for security using information gained from operating experience, lessons learned, external and internal assessments, technology advances, and changes in the threat environment.	Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation
<b>Security Strategy 2:</b> Maintain effective, consistent, and risk-informed oversight of licensee performance with respect to meeting NRC security requirements.	Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation
<b>Security Strategy 3:</b> Maintain material security through the National Materials Program in partnership with the safety programs administered by the Agreement States.	Nuclear Materials Users
<b>Security Strategy 4:</b> Proactively identify, assess, and address threats, vulnerabilities, and security risks.	Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation

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Strategy	Business Line
<p><b>Security Strategy 5:</b> Support U.S. national security interests and nuclear nonproliferation policy objectives consistent with the NRC’s statutory mandate through cooperation with domestic and international partners.</p>	<p>Corporate Support, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation</p>
<p><b>Security Strategy 6:</b> Ensure material control and accounting for special nuclear materials.</p>	<p>Fuel Facilities, Operating Reactors, Spent Fuel Storage and Transportation</p>
<p><b>Security Strategy 7:</b> Ensure that programs for the handling and control of classified and Controlled Unclassified Information are effectively implemented at the NRC and at licensed facilities.</p>	<p>Corporate Support, Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation</p>

**OFFICE OF THE INSPECTOR GENERAL**

The NRC’s OIG was established as a statutory entity on April 15, 1989, in accordance with the 1988 amendments to the Inspector General Act. Starting in FY 2014, the NRC’s OIG has exercised the same authorities with respect to the DNFSB per the Consolidated Appropriations Act, 2014. OIG’s mission is to provide independent, objective audit and investigative oversight of NRC and DNFSB operations to protect people and the environment.

<b>NRC OIG Budget Authority and Full-Time Equivalents</b>						
<b>(Dollars in Millions)</b>						
	<b>FY 2020 Enacted</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>
Program Support	2.0	0.0	1.9	0.0	-0.1	0.0
Program Salaries and Benefits	11.3	63.0	11.6	63.0	0.3	0.0
<b>Total</b>	<b>\$13.3</b>	<b>63.0</b>	<b>\$13.5</b>	<b>63.0</b>	<b>\$0.2</b>	<b>0.0</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

The FY 2021 budget request for the NRC OIG is \$13.5 million, which includes \$11.6 million in salaries and benefits to support 63 FTE, and \$1.9 million in program support. These resources will support Inspector General auditing and investigation functions for both the NRC, \$12.3 million, and the DNFSB, \$1.2 million, respectively.

OIG is showing the full cost associated with its programs for the FY 2021 budget with the following caveat: as a result of an October 1989 memorandum of understanding between the NRC’s Chief Financial Officer and the Inspector General and a subsequent amendment in March 1991, OIG no longer requests that funding for some OIG management and support services be included in the OIG appropriation. It was agreed that funds for OIG infrastructure requirements and other agency support services would instead be included in the NRC’s main appropriation. For the most part, these costs are not readily severable. Thus, this funding continues to be included in NRC’s main appropriation.

**AUDITS PROGRAM**

<b>Audits Budget Authority</b>						
<b>(Dollars in Millions)</b>						
	<b>FY 2020 Enacted</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>
Audits Program	9.0	41.0	9.2	41.0	0.2	0.0

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

The OIG Audits Program focuses on the agency’s management and financial operations; economy and efficiency with which an organization, program, or function is managed; and whether the programs achieve intended results. OIG auditors assess the degree to which an organization complies with laws, regulations, and internal policies in carrying out programs, and they test program effectiveness as well as the accuracy and reliability of financial statements. The overall objective of an audit is to identify ways to enhance agency operations and promote greater economy and efficiency.

## **OFFICE OF THE INSPECTOR GENERAL**

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For FY 2021, OIG requests \$9.2 million and 41 FTE to carry out its Audits Program activities for NRC and DNFSB programs. With these resources, the Audits Program will conduct approximately 24 audits and evaluations for the NRC. This will enable OIG to provide coverage of the NRC's Nuclear Reactor Safety, Nuclear Materials and Waste Safety, Security, and Corporate Support programs. OIG's assessment of these mission-critical programs will support the agency in accomplishing its goals to ensure adequate protection of public health and safety and the environment, and in the secure use and management of radioactive materials.

In addition, OIG will conduct approximately six audits and evaluations that will cover various DNFSB programs and operations. These assessments will support the DNFSB's primary purpose of ensuring adequate protection of public health and safety in the U.S. Department of Energy's defense nuclear facilities and operations.

### **CHANGES FROM FY 2020 ENACTED BUDGET**

OIG's FY 2021 budget request reflects the funding level needed to sustain the authorized staffing level, conduct legislatively mandated audits at NRC and DNFSB, and fund essential contract support and travel activities related to audit work at both agencies.

### **FY 2020–FY 2021 AUDITS PROGRAM PERFORMANCE MEASURES**

- Ensure that 85 percent of OIG audit products and activities cause the NRC and DNFSB to take corrective action to improve agency safety, security, and corporate management programs; ratify adherence to agency policies, procedures, or requirements; or identify real dollar savings or reduced regulatory burden (i.e., high impact).
- Obtain NRC agreement on at least 92 percent of OIG audit recommendations, and DNFSB agreement on at least 50 percent of OIG audit recommendations.
- Obtain final action on 70 percent of NRC and 50 percent of DNFSB OIG audit recommendations within 2 years.

### **SELECTED FY 2019 AUDITS PROGRAM ACCOMPLISHMENTS**

In FY 2019, OIG issued 24 reports, with 21 pertaining to NRC programs and operations and 3 pertaining to DNFSB programs and operations. These reports either evaluated high-risk agency programs or complied with mandatory audits pursuant to financial and computer security-related legislation. Additional information related to work performed may be found on the OIG Web Site at <https://www.nrc.gov/insp-gen/pubs.html#Semi-Annual>.



**INVESTIGATIONS PROGRAM**

<b>Investigations Budget Authority</b> (Dollars in Millions)						
	<b>FY 2020 Enacted</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>
Investigations Program	4.3	22.0	4.3	22.0	0.0	0.0

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

The OIG’s responsibility for detecting and preventing fraud, waste, and abuse within the NRC and DNFSB includes investigating possible violations of criminal statutes relating to NRC and DNFSB programs and activities, investigating misconduct by NRC and DNFSB employees, interfacing with the DOJ on OIG-related criminal matters, and coordinating investigations and other OIG initiatives with Federal, State, and local investigative agencies and other OIGs. Investigations may be initiated as a result of allegations or referrals from private citizens; licensee employees; NRC and DNFSB employees; Congress; other Federal, State, and local law enforcement agencies; OIG audits; the OIG hotline; and Inspector General initiatives directed at bearing a high potential for fraud, waste, and abuse.

For FY 2021, OIG requests \$4.3 million and 22 FTE to carry out its Investigations Program activities for NRC and DNFSB programs. Reactive investigations into allegations of criminal and other wrongdoing will continue to be OIG’s priority. The Investigations Program’s main concentration of effort will involve investigations of alleged NRC or DNFSB staff misconduct that could adversely impact matters related to the health and safety mission of the NRC and the DNFSB. OIG has also implemented a series of proactive initiatives designed to identify specific high-risk areas that are most vulnerable to fraud, waste, and abuse. With these resources, OIG expects to conduct approximately 40 investigations at the NRC and at DNFSB covering a broad range of allegations concerning misconduct and mismanagement affecting various NRC and DNFSB programs.

**CHANGES FROM FY 2020 ENACTED BUDGET**

OIG’s FY 2021 budget request reflects the funding level needed to sustain the authorized staffing level.

**FY 2020–FY 2021 INVESTIGATIONS PROGRAM PERFORMANCE MEASURES**

- Ensure 85 percent of OIG investigative products and activities identify opportunities for improvements to NRC and DNFSB safety, security, and corporate management programs; ratify adherence to policies/procedures; or confirm or disprove allegations of wrongdoing (e.g., high impact).
- Obtain 90 percent agency actions taken in response to NRC and DNFSB investigative reports.
- Complete 90 percent of NRC cases and 85 percent of DNFSB cases within 18 months.

- Refer at least 20 percent of closed NRC investigations to DOJ or other relevant authorities.
- Ensure that at least 60 percent of closed NRC investigations result in indictments, convictions, civil suits or settlements, judgments, administrative actions, monetary results, or IG clearance letters.

### SELECTED FY 2019 INVESTIGATIONS PROGRAM ACCOMPLISHMENTS

In FY 2019, OIG completed 44 investigations. These investigative efforts focused on violations of law or misconduct by NRC/DNFSB employees and contractors and allegations of irregularities or inadequacies in NRC/DNFSB programs and operations. Additional information related to work performed may be found on the OIG Web Site at <https://www.nrc.gov/insp-gen/pubs.html#Semi-Annual>.

### NRC OIG'S STRATEGIC GOALS, STRATEGIES, AND ACTIONS

The NRC OIG carries out its mission through its Audits and Investigations Programs. The NRC OIG Strategic Plan for FY 2019-2023 features three strategic goals and guides the activities of these programs. This OIG Strategic Plan identifies the major challenges and risk areas facing the NRC and generally aligns with the agency's mission. It also includes a number of supporting strategies and actions that describe OIG's planned accomplishments over the strategic planning period. The NRC OIG strategic plan can be found in its entirety at the following address: <https://www.nrc.gov/insp-gen/plandocs.html>.

To ensure that each NRC OIG audit and evaluation aligns with these three goals, program areas selected for audit and evaluation are included in the OIG *Annual Plan* after being cross walked against the NRC OIG *Strategic Plan* to ensure alignment with the office's strategic goals. Furthermore, each OIG audit, evaluation, and investigation is informed by one or more of the most serious management and performance challenges facing the agency as identified by the Inspector General. The work performed by OIG auditors and investigators is mutually supportive and complementary in pursuit of these objectives. Below are the NRC OIG's current strategic goals and strategies.

### NRC OIG STRATEGIC GOALS

(1) **Safety:** *Strengthen NRC's efforts to protect public health and safety and the environment.*

**Discussion:** NRC performs critical functions to ensure the safe use of radioactive materials in the United States and to protect both the public and radiation workers from radiation hazards that could result from the use of radioactive materials. NRC provides licensing and oversight activities for 95 commercial nuclear power reactors; research, test, and training reactors; radioactive materials used in medicine, academia, and industry; and nuclear waste.

NRC is responsible for maintaining an established regulatory framework for the safe and secure use of civilian nuclear reactors, including commercial nuclear power plants as well as research, test, and training reactors. NRC's regulatory oversight responsibilities in the reactor arena include developing policy and rulemaking, licensing and inspecting reactors, licensing reactor operators, and enforcing regulations. The agency is also facing the increased number of plants that are closing down and undergoing decommissioning.

NRC is also responsible for regulatory oversight of the safe and secure use of nuclear materials; medical, industrial, and academic applications, uranium recovery activities; and for the storage and disposal of high-level and low-level radioactive waste. NRC is authorized to grant licenses for the possession and use of radioactive materials and establish regulations to govern the possession and use of those materials.

Upon a State's request, NRC may enter into an agreement to relinquish its authority to the State to regulate certain radioactive materials and limited quantities of special nuclear material. The State must demonstrate that its regulatory program is adequate to protect public health and safety and compatible with NRC's program. The States that enter into an agreement assuming this regulatory authority from NRC are called Agreement States. The number of Agreement States continues to increase.

NRC regulates spent (used) reactor fuel from commercial and research and test reactors. Because of its highly radioactive nature, spent fuel must be handled and stored with care and in a manner, that provides for adequate protection of the public. NRC has been reviewing the issues associated with storing spent fuel at existing reactor sites or at interim storage facilities.

NRC must address its safety challenges to fulfill its mission of protecting public health and safety and the environment. NRC must be prepared to address emerging technical and regulatory issues in a timely manner as well as be able to capture and transfer knowledge learned through experience. In an ever evolving and resource-constrained climate, it is of paramount importance that the agency implements its programs as effectively and efficiently as possible. Below are the NRC OIG's strategies to support the NRC in facing these and other safety-related challenges.

- **Strategy 1-1:** Identify risk areas associated with NRC's oversight of nuclear facilities, and conduct audits and/or investigations that lead to NRC program and operational improvements.
- **Strategy 1-2:** Identify risk areas facing NRC's oversight of nuclear materials, and conduct audits and/or investigations that lead to NRC program and operational improvements.
- **Strategy 1-3:** Identify risk areas associated with NRC's oversight of high-level and low level waste, and conduct audits and/or investigations that lead to NRC program and operational improvements.

(2) **Security:** *Strengthen NRC's security efforts in response to an evolving threat environment.*

**Discussion:** NRC must ensure that nuclear power and materials licensees take adequate measures to protect their facilities against radiological sabotage. NRC faces the challenge of adapting to dynamic threats while also maintaining a stable security oversight regime commensurate with the agency's mission as a fair and impartial regulator. NRC has well-established inspection programs for evaluating the physical, cyber, and personnel security activities of nuclear power and materials licensees.

NRC must respond to a cyber threat environment where adversaries' tactics and capabilities rapidly evolve. Cyber security also entails oversight challenges related to the mix of digital and analog systems at NRC licensees. For example, digital equipment upgrades could impact licensee operations and security.

NRC plays a critical role in overseeing and supporting the emergency preparedness and incident response capabilities of its licensees. This oversight includes the integration of licensee plans with government agencies in light of natural disasters and terrorist threats.

NRC also supports U.S. international interests in the secure use of nuclear material and technology and nuclear nonproliferation. This includes controls on the import and export of nuclear materials and equipment, and exercising its international oversight commitments.

- **Strategy 2-1:** Identify risks involved in securing nuclear reactors, fuel cycle facilities, and materials, and conduct audits and/or investigations that lead to NRC program and operational improvements.
- **Strategy 2-2:** Identify risks in emergency preparedness and incident response, and conduct audits and/or investigations that lead to NRC program and operational improvements.
- **Strategy 2-3:** Identify risks in international security activities, and conduct audits and/or investigations that lead to program and operational improvements.

*(3) **Corporate Management:** Increase the economy, efficiency, and effectiveness with which NRC manages and exercises stewardship over its resources.*

**Discussion:** NRC faces significant challenges to efficiently, effectively and economically manage its corporate resources. NRC must continue to provide infrastructure and support to accomplish its regulatory mission while responding to continuous scrutiny of budgetary levels, evolving regulatory requirements, changing industry and market conditions, and the continuously developing security threat environment.

Addressing corporate resource challenges concerning organizational staffing, human capital, information management and internal financial oversight will require a continuing, well considered process of adaptation throughout the next strategic planning period. NRC must continue its efforts to maintain its capability to effectively use its financial resources and to manage other factors. Such factors include reductions in long-tenured staffing, which require knowledge preservation and transfer, the effective deployment of resources to meet changing regulatory requirements, efficient adaptation to changing industry conditions, and the need for continued improvement in information technology capabilities.

Further, NRC must protect its infrastructure and take the necessary steps to ensure that its staff, facilities, information, and information technology assets are adequately protected against insider and external threats while maintaining operations. NRC faces the challenge of balancing transparency with information security.

OIG will continue to target corporate management risk areas for audits and investigations, to fulfill its statutory responsibilities to evaluate agency financial management, and work with NRC to identify and improve areas of weakness.

- **Strategy 3-1:** Identify areas of corporate management risk within NRC and conduct audits and/or investigations that lead to NRC program and operational improvements.
- **Strategy 3-2:** Identify risks in maintaining a secure infrastructure (i.e., physical, personnel, and cyber security), and conduct audits and/or investigations that lead to NRC program and operational improvements.

**FY 2021 NRC OIG BUDGET RESOURCES LINKED TO STRATEGIC GOALS**

The following table depicts the relationship of the Inspector General program and associated resource requirements to the NRC OIG strategic goals.

<b>NRC OIG Budget Resources Linked to OIG's Strategic Goals (Dollars in Millions)</b>			
<b>Program Links to Strategic Goals</b>	<b>Strengthen NRC's Public Health &amp; Safety Efforts</b>	<b>Enhance NRC's Security Efforts</b>	<b>Improve NRC's Resource Stewardship Efforts</b>
<b>\$M</b>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
FY 2021 Programs (\$12.3) <sup>1</sup>			
Audits \$8.2	1.6	1.6	5.0
Investigations \$4.1	1.4	0.4	2.3

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

<sup>1</sup>The budget resources linked to the NRC OIG strategic goals does not include the \$1.2M for the DNFSB.

**NRC OIG PROGRAM PERFORMANCE MEASURES**

<b>NRC OIG Strategic Goal 1: Strengthen the NRC's Efforts to Protect Public Health and Safety and the Environment</b>						
	2016	2017	2018	2019	2020	2021
<b>Measure 1. Percentage of OIG products and activities that have a high impact<sup>1</sup> on improving the NRC's safety program.<sup>2</sup></b>						
<b>Target</b>	85%	85%	85%			
<b>Actual</b>	100%	100%	91%			
<b>Measure 2. Percentage of OIG audit products and activities that cause the agency to take corrective action to improve agency safety programs; ratify adherence to agency policies, procedures, or requirements; or identify real dollar savings or reduced regulatory burden (i.e., high impact).<sup>3</sup></b>						
<b>Target</b>				85%	85%	85%
<b>Actual</b>				100%	TBD	TBD
<b>Measure 3. Percentage of audit recommendations agreed to by agency.</b>						
<b>Target</b>	92%	92%	92%	92%	92%	92%
<b>Actual</b>	100%	95%	100%	100%	TBD	TBD
<b>Measure 4. Percentage of final agency actions taken within 2 years on audit recommendations.</b>						
<b>Target</b>	70%	70%	70%	70%	70%	70%
<b>Actual</b>	76%	75%	67% <sup>4</sup>	78%	TBD	TBD
<b>Measure 5. Percentage of OIG investigative products and activities that identify opportunities for improvements to agency safety programs; ratify adherence to policies/procedures; or confirm or disprove allegations of wrongdoing (e.g., high impact).<sup>5</sup></b>						
<b>Target</b>				85%	85%	85%
<b>Actual</b>				100%	TBD	TBD
<b>Measure 6. Percentage of agency actions taken in response to investigative reports.</b>						
<b>Target</b>	90%	90%	90%	90%	90%	90%
<b>Actual</b>	100%	0% <sup>6</sup>	N/A	N/A	TBD	TBD

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<b>Measure 7. Percentage of active cases completed in less than 18 months.</b>						
<b>Target</b>	90%	90%	90%	90%	90%	90%
<b>Actual</b>	60% <sup>7</sup>	0% <sup>8</sup>	83% <sup>9</sup>	N/A	TBD	TBD
<b>Measure 8. Percentage of closed investigations referred to DOJ or other relevant authorities.</b>						
<b>Target</b>	20%	20%	20%	20%	20%	20%
<b>Actual</b>	N/A	N/A	0% <sup>10</sup>	0% <sup>11</sup>	TBD	TBD
<b>Measure 9. Percentage of closed investigations resulting in indictments, convictions, civil suits or settlements, judgments, administrative actions, monetary results, or IG clearance letters.<sup>12</sup></b>						
<b>Target</b>	60%	60%	60%	60%	60%	60%
<b>Actual</b>	100%	0% <sup>13</sup>	0% <sup>14</sup>	N/A	TBD	TBD

<sup>1</sup>High impact is the effect of an issued report or activity undertaken that results in: (a) confirming risk areas or management challenges that caused the agency to take corrective action, (b) real dollar savings or reduced regulatory burden, (c) identifying significant wrongdoing by individuals that results in criminal or administrative action, (d) clearing an individual wrongly accused, or (e) identifying regulatory actions or oversight that may have contributed to the occurrence of a specific event or incident or resulted in a potential adverse impact on public health or safety.

<sup>2</sup>This measure was replaced, beginning in FY 2019, with measures 2 and 5 to clarify the definitions of high impact for audits and investigations.

<sup>3</sup>This high-impact measure for audits was added, beginning in FY 2019.

<sup>4</sup>Several audit reports included recommendations that required more than 2 years for the agency to finalize action on. These recommendations are now closed.

<sup>5</sup>This high-impact measure for investigations was added beginning in FY 2019.

<sup>6</sup>Only one case was applicable to this measure and the agency did not take action in response to the report.

<sup>7</sup>The complexity of two investigations in the safety arena required additional time to close these investigations.

<sup>8</sup>There was only one case applicable to this measure; the case was not closed within 18 months.

<sup>9</sup>Five out of six cases were closed within 18 months. The sixth case took longer due to case complexity and the ongoing nature of the issue.

<sup>10</sup>Neither of the safety related investigations warranted referral because neither identified a criminal violation of law.

<sup>11</sup>There was only one applicable case in FY 19 which was not referred because it was not eligible for referral.

<sup>12</sup>Starting in FY 2014, OIG began measuring the percentage of closed investigations that resulted in an indictment, conviction, civil suit or settlement, judgment, administrative action, or monetary result. Starting in FY 2017, OIG added closed investigations that resulted in IG clearance letters to this measure. A clearance letter is a document provided to an employee in cases where an investigation is initiated in response to an allegation of employee misconduct and the misconduct is not substantiated.

<sup>13</sup>Only one case was applicable to this measure and it did not result in any of the listed outcomes.

<sup>14</sup>Four technical cases focused on safety related procedures; none involved had individual misconduct and none were substantiated.

### NRC OIG Strategic Goal 2: Enhance the NRC's Efforts to Increase Security in Response to an Evolving Threat Environment

	2016	2017	2018	2019	2020	2021
<b>Measure 1. Percentage of OIG products and activities that have a high impact on improving the NRC's security program.<sup>1</sup></b>						
<b>Target</b>	85%	85%	85%			
<b>Actual</b>	91%	100%	100%			
<b>Measure 2. Percentage of OIG audit products and activities that cause the agency to take corrective action to improve agency security programs; ratify adherence to agency policies, procedures, or requirements; or identify real dollar savings or reduced regulatory burden (i.e., high impact).<sup>2</sup></b>						
<b>Target</b>				85%	85%	85%
<b>Actual</b>				100%	TBD	TBD
<b>Measure 3. Percentage of audit recommendations agreed to by the agency.</b>						

<b>Target</b>	92%	92%	92%	92%	92%	92%
<b>Actual</b>	100%	100%	100%	100%	TBD	TBD
<b>Measure 4. Percentage of final agency actions taken within 2 years on audit recommendations.</b>						
<b>Target</b>	70%	70%	70%	70%	70%	70%
<b>Actual</b>	64% <sup>3</sup>	55% <sup>4</sup>	88%	78%	TBD	TBD
<b>Measure 5. Percentage of OIG investigative products and activities that identify opportunities for improvements to agency security programs; ratify adherence to policies/procedures; or confirm or disprove allegations of wrongdoing (e.g., high impact).<sup>5</sup></b>						
<b>Target</b>				85%	85%	85%
<b>Actual</b>				100%	TBD	TBD
<b>Measure 6. Percentage of agency actions taken in response to investigative reports.</b>						
<b>Target</b>	90%	90%	90%	90%	90%	90%
<b>Actual</b>	100%	N/A	N/A	N/A	TBD	TBD
<b>Measure 7. Percentage of active cases completed in less than 18 months.</b>						
<b>Target</b>	90%	90%	90%	90%	90%	90%
<b>Actual</b>	80% <sup>6</sup>	100%	N/A	33% <sup>7</sup>	TBD	TBD
<b>Measure 8. Percentage of closed investigations referred to DOJ or other relevant authorities.</b>						
<b>Target</b>	20%	20%	20%	20%	20%	20%
<b>Actual</b>	100%	50%	N/A	0% <sup>8</sup>	TBD	TBD
<b>Measure 9. Percentage of closed investigations resulting in indictments, convictions, civil suits or settlements, judgments, administrative actions, monetary results or IG clearance letters.</b>						
<b>Target</b>	60%	60%	60%	60%	60%	60%
<b>Actual</b>	100%	33% <sup>9</sup>	N/A	33% <sup>10</sup>	TBD	TBD

<sup>1</sup>This measure was replaced, beginning in FY 2019, with measures 2 and 5 to clarify the definitions of high impact for audits and investigations.

<sup>2</sup>This high-impact measure for audits was added, beginning in FY 2019.

<sup>3</sup>One audit recommendation in the security arena required additional time to close. This recommendation has since been closed.

<sup>4</sup>Four of eight recommendations on the Independent Evaluation of NRC's Implementation of FISMA for FY 2012 required additional time to close. These four recommendations have since been closed.

<sup>5</sup>This high-impact measure for investigations was added beginning in FY 2019.

<sup>6</sup>The complexity of one investigation in the security arena required additional time to close this investigation.

<sup>7</sup>The two cases eligible did not meet the target due to case complexity and competing priorities.

<sup>8</sup>The two cases eligible for referral did not meet the criteria for referral.

<sup>9</sup>Only one of three closed investigations resulted in an indictment, conviction, civil suit or settlement, judgment, administrative action, monetary result or IG clearance letter, which resulted in an achievement rate of 33 percent.

<sup>10</sup>Two out of three cases did not meet this measure. One case was a joint operation in which OIG provided support. In the other case, the employee left before action could be taken.

**NRC OIG Strategic Goal 3: Improve the Economy, Efficiency, and Effectiveness With Which the NRC Manages and Exercises Stewardship over Its Resources**

	2016	2017	2018	2019	2020	2021
<b>Measure 1. Percentage of OIG completed products and activities that have a high impact on improving corporate management Programs.<sup>1</sup></b>						
<b>Target</b>	85%	85%	85%			
<b>Actual</b>	85%	93%	88%			

**Measure 2. Percentage of OIG audit products and activities that cause the agency to take corrective action to improve agency corporate management programs; ratify adherence to agency policies, procedures, or requirements; or identify real dollar savings or reduced regulatory burden (i.e., high impact).<sup>2</sup>**

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<b>Target</b>				85%	85%	85%
<b>Actual</b>				100%	TBD	TBD
<b>Measure 3. Percentage of audit recommendations agreed to by the agency.</b>						
<b>Target</b>	92%	92%	92%	92%	92%	92%
<b>Actual</b>	100%	100%	100%	100%	TBD	TBD
<b>Measure 4. Percentage of final agency actions taken within 2 years on audit recommendations.</b>						
<b>Target</b>	70%	70%	70%	70%	70%	70%
<b>Actual</b>	80%	81%	62% <sup>3</sup>	67% <sup>4</sup>	TBD	TBD
<b>Measure 5. Percentage of OIG investigative products and activities that identify opportunities for improvements to agency corporate management programs; ratify adherence to policies/procedures; or confirm or disprove allegations of wrongdoing (e.g., high impact).<sup>5</sup></b>						
<b>Target</b>				85%	85%	85%
<b>Actual</b>				86%	TBD	TBD
<b>Measure 6. Percentage of agency actions taken in response to investigative reports.</b>						
<b>Target</b>	90%	90%	90%	90%	90%	90%
<b>Actual</b>	100%	89% <sup>6</sup>	100%	100%	TBD	TBD
<b>Measure 7. Percentage of active cases completed in less than 18 months.</b>						
<b>Target</b>	90%	90%	90%	90%	90%	90%
<b>Actual</b>	78% <sup>7</sup>	85% <sup>8</sup>	72% <sup>9</sup>	59% <sup>10</sup>	TBD	TBD
<b>Measure 8. Percentage of closed investigations referred to DOJ or other relevant authorities.</b>						
<b>Target</b>	20%	20%	20%	20%	20%	20%
<b>Actual</b>	45%	44%	12% <sup>11</sup>	25%	TBD	TBD
<b>Measure 9. Percentage of closed investigations resulting in indictments, convictions, civil suits or settlements, judgments, administrative actions, monetary results, or IG clearance letters.</b>						
<b>Target</b>	60%	60%	60%	60%	60%	60%
<b>Actual</b>	71%	70%	46% <sup>12</sup>	42% <sup>13</sup>	TBD	TBD

<sup>1</sup>This measure was replaced, beginning in FY 2019, with measures 2 and 5 to clarify the definitions of high impact for audits and investigations.

<sup>2</sup>This high-impact measure for audits was added, beginning in FY 2019.

<sup>3</sup>Several audit reports included recommendations that require more than 2 years for the agency to finalize action on. The agency is working to finalize actions so that these recommendations can be closed.

<sup>4</sup>Recommendations required additional time to close due to system changes that were needed.

<sup>5</sup>This high-impact measure for investigations was added beginning in FY 2019.

<sup>6</sup>One of nine investigative cases resulted in no action taken in response to an investigative report which resulted in an 89 percent achievement rate.

<sup>7</sup>The complexity of several investigations in the corporate management arena required additional time to close these investigations.

<sup>8</sup>The complexity of several investigations required additional time to close these investigations.

<sup>9</sup>The complexity of several investigations required additional time to close.

<sup>10</sup>Due to the complexity and competing priorities, several investigations required additional time to close.

<sup>11</sup>Although we initially identified 17 cases with potential criminal violations, only 2 developed sufficient evidence to warrant referral.

<sup>12</sup>Two investigations were inconclusive; therefore, a clearance letter could not be issued. In another case, misconduct was identified; however, the agency did not take action.

<sup>13</sup>In several cases, either the subject left the agency before the agency could take action or the cases pertained to ownership of prohibited securities; therefore, a clearance memo was not warranted.



**VERIFICATION AND VALIDATION OF MEASURED VALUES AND PERFORMANCE**

The OIG uses an automated management information system to capture program performance data for the Audits and Investigations Programs. The integrity of the system was thoroughly tested and validated before implementation. Reports generated by the system provide both detailed information and summary data. All system data are deemed reliable.

**PROGRAM EVALUATIONS (PEER REVIEWS)**

An independent audit peer review performed in FY 2015 by the U.S. Federal Communications Commission OIG gave NRC OIG a peer review rating of “Pass.” This is the highest rating possible based on the available options of “Pass,” “Pass with deficiencies,” and “Fail.”

In addition, in October 2016, the Tennessee Valley Authority OIG issued a report documenting the results of its independent investigative peer review of OIG’s Investigations Program. The program was found to be in compliance with quality standards established by the Council of the Inspectors General on Integrity and Efficiency and the Attorney General Guidelines for Offices of Inspectors General with Statutory Law Enforcement Authority.

**DNFSB OIG PROGRAM PERFORMANCE MEASURES**

Performance Measures for the DNFSB OIG Program						
	2016	2017	2018	2019	2020	2021
<b>Measure 1. Percentage of OIG audits undertaken and issued within a year.<sup>1</sup></b>						
<b>Target</b>	60%	60%	60%			
<b>Actual</b>	100%	100%	100%			
<b>Measure 2. Percentage of OIG audit products and activities that cause the agency to take corrective action to improve agency safety, security, or corporate management programs; ratify adherence to agency policies, procedures, or requirements; or identify real dollar savings or reduced regulatory burden (i.e., high impact).<sup>2</sup></b>						
<b>Target</b>				85%	85%	85%
<b>Actual</b>				100%	TBD	TBD
<b>Measure 3. Percentage of audit recommendations agreed to by agency.<sup>3</sup></b>						
<b>Target</b>				50%	50%	50%
<b>Actual</b>				100%	TBD	TBD
<b>Measure 4. Percentage of final Board actions taken within 2 years on audit recommendations.</b>						
<b>Target</b>	50%	50%	50%	50%	50%	50%
<b>Actual</b>	100%	100%	100%	75%	TBD	TBD
<b>Measure 5. Percentage of OIG investigative products and activities that identify opportunities for improvements to agency safety, security, or corporate management programs; ratify adherence to policies/procedures; or confirm or disprove allegations of wrongdoing (e.g., high impact).<sup>4</sup></b>						
<b>Target</b>				85%	85%	85%
<b>Actual</b>				100%	TBD	TBD
<b>Measure 6. Percentage of Board actions taken in response to investigative reports.</b>						
<b>Target</b>	90%	90%	90%	90%	90%	90%
<b>Actual</b>	100%	100%	N/A	N/A	TBD	TBD
<b>Measure 7. Percentage of active cases completed in less than 18 months.</b>						
<b>Target</b>	85%	85%	85%	85%	85%	85%
<b>Actual</b>	100%	100%	N/A	25% <sup>5</sup>	TBD	TBD

<sup>1</sup>OIG anticipates issuing six audit reports per year. This measure was being tracked since FY 2015 and replaced with measure 2 beginning in FY 2019.

<sup>2</sup>This high-impact measure for audits was added, beginning in FY 2019.

<sup>3</sup>This measure for audits was added, beginning in FY 2019.

<sup>4</sup>This high-impact measure for investigations was added beginning in FY 2019.

<sup>5</sup>Out of four cases, one case completed within 18 months. A second case was referred; however, the individual retired before the agency could take action and the 18-month target was exceeded.

## **INSPECTOR GENERAL REFORM ACT CERTIFICATION FOR FY 2021**

In accordance with the Inspector General Reform Act (Public Law 110-409), the OIG NRC budget request was submitted to the NRC Chairman for FY 2021 and was subsequently approved. In addition, the OIG DNFSB budget request was submitted to the DNFSB Chairman for FY 2021 who provided no comments.

Furthermore, OIG's total budget request includes \$130,000 for OIG training. The amount requested provides for all OIG specific training requirements for which there is a fee charged to OIG for attendance. In addition, funds are available for the OIG share of the resources needed to support the Council of the Inspectors General on Integrity and Efficiency.

**APPENDIX A: FULL COST OF U.S. NUCLEAR REGULATORY COMMISSION PROGRAMS**

**APPENDIX A: FULL COST OF U.S. NUCLEAR REGULATORY COMMISSION PROGRAMS**

This appendix provides the full cost of U.S. Nuclear Regulatory Commission (NRC) programs. The table below reflects the total of the allocated corporate support costs for all business lines, except for the High-Level Waste Business Line and the Office of the Inspector General, plus the business line costs presented in each chapter of this report.

<b>Full Cost Budget Authority and Full-Time Equivalents</b>								
<b>(Dollars in Millions)</b>								
<b>Business Line/Major Program</b>	<b>FY 2019 Actuals</b>		<b>FY 2020 Enacted*</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>
Operating Reactors	549.8	1,828.7	523.0	1,877.6	552.8	1,859.9	29.8	(17.8)
New Reactors	122.2	410.5	124.5	420.4	114.9	360.6	(9.6)	(59.8)
<b>Nuclear Reactor Safety</b>	<b>\$671.9</b>	<b>2,239.2</b>	<b>\$647.5</b>	<b>2,298.0</b>	<b>\$667.7</b>	<b>2,220.5</b>	<b>\$20.2</b>	<b>(77.5)</b>
Spent Fuel Storage and Transportation	40.4	130.3	35.3	129.1	40.5	129.1	5.2	(0.1)
Nuclear Materials Users	84.5	258.4	81.2	259.6	80.1	254.3	(1.1)	(5.2)
Decommissioning and Low-Level Waste	35.5	116.0	33.1	117.7	33.3	108.8	0.2	(8.9)
High-Level Waste	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Facilities	32.0	109.9	29.1	102.6	28.2	92.4	(0.9)	(10.2)
<b>Nuclear Materials and Waste Safety Major Program Subtotal</b>	<b>\$192.4</b>	<b>614.7</b>	<b>\$178.7</b>	<b>609.0</b>	<b>\$182.2</b>	<b>584.5</b>	<b>\$3.4</b>	<b>(24.5)</b>
<b>Subtotal</b>	<b>\$864.3</b>	<b>2,853.8</b>	<b>\$826.2</b>	<b>2,907.0</b>	<b>\$849.9</b>	<b>2,805.0</b>	<b>\$23.6</b>	<b>(102.0)</b>
Integrated University Program	14.8	0.0	16.0	0.0	0.0	0.0	(16.0)	0.0
<b>Subtotal</b>	<b>\$879.2</b>	<b>2,853.8</b>	<b>\$842.2</b>	<b>2,907.0</b>	<b>\$849.9</b>	<b>2,805.0</b>	<b>\$7.6</b>	<b>(102.0)</b>
Office of the Inspector General	12.3	58.5	13.3	63.0	13.5	63.0	0.2	0.0
<b>Total</b>	<b>\$891.5</b>	<b>2,912.3</b>	<b>\$855.5</b>	<b>2,970.0</b>	<b>\$863.4</b>	<b>2,868.0</b>	<b>\$7.8</b>	<b>(102.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*FY 2020 Enacted does not include \$40 million of authorized prior-year carryover.

## **APPENDIX A: FULL COST OF U.S. NUCLEAR REGULATORY COMMISSION PROGRAMS**

The fiscal year (FY) 2021 Congressional Budget Justification identifies the infrastructure and support costs for the NRC. The allocation methodology is consistent with that used for preparing the agency's financial statements. The table below presents the associated infrastructure and support funding allocated to the programmatic funding to provide the full cost of each business line.

<b>Corporate Support by Business Line</b>								
<b>(Dollars in Millions)</b>								
<b>Major Programs</b>	<b>FY 2019 Actuals</b>		<b>FY 2020 Enacted*</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>
Operating Reactors	186.6	365.6	180.5	394.6	180.0	389.9	(0.5)	(4.8)
New Reactors	41.9	82.1	40.4	88.4	34.9	75.6	(5.5)	(12.8)
<b>Nuclear Reactor Safety</b>	<b>\$228.5</b>	<b>447.7</b>	<b>\$220.9</b>	<b>483.0</b>	<b>\$214.9</b>	<b>465.5</b>	<b>\$(6.0)</b>	<b>(17.5)</b>
Spent Fuel Storage and Transportation	13.3	26.0	12.4	27.1	12.5	27.1	0.1	(0.1)
Nuclear Materials Users	26.4	51.7	24.9	54.6	24.6	53.3	(0.3)	(1.2)
Decommissioning and Low-Level Waste	11.8	23.2	11.3	24.7	10.5	22.8	(0.8)	(1.9)
High-Level Waste	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Facilities	11.2	22.0	9.9	21.6	8.9	19.4	(0.9)	(2.2)
<b>Nuclear Materials and Waste Safety</b>	<b>\$62.7</b>	<b>122.9</b>	<b>\$58.5</b>	<b>128.0</b>	<b>\$56.6</b>	<b>122.5</b>	<b>\$(2.0)</b>	<b>(5.5)</b>
Integrated University Program	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>\$291.2</b>	<b>570.5</b>	<b>\$279.4</b>	<b>611.0</b>	<b>\$271.4</b>	<b>588.0</b>	<b>\$(8.0)</b>	<b>(23.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

\*FY2020 Enacted does not include \$40 million of authorized prior-year carryover.

**APPENDIX B: BUDGET AUTHORITY BY FUNCTION**

The U.S. Nuclear Regulatory Commission’s (NRC) budget authority is aggregated into the major categories of salaries and benefits, contract support, and travel. Salaries and benefits are estimated based on full-time equivalents (FTE), pay rates, pay raise assumptions including enacted pay raises and a one percent increase in awards spending directed by OMB Circular A-11, and the effective pay periods for pay raises. Benefits costs include the Federal Government’s contributions for retirement, health benefits, life insurance, Medicare, Social Security, and the Thrift Savings Plan. Contract support comprises obligations for commercial contracts, interagency agreements, grants, and other nontravel services, such as rent and utility payments. Travel costs primarily comprise expenses for site inspections at regulated facilities, meetings with stakeholders, and international travel.

<b>Budget Authority by Function</b> (Dollars in Millions)			
	<b>FY 2020 Enacted</b>	<b>FY 2021 Request</b>	<b>Changes from FY 2020</b>
<b>Salaries &amp; Expenses (S&amp;E)</b>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
Salaries and Benefits	534.7	556.8	22.1
Contract Support	285.8	272.2	(13.7)
Travel	21.7	21.0	(0.8)
<b>Total (S&amp;E)</b>	<b>\$842.2</b>	<b>\$849.9</b>	<b>\$7.6</b>
<b>Office of the Inspector General (OIG)</b>			
Salaries and Benefits	11.3	11.6	0.3
Contract Support	1.7	1.7	(0.0)
Travel	0.3	0.2	(0.1)
<b>Total (OIG)</b>	<b>\$13.3</b>	<b>\$13.5</b>	<b>\$0.2</b>
<b>Total NRC Appropriations</b>			
Salaries and Benefits	546.0	568.3	22.3
Contract Support	287.5	273.8	(13.7)
Travel	22.0	21.2	(0.8)
<b>Total (NRC)</b>	<b>\$855.5</b>	<b>\$863.4</b>	<b>\$7.8</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.



**APPENDIX C: ESTIMATED OPERATING POWER REACTORS ANNUAL FEE**

This appendix provides the U.S. Nuclear Regulatory Commission’s (NRC) estimated fiscal year (FY) 2021 annual fee calculation for operating power reactors and a comparison of that amount against the FY 2015 annual fee amount for operating power reactors, adjusted for inflation. In accordance with Section 102(b)(3)(B)(i) of Public Law 115-439, “Nuclear Energy Innovation and Modernization Act,” the operating power reactors annual fee, to the maximum extent practicable, shall not exceed the operating power reactors annual fee amount established in the FY 2015 final fee rule, adjusted for inflation. This provision takes effect in FY 2021.

The operating power reactors annual fee estimate is based on the NRC staff’s allocation of the FY 2021 budget request to fee collections under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 170, “Fees for Facilities, Materials, Import and Export Licenses, and Other Regulatory Services Under the Atomic Energy Act of 1954, as Amended,” and allocations within the operating power reactors fee class under 10 CFR Part 171, “Annual Fees for Reactor Licenses and Fuel Cycle Licenses and Materials Licenses, Including Holders of Certificates of Compliance, Registrations, and Quality Assurance Program Approvals and Government Agencies Licensed by the NRC;” it assumes 93 operating power reactors in FY 2021 and applies various data assumptions from the FY 2019 final fee rule. Based on these allocations and assumptions, the operating power reactor annual fee for FY 2021 is estimated to be \$4.8 million, approximately \$0.6 million below the FY 2015 operating power reactors annual fee amount, adjusted for inflation to \$5.4 million.

<b>Estimated FY 2021 Operating Power Reactors Annual Fee</b>	
	<b>\$M</b>
FY 2021 Operating Power Reactors Allocation	628.0
Estimated Part 170 Fee Collections	188.3
Estimated Part 171 Allocations	439.7
<i>Generic Transportation Resources Allocated<sup>1</sup></i>	0.5
Adjusted Part 171 Allocations <sup>2</sup>	440.2
<i>Generic Low-Level Waste Surcharge</i>	3.9
<i>Part 171 Billing Adjustments</i>	1.5
<b>Total FY 2021 Annual Fee<sup>3</sup></b>	<b>\$445.5</b>
<b>FY 2021 Annual Fee per Operating Power Reactor<sup>4</sup></b>	<b>\$4.8</b>
<b>FY 2015 Annual Fee per Operating Power Reactor Adjusted for Inflation<sup>5</sup></b>	<b>\$5.4</b>
<b>Delta: FY 2021 Annual Fee - FY 2015 Annual Fee Adjusted for Inflation</b>	<b>(\$0.6)</b>

Numbers may not add due to rounding.

<sup>1</sup>Generic transportation costs recovered as part of other existing annual fees as published in the FY 2006 final fee rule (71 FR 30734).

<sup>2</sup>Adjusted amount after generic transportation resources allocation.

<sup>3</sup>Sum of Adjusted Part 171 Allocations, Generic Low-Level Waste Surcharge, and Part 171 Billing Adjustments.

<sup>4</sup>Assumes 93 operating power reactors based on the following: 1) As published in the *Federal Register* on November 26, 2019, (84 FR 65032), the NRC will consider amending its regulations for 10 CFR part 52 combined license holders so that assessment of annual fees will commence at a time after the § 52.103(g) finding is issued. Based on this consideration, the NRC has conservatively assumed that Vogtle Electric Generating Plant, Unit 3, will be excluded from the count of operating power reactors that will be assessed fees for FY 2021. 2) Indian Point Nuclear Generating Unit 3 is scheduled to shut down in April 2021 and therefore, will be excluded from the count of operating reactors that will be assessed fees for FY 2021.

<sup>5</sup>Based on 1.5 percent Consumer Price Index increase per fiscal year.





**APPENDIX D: ESTIMATED AGENCY FEE RECOVERY**

Under the Omnibus Budget Reconciliation Act of 1990, as amended (OBRA-90), the U.S. Nuclear Regulatory Commission (NRC) had to recover approximately 90 percent of its total budget authority for each fiscal year, less amounts for activities excluded from fee recovery specifically identified in OBRA-90 or excluded by other legislation. The remaining 10 percent excluded from fee recovery by OBRA-90 was referred to as “fee-relief.”

Effective in fiscal year (FY) 2021, Public Law 115-439, “Nuclear Energy Innovation and Modernization Act” (NEIMA), repeals Section 6101 of OBRA-90 and establishes a revised framework for fee recovery. Under Section 102(b)(1)(B), NEIMA designates fee-relief activities identified by the Commission and other specific activities excluded from fee recovery as “excluded activities.”

**Fee Recovery Framework Comparison**

<b>OBRA-90</b>	<b>NEIMA</b>
Approximately 90% of total budget authority, less amounts for activities excluded from fee recovery specifically identified in OBRA-90 or excluded by other legislation	Approximately 100% of total budget authority, less excluded activities

Activities specifically identified in OBRA-90 or excluded by other legislation include Generic Homeland Security, Waste Incidental to Reprocessing, Nuclear Waste Fund, Advanced Reactors Regulatory Infrastructure, Office of the Inspector General (OIG) services for the Defense Nuclear Facilities Safety Board, and International Activities.

Under Section 102(b)(1)(B) of NEIMA, “excluded activities” include fee-relief activities identified by the Commission, Generic Homeland Security, Waste Incidental to Reprocessing, Nuclear Waste Fund, Advanced Reactors Regulatory Infrastructure, OIG services for the Defense Nuclear Facilities Safety Board, and the Integrated University Program. Fee-relief activities identified by the Commission consistent with prior fee rules include Agreement State oversight, regulatory support to Agreement States, medical isotope production infrastructure, fee exemption for non-profit educational institutions, generic decommissioning/reclamation, uranium recovery program and unregistered general licenses, Potential U.S. Department of Defense Remediation Program Memorandum of Understanding Activities (Military Radium-226), and non-military radium sites.

In addition for FY 2021, the Commission identified international activities, not including the resources requested for import and export licensing, as fee-relief activities to be excluded from fee recovery, in accordance with NEIMA. The amounts budgeted for fee-relief activities in FY 2021 are provided below.

## APPENDIX D: ESTIMATED AGENCY FEE RECOVERY

<b>Budgetary Resources for Fee-Relief Activities</b> (Dollars in Millions)		
<b>Business Line</b>	<b>FY 2021 Request</b>	
	<b>\$M</b>	<b>FTE</b>
Agreement State Oversight	5.1	20.2
Regulatory Support to Agreement States	7.1	23.0
Medical Isotope Production Infrastructure	4.9	21.5
Fee Exemption for Non-profit Educational Institutions	4.5	21.9
Generic Decommissioning/Reclamation	8.2	29.4
Uranium Recovery Program and Unregistered General Licensees	1.7	7.1
Potential Department of Defense Remediation Program Memorandum of Understanding Activities (Military Radium-226)	0.5	2.2
Non-Military Radium Sites	0.1	0.4
International Activities <sup>1</sup>	13.3	39.5
<b>Total<sup>2</sup></b>	<b>\$45.4</b>	<b>165.2</b>

\$M includes full-time equivalent (FTE) costs as well as contract support and travel. Numbers may not add due to rounding.

<sup>1</sup>Does not include resources for import and export licensing. For FY 2021, resources for import and export licensing are identified as a requested activity of the Commission. For more information on requested activities, please refer to Appendix E, "Requested Activities by Business Line."

<sup>2</sup>Does not include full cost allocation of \$37.8M applied during the development of the fee rule and \$8M for the small entity adjustment, as described in 10 CFR Part 171.15(d)(1) and 171.16(c).

Under this revised framework, and should the NRC receive the full amount requested for FY 2021, the estimated fee recovery amount for FY 2021 is \$740.4 million, as shown on the following page. Of this amount, approximately \$215.6 million, utilizing the estimated full cost FTE rate consistent with the fee rule methodology, is estimated to be recovered through fees assessed under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 170, "Fees for Facilities, Materials, Import and Export Licenses, and Other Regulatory Services under the Atomic Energy Act of 1954, as Amended." Approximately half of this amount is estimated to be recovered through requested activities of the Commission as described in Appendix E, "Requested Activities by Business Line." The remaining \$526.5 million of the \$740.4 million is estimated to be recovered through fees assessed under 10 CFR Part 171, "Annual Fees for Reactor Licenses and Fuel Cycle Licenses and Material Licenses, Including Holders of Certificates of Compliance, Registrations, and Quality Assurance Program Approvals and Government Agencies Licensed by the NRC."

The amounts shown for the FY 2020 Enacted Budget reflect the calculation under the OBRA-90 fee recovery framework. Under OBRA-90, the "Less Non-Fee Recoverable/Excluded Activities" Line does not include \$80.9 million for fee-relief activities. If accounted for, the total amount is \$127.5 million.

**APPENDIX D: ESTIMATED AGENCY FEE RECOVERY**

<b>Estimated Agency Fee Recovery</b>			
<b>(Dollars in Millions)</b>			
	<b>FY 2020 Enacted</b>	<b>FY 2021 Projection</b>	<b>Changes from FY 2020</b>
	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
<b>Total Appropriation<sup>1</sup></b>	<b>\$855.6</b>	<b>\$863.4</b>	<b>\$7.8</b>
<b>Less Non-Fee Recoverable/Excluded Activities</b>	<b>\$46.6<sup>2</sup></b>	<b>\$123.0</b>	<b>\$76.4</b>
<i>Generic Homeland Security</i>	<i>14.2</i>	<i>11.7</i>	<i>(2.4)</i>
<i>Waste Incidental to Reprocessing Advanced Reactors Regulatory Readiness</i>	<i>1.3</i>	<i>1.2</i>	<i>(0.1)</i>
<i>International Activities<sup>3</sup></i>	<i>14.5</i>	<i>0.0</i>	<i>(14.5)</i>
<i>Nuclear Waste Fund</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Defense Nuclear Facilities Safety Board</i>	<i>1.2</i>	<i>1.2</i>	<i>0.0</i>
<i>Integrated University Program</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Fee Relief Activities<sup>4</sup></i>	<i>80.9</i>	<i>91.2</i>	<i>10.3</i>
<b>Fees to be Recovered</b>	<b>\$728.1</b>	<b>\$740.4</b>	<b>\$12.3</b>
<i>Billing &amp; Carryover Adjustments<sup>5</sup></i>	<i>1.7</i>	<i>1.7</i>	<i>0.0</i>
<b>Adjusted Fee Recovery Amount</b>	<b>\$729.8</b>	<b>\$742.1</b>	<b>\$12.3</b>
<b>Estimated Part 170 Fees Amount<sup>6</sup></b>	<b>\$235.1</b>	<b>\$215.6</b>	<b>\$(19.5)</b>
<i>Estimated Part 170 Fees Percent</i>	<i>32.2%<sup>7</sup></i>	<i>29.0%</i>	<i>-3.2%</i>
<b>Estimated Part 171 Fees Amount</b>	<b>\$494.8</b>	<b>\$526.5</b>	<b>\$31.7</b>
<i>Estimated Part 171 Fees Percent</i>	<i>67.8%<sup>7</sup></i>	<i>71.0%</i>	<i>3.2%</i>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

<sup>1</sup>Includes both salaries and expenses and Office of the Inspector General appropriations.

<sup>2</sup>Does not include \$80.9M for fee relief activities. If accounted for, the total amount of \$127.5M would result in a decrease of \$4.5M from FY 2020 Enacted Budget versus an increase of \$76.4M.

<sup>3</sup>In FY 2021, resources for international activities, not including the resources requested for import and export licensing, have been identified by the Commission as a fee-relief activity and is included in the \$91.2M amount.

<sup>4</sup>Amount may vary in fee rule based on offsetting estimated receipts and small entity allowance. In addition to the fee-relief activities listed in the previous table, this amount includes a full cost allocation of \$37.8M applied during the development of the fee rule and \$8M for the small entity adjustment.

<sup>5</sup>The NRC applies billing and carryover adjustments to the estimated fee recovery amount to account for the sum of unpaid current year invoices minus prior year invoices that will be paid in the budget request year.

<sup>6</sup>Includes \$101.3 million recovered through requested activities of the Commission as identified in Appendix E, "Requested Activities by Business Line."

<sup>7</sup>FY 2020 Enacted Budget assumes same percentage from FY 2019 final fee rule.



**APPENDIX E: REQUESTED ACTIVITIES BY BUSINESS LINE**

This appendix summarizes the U.S. Nuclear Regulatory Commission’s fiscal year (FY) 2021 requested activities budgeted by business line. In accordance with Section 102(a)(1) of Public Law 115-439, “Nuclear Energy Innovation and Modernization Act” (NEIMA), “[i]n the annual budget justification submitted by the Commission to Congress, the Commission shall expressly identify anticipated expenditures necessary for completion of the requested activities of the Commission anticipated to occur during the applicable fiscal year.” According to NEIMA, a requested activity is defined as the processing of applications for (1) design certifications or approvals, (2) licenses, (3) permits, (4) license amendments, (5) license renewals, (6) certificates of compliance, (7) power uprates, and (8) any other activity requested by a licensee or applicant.

A total of \$62.5 million, including 265.8 full-time equivalents (FTE), is budgeted to support requested activities of the Commission, including import and export licensing activities, for FY 2021. Note the table below is not an exhaustive list of NRC’s budgetary resources for fee for service activities recovered through Title 10 of the *Code of Federal Regulations* (10 CFR) Part 170, “Fees for Facilities, Materials, Import and Export Licenses, and Other Regulatory Services Under the Atomic Energy Act of 1954, as Amended.” Other fee for service activities, such as inspections, do not meet NEIMA’s definition of a requested activity, and therefore, are not included.

Note the table below includes \$4.8 million, including 24.4 FTE, budgeted to support requested activities within the Nuclear Materials Users Business Line that will be recovered through annual fees under 10 CFR Part 171, “Annual Fees for Reactor Licenses and Fuel Cycle Licenses and Material Licenses, Including Holders of Certificates of Compliance, Registrations, and Quality Assurance Program Approvals and Government Agencies Licensed by the NRC.”

<b>Requested Activity by Business Line</b> (Dollars in Millions)		
<b>Business Line</b>	<b>FY 2021 Request</b>	
	<b>\$M</b>	<b>FTE</b>
Operating Reactors	27.7	121.2
New Reactors	15.1	65.0
Spent Fuel Storage and Transportation	9.0	33.7
Nuclear Materials Users <sup>1</sup>	5.5	28.5
Decommissioning and Low-Level Waste	2.6	9.7
Fuel Facilities	2.6	7.7
<b>Total</b>	<b>\$62.5</b>	<b>265.8</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

<sup>1</sup>\$4.8M, including 24.4 FTE, budgeted to support requested activities within the Nuclear Materials Users Business Line are recovered through annual fees under 10 CFR Part 171.

## **APPENDIX E: REQUESTED ACTIVITIES BY BUSINESS LINE**

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Should the NRC receive the full amount requested for FY 2021, the budgetary resources for 10 CFR Part 170 requested activities of \$57.8 million will be used to develop the fee schedule by applying the estimated full costed rate per FTE consistent with the fee rule methodology, converting the requested activities fee recoverable amount to \$101.3 million as part of the FY 2021 fee rule. This amount comprises approximately 47 percent of the agency's estimated FY 2021 total 10 CFR Part 170 recovered fee amount of \$215.6 million cited in Appendix D, "Estimated Agency Fee Recovery."

Section 102(c) of NEIMA requires the development of performance metrics for activities requested by licensees and applicants to be established no later than 180 days after the date of enactment of NEIMA. These new NEIMA performance metrics can be found at the end of each business line chapter.

**APPENDIX F: SUMMARY OF REIMBURSABLE WORK**

The U.S. Nuclear Regulatory Commission (NRC) performs services for other Federal agencies and non-Federal organizations on a reimbursable basis. The NRC's reimbursable work is financed with funds provided by the ordering organization and represents additional funding in excess of the NRC's directly appropriated funds. The table below lists anticipated reimbursable funding by category per fiscal year (FY).

<b>Summary of Reimbursable Work</b> (Dollars in Millions)								
<b>Description of Work</b>	<b>FY 2019 Actuals</b>		<b>FY 2020</b>		<b>FY 2021 Request</b>		<b>Changes from FY 2020</b>	
	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>	<b>\$M</b>	<b>FTE</b>
<b>COOPERATIVE RESEARCH</b>								
Foreign Cooperative Research Agreements	0.425	0.0	2.100	0.0	2.200	0.0	0.100	0.0
<b>FACILITIES REVENUE</b>								
Parking Receipts	0.000	0.0	0.015	0.0	0.015	0.0	0.000	0.0
Recycling Reimbursements (GSA)	0.015	0.0	0.005	0.0	0.005	0.0	0.000	0.0
<b>INTERNATIONAL ASSISTANCE</b>								
Cooperative Activities Travel (Nuclear Regulation Authority of Japan)	0.138	0.0	0.000	0.0	0.055	0.0	0.055	0.0
International Invitational Travel (IAEA)	0.385	0.0	0.350	0.0	0.300	0.0	(0.050)	0.0
International Travel (AIT)	0.013	0.0	0.016	0.0	0.015	0.0	(0.001)	0.0
<b>SECURITY RELATED ACTIVITIES</b>								
Criminal History Program	1.278	2.9	1.700	2.0	1.700	2.0	0.000	0.0
Information Access Authorization Program	0.346	1.1	0.540	1.5	0.540	1.5	0.000	0.0
Material Access Authorization Program	0.028	0.2	0.000	0.5	0.000	0.5	0.000	0.0
<b>TECHNICAL ASSISTANCE TO OTHER FEDERAL AGENCIES</b>								
Assessment of Analysis Methodology (DOE)	0.000	0.0	0.040	0.2	0.000	0.2	(0.040)	0.0
Development of Enforcement Policy (DOE/NNSA)	0.013	0.1	0.200	0.5	0.000	0.0	(0.200)	(0.5)
Employee Detail to Army Corps of Engineers (USACE)	0.180	0.6	0.000	0.0	0.000	0.0	0.000	0.0
Employee Detail to the Federal Permitting Improvement Steering Committee (FPISC)	0.029	0.2	0.070	0.3	0.000	0.0	(0.070)	(0.3)
Fuel Cycle Research and Development (DOE)	0.120	0.2	0.000	0.0	0.000	0.0	0.000	0.0
Hanford Tank Waste Projects (DOE)	0.339	1.3	0.600	2.0	0.600	2.0	0.000	0.0

**APPENDIX F: SUMMARY OF REIMBURSABLE WORK**

Summary of Reimbursable Work (Dollars in Millions)								
Description of Work	FY 2019 Actuals		FY 2020		FY 2021 Request		Changes from FY 2020	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Mars 2020 Mission Interagency Nuclear Safety Review Panel (NASA)	0.141	0.5	0.044	0.2	0.000	0.0	(0.044)	(0.2)
Revalidation of Selected Foreign Certificates for Packages (Casks) (DOE)	0.085	0.4	0.050	0.0	0.050	0.3	0.000	0.3
U.S. Navy Reviews (DOD)	0.004	0.1	0.005	0.1	0.005	0.1	0.000	0.0
Seismic Induced Liquefaction Model Development (DOI)	0.000	0.0	0.250	0.0	0.150	0.0	(0.100)	0.0
Surface Ship Support Barge Decommissioning (DOE)	0.000	0.0	0.500	1.0	0.675	1.5	0.175	0.5
<b>AGENCY TOTAL</b>	<b>\$3.539</b>	<b>7.4</b>	<b>\$6.485</b>	<b>8.3</b>	<b>\$6.310</b>	<b>8.1</b>	<b>(\$0.175)</b>	<b>(0.2)</b>

\$M includes full-time equivalent costs as well as contract support and travel. Numbers may not add due to rounding. Does not include classified reimbursable work agreements. FY 2019 \$M represents actual amounts obligated. FY 2020 and FY 2021 \$M represent new reimbursable budget authority expected in the FY from Federal agencies or other outside sources.



**APPENDIX G: FEDERAL INFORMATION TECHNOLOGY  
ACQUISITION REFORM ACT REQUIREMENTS**

February 4, 2020

MEMORANDUM TO: Office of Management and Budget

FROM: David J. Nelson **/RA/**  
Chief Information Officer  
Office of the Chief Information Officer  
U.S. Nuclear Regulatory Commission

L. Benedict Ficks **/RA Russell C. Allwein for/**  
Acting Chief Financial Officer  
Office of the Chief Financial Officer  
U.S. Nuclear Regulatory Commission

SUBJECT: INFORMATION TECHNOLOGY RESOURCE STATEMENTS

In accordance with [OMB Circular A-11, Sec. 51.3](#), the U.S. Nuclear Regulatory Commission (NRC) is providing this memorandum to demonstrate compliance with the Federal Information Technology Acquisition Reform Act (FITARA) through the following Information Technology (IT) Resource Statements:

- The NRC's Chief Information Officer (CIO) affirms that he collaborated with the Chief Financial Officer (CFO) on the IT Budget submissions, and those submissions include appropriate estimates of all IT resources included in the agency's budget request.
- The NRC's CIO affirms that he has thoroughly reviewed and had significant input in approving all IT Investments included in the agency's budget request.
- The NRC's CFO and CIO affirm that the agency's CIO had a significant role in reviewing planned IT support for major programs and significant increases and decreases in IT resources reflected in the agency's budget request.
- The CIO's current common baseline rating for Element D, Item D1, "CIO reviews and approves Major IT Investment portion of budget request," is "Fully Implemented." The NRC has developed and implemented its plan to ensure that the necessary processes and procedures are in place to fulfill these common baseline FITARA responsibilities.

CONTACT: Edward Madden, OCIO/GEMSD  
301-415-1362

## **APPENDIX G: FITARA REQUIREMENTS**

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- The CIO can certify the use of modular approaches and/or incremental development practices, as appropriate, for contracts and projects associated with IT Investments included in the agency's budget request.

**INFORMATION TECHNOLOGY TABLE**

In enacting the Federal Information Technology Acquisition Reform Act, Congress established Governmentwide IT management controls and required an inclusive governance process that enables effective planning, budgeting, and execution for IT investments. Consistent with that mandate, Section 51.3, “Analysis of Resources,” of U.S. Office of Management and Budget (OMB) Circular A-11, “Preparation, Submission, and Execution of the Budget,” issued July 2016, requires the following summary of agency IT spending by Treasury Account Fund Symbol (TAFS), as well as the tabular presentation on the following pages depicting the financial and personnel resources for all IT investments within each agency program area. For each IT investment, this table provides the investment title, its unique investment identifier (UII), all supported program names, and budget authority level for the prior year (PY) (fiscal year (FY) 2019), current year (CY) (FY 2020), and budget year (BY) (FY 2021).

NRC IT Spending (Dollars in Millions)									
TAFS	FY 2019 (PY) <sup>1</sup>			FY 2020 (CY) <sup>2</sup>			FY 2021 (BY)		
	CS	FTE	Total <sup>3</sup>	CS	FTE	Total	CS	FTE	Total
429-00-0200	126.744	175.5	157.933	130.886	182.0	163.417	108.188	168.0	140.895

**Note 1:** Table represents FY 2019 (PY) Actual Obligations, FY 2020 (CY) Enacted, and Agency Budget Request for FY 2021 (BY), as required by OMB Circular A-11, Section 55, "Information Technology Investments," [https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/assets/a11\\_current\\_year/a11\\_2017/s55.pdf](https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/assets/a11_current_year/a11_2017/s55.pdf), page 5

**Note 2:** Figures shown for FY 2020 exclude \$17.597M in authorized carryover included in the enacted budget.

**Note 3:** Total includes full-time equivalent costs as well as contract support.

NRC IT Table											
(Dollars in Millions)											
Ull	IT Investment Title	Program Area	FY 2019 (PY) <sup>1</sup>			FY 2020 (CY) <sup>2</sup>			FY 2021 (BY)		
			CS	FTE	Total <sup>3</sup>	CS	FTE	Total	CS	FTE	Total
429-00000500	Facilities, Space, and Property Management	01: Corporate Support	0.489	0.6	0.586	0.449	0.5	0.538	0.361	0.5	0.458
429-00000500	Facilities, Space, and Property Management	02: Nuclear Reactor Safety	0.008	0.0	0.008	0.010	0.0	0.010	0.010	0.0	0.010
429-00000600	Personnel Security Management	01: Corporate Support	0.844	0.5	0.932	0.583	1.5	0.849	0.536	1.5	0.826
429-000001300	Document and Knowledge Management	01: Corporate Support	0.351	0.0	0.351	0.163	0.0	0.163	0.259	0.0	0.259
429-000001400	Public Outreach	01: Corporate Support	0.567	0.0	0.567	0.392	0.0	0.392	0.402	0.0	0.402
429-000001500	Web Services	01: Corporate Support	1.017	2.5	1.457	0.886	3.0	1.417	1.162	3.0	1.743
429-000002100	Human Resource and Training Support	02: Nuclear Reactor Safety	0.320	0.0	0.320	0.669	0.0	0.669	0.479	0.0	0.479
429-000002100	Human Resource and Training Support	01: Corporate Support	0.271	0.0	0.271	0.376	3.0	0.907	0.376	3.0	0.957
429-000002100	Human Resource and Training Support	03: Nuclear Materials & Waste Safety	0.000	0.0	0.000	0.055	0.0	0.055	0.091	0.0	0.091
429-000002500	Financial Services	01: Corporate Support	10.737	9.0	12.321	8.601	7.9	9.999	10.896	6.4	12.135
429-000002600	Enterprise-wide Acquisition Services	01: Corporate Support	4.757	2.0	5.109	5.875	2.0	6.229	2.118	2.0	2.360
429-000003100	Workflow, Tracking, and Decision-making Support	01: Corporate Support	0.118	0.0	0.118	0.088	0.0	0.088	0.080	0.0	0.080
429-000003400	Secure Communications System	02: Nuclear Reactor Safety	2.658	7.0	3.946	2.745	8.0	4.217	2.705	8.0	4.289
429-000003600	Incident Response	02: Nuclear Reactor Safety	3.584	5.0	4.504	3.637	3.0	4.189	3.251	3.0	3.845

**NRC IT Table**

(Dollars in Millions)

UUI	IT Investment Title	Program Area	FY 2019 (PY) <sup>1</sup>			FY 2020 (CY) <sup>2</sup>			FY 2021 (BY)		
			CS	FTE	Total <sup>3</sup>	CS	FTE	Total	CS	FTE	Total
429-000006200	NRC IT Security and Compliance	01: Corporate Support	16.443	31.3	21.945	14.729	31.0	20.216	14.954	27.0	20.181
429-000006200	NRC IT Security and Compliance	02: Nuclear Reactor Safety	0.859	0.0	0.859	0.859	0.0	0.859	0.979	2.0	1.380
429-000006200	NRC IT Security and Compliance	03: Nuclear Materials & Waste Safety	0.237	0.0	0.237	0.237	0.0	0.237	0.237	0.0	0.237
429-000007700	NRC IT Management	01: Corporate Support	0.715	24.0	4.940	0.994	24.0	5.242	0.586	26.0	5.813
429-000008000	Electronic Document Authentication and Transmission	01: Corporate Support	0.027	0.0	0.027	0.027	0.0	0.027	0.027	0.0	0.027
429-000008200	Materials Licensing and Oversight	03: Nuclear Materials & Waste Safety	8.240	6.0	9.350	8.048	5.0	8.965	5.334	4.0	6.104
429-000008400	Reactor Licensing and Oversight	02: Nuclear Reactor Safety	8.454	12.0	10.679	8.131	11.0	10.175	8.518	7.0	9.918
429-000008400	Reactor Licensing and Oversight	01: Corporate Support	0.000	0.0	0.000	0.016	1.0	0.193	0.016	1.0	0.210
429-000008500	High Performance Computing and Scientific Software - Materials and Waste Safety	03: Nuclear Materials & Waste Safety	0.480	0.0	0.480	0.557	0.0	0.557	0.477	0.0	0.477
429-000008600	High Performance Computing and Scientific Software - Reactor Safety	02: Nuclear Reactor Safety	2.287	2.0	2.655	2.442	1.0	2.626	1.822	2.0	2.218
429-000008700	High-Level Waste Licensing and Oversight	03: Nuclear Materials & Waste Safety	0.000	0.0	0.000	10.391	8.0	11.911	0.000	0.0	0.000

**NRC IT Table**

(Dollars in Millions)

UII	IT Investment Title	Program Area	FY 2019 (PY) <sup>1</sup>			FY 2020 (CY) <sup>2</sup>			FY 2021 (BY)		
			CS	FTE	Total <sup>3</sup>	CS	FTE	Total	CS	FTE	Total
429-000009100	NRC Data Center and Cloud	03: Nuclear Materials & Waste Safety	0.318	0.0	0.318	0.424	0.0	0.424	0.415	0.0	0.415
429-000009100	NRC Data Center and Cloud	02: Nuclear Reactor Safety	1.147	0.0	1.147	1.546	0.0	1.546	1.515	0.0	1.515
429-000009100	NRC Data Center and Cloud	01: Corporate Support	14.902	4.2	15.641	12.450	6.0	13.512	9.024	5.0	10.186
429-000009200	NRC Network	01: Corporate Support	9.639	7.8	11.003	9.103	3.0	9.634	8.808	10.0	10.744
429-000009200	NRC Network	03: Nuclear Materials & Waste Safety	0.442	0.0	0.442	0.667	0.0	0.667	0.588	0.0	0.588
429-000009200	NRC Network	02: Nuclear Reactor Safety	2.413	2.0	2.781	2.743	0.0	2.743	2.365	0.0	2.365
429-000009300	NRC Delivery	01: Corporate Support	3.272	18.0	6.441	3.198	19.0	6.561	3.629	15.0	6.339
429-000009300	NRC Delivery	02: Nuclear Reactor Safety	0.000	0.0	0.000	0.000	0.0	0.000	0.000	3.0	0.603
429-000009400	NRC End User	02: Nuclear Reactor Safety	4.188	0.0	4.188	3.235	0.0	3.235	2.531	0.0	2.531
429-000009400	NRC End User	01: Corporate Support	13.085	24.0	17.310	14.352	31.0	19.839	11.324	25.0	16.164
429-000009400	NRC End User	03: Nuclear Materials & Waste Safety	0.176	0.0	0.176	0.809	0.0	0.809	0.670	0.0	0.670
429-000009500	NRC Failover Site	02: Nuclear Reactor Safety	0.050	0.0	0.050	0.138	0.0	0.138	0.200	0.0	0.200
429-000009600	NRC Application	02: Nuclear Reactor Safety	0.200	0.0	0.200	0.100	0.0	0.100	0.100	0.0	0.100
429-000009600	NRC Application	01: Corporate Support	1.643	4.3	2.391	2.523	4.3	3.275	2.403	3.0	2.984
429-000009700	NRC Platform	01: Corporate Support	9.201	7.5	10.521	6.555	5.8	7.573	7.118	7.0	8.473

NRC IT Table											
(Dollars in Millions)											
UII	IT Investment Title	Program Area	FY 2019 (PY) <sup>1</sup>			FY 2020 (CY) <sup>2</sup>			FY 2021 (BY)		
			CS	FTE	Total <sup>3</sup>	CS	FTE	Total	CS	FTE	Total
429-000009700	NRC Platform	03: Nuclear Materials & Waste Safety	0.041	0.0	0.041	0.041	0.0	0.041	0.000	0.0	0.000
429-000009700	NRC Platform	02: Nuclear Reactor Safety	0.142	0.0	0.142	0.142	0.0	0.142	0.000	0.0	0.000
429-999990060	E-Rulemaking	03: Nuclear Materials & Waste Safety	0.118	0.0	0.118	0.113	0.0	0.113	0.116	0.0	0.116
429-999990220	E-Travel	01: Corporate Support	0.600	1.0	0.776	0.458	1.1	0.653	0.326	1.6	0.636
429-999990230	Integrated Award Environment	01: Corporate Support	0.063	0.0	0.063	0.042	0.0	0.042	0.042	0.0	0.042
429-999991100	Financial Management LOB	01: Corporate Support	0.042	0.0	0.042	0.029	0.0	0.029	0.045	0.0	0.045
429-999991204	IBC Shared Service Center (HRLoB)	01: Corporate Support	1.223	3.0	1.751	1.090	2.0	1.444	1.125	2.0	1.512
429-999991217	E-Training	01: Corporate Support	0.209	2.0	0.561	0.000	0.0	0.000	0.000	0.0	0.000
429-999991218	USAJobs	01: Corporate Support	0.027	0.0	0.027	0.028	0.0	0.028	0.028	0.0	0.028
429-999991219	Enterprise Human Resource Integration	01: Corporate Support	0.140	0.0	0.140	0.140	0.0	0.140	0.140	0.0	0.140
<b>Total</b>			<b>126.744</b>	<b>175.5</b>	<b>157.933</b>	<b>130.886</b>	<b>182.0</b>	<b>163.417</b>	<b>108.188</b>	<b>168.0</b>	<b>140.895</b>

**Note 1:** Table represents FY 2019 (PY) Actual Obligations, FY 2020 (CY) Enacted, and Agency Budget Request for FY 2021 (BY), as required by OMB Circular A-11, Section 55, "Information Technology Investments" (page 6) [https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/assets/a11\\_current\\_year/a11\\_2017/s55.pdf](https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/assets/a11_current_year/a11_2017/s55.pdf)

**Note 2:** Figures shown for FY 2020 exclude \$17.597M in authorized carryover included in the enacted budget.

**Note 3:** Total includes full-time equivalent costs as well as contract support.





**APPENDIX H: SUMMARY OF PLANNED RULEMAKING ACTIVITIES  
(AS OF DECEMBER 10, 2019)**

The table below lists all of the U.S. Nuclear Regulatory Commission’s (NRC) rulemaking activities, including their priority and schedule, as of December 10, 2019. Of the 83 rulemaking activities listed, 61 are planned rulemaking activities and 22 are petitions for rulemaking that are currently under NRC review. The total rulemaking budget for fiscal year (FY) 2021 includes \$16.9 million and 82 full-time equivalents. The NRC has published the most current information available on the status of the agency’s rulemaking activities on its public Web site at <https://www.nrc.gov/about-nrc/regulatory/rulemaking/rules-petitions.html>.

At the time of publication, each proposed and final rule includes a statement that addresses actions taken to adhere to applicable backfitting and issue finality requirements. This includes discussing which backfitting and issue finality requirements apply, if any, and how NRC staff evaluated the rule with respect to those requirements. In an effort to improve consistency in applying these requirements, the agency provides training on backfitting and issue finality to staff who engage in activities where these topics arise. The agency’s Committee to Review Generic Requirements also reviews all rulemakings that meet defined criteria to provide additional confirmation that backfitting and issue finality requirements are appropriately and consistently applied to rulemakings.

Item #	Category	Title	CPR Priority	RIN <sup>1</sup>	Docket ID	Associated PRM Numbers	Rulemaking Initiation Date	Regulatory Basis Publication Date	Proposed Rule to Signature Authority	Proposed Rule Publication Date	Final Rule to Signature Authority	Final Rule Publication Date
1	Rulemaking Actions	2019 Edition of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code	High	3150-AK09	NRC-2017-0226	N/A	11/2/2017	N/A	7/31/2020	8/31/2020	5/28/2021	9/30/2021
2	Rulemaking Actions	2020 Edition of the American Society of Mechanical Engineers Operations and Maintenance Code	High	3150-AK22	NRC-2018-0290	N/A	12/12/2018	N/A	TBD	TBD	TBD	TBD
3	Rulemaking Actions	2021 Edition of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code	High	3150-AK21	NRC-2018-0289	N/A	12/12/2018	N/A	TBD	TBD	TBD	TBD
4	Rulemaking Actions	Advanced Boiling-Water Reactor (ABWR) Design Certification Renewal	High	3150-AK04	NRC-2017-0090	N/A	3/30/2017	N/A	7/21/2020	9/22/2020	7/21/2020	9/22/2020
5	Rulemaking Actions	American Society of Mechanical Engineers 2015—2017 Code Editions	High	3150-AJ74	NRC-2016-0082	N/A	7/1/2015	N/A	10/5/2018	11/9/2018	11/5/2019	3/4/2020

<sup>1</sup> Rulemaking activities without a Regulation Identification Number (RIN) have not been approved by the Commission for the NRC staff to begin rulemaking but are included in the table for completeness.

## APPENDIX H: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

Item #	Category	Title	CPR Priority	RIN <sup>1</sup>	Docket ID	Associated PRM Numbers	Rulemaking Initiation Date	Regulatory Basis Publication Date	Proposed Rule to Signature Authority	Proposed Rule Publication Date	Final Rule to Signature Authority	Final Rule Publication Date
		Incorporation by Reference										
6	Rulemaking Actions	Approval of American Society of Mechanical Engineers Code Cases, Revision 38	High	3150-AJ93	NRC-2017-0024	N/A	7/1/2014	N/A	6/11/2018	8/16/2018	9/6/2019	1/2/2020
7	Rulemaking Actions	Approval of American Society of Mechanical Engineers Code Cases, Revision 39	High	3150-AJ94	NRC-2017-0025	N/A	5/1/2016	N/A	7/29/2020	9/23/2020	10/14/2021	12/15/2021
8	Rulemaking Actions	Approval of American Society of Mechanical Engineers Code Cases, Revision 40	High	3150-AK23	NRC-2018-0291	N/A	12/12/2018	N/A	TBD	TBD	TBD	TBD
9	Rulemaking Actions	Cyber Security for Fuel Facilities	High	3150-AJ64	NRC-2015-0179	N/A	3/24/2015	4/12/2016	10/4/2017	4/30/2020	4/30/2021	8/30/2021
10	Rulemaking Actions	Drug and Alcohol Testing: Technical Issues and Editorial Changes	High	3150-AJ15	NRC-2012-0079	PRM-26-4, PRM-26-7, PRM-26-8	N/A	1/1/2021	1/1/2022	4/1/2022	1/1/2023	4/1/2023
11	Rulemaking Actions	Enhanced Security for Special Nuclear Material <sup>2</sup>	High	3150-AJ41	NRC-2014-0118	N/A	2/8/2006	N/A	9/30/2020	12/31/2020	9/20/2021	12/30/2021
12	Rulemaking Actions	Enhanced Weapons for Spent Fuel Storage Installations and Transportation—Section 161A Authority	High	3150-AJ55	NRC-2015-0018	N/A	8/15/2008	9/30/2020	3/26/2021	7/23/2021	3/25/2022	7/22/2022
13	Rulemaking Actions	Enhanced Weapons, Firearms Background Checks, and Security Event Notifications	High	3150-AI49	NRC-2011-0018	N/A	8/8/2005	N/A	3/16/2015	9/22/2015	5/21/2018	3/30/2020
14	Rulemaking Actions	Fitness-for-Duty Drug Testing Program Requirements	High	3150-AI67	NRC-2009-0225	N/A	9/1/2012	7/1/2013	2/22/2017	9/16/2019	2/26/2021	5/26/2021
15	Rulemaking Actions	Generic Environmental Impact for License Renewal	High	3150-AK32	NRC-2018-0296	N/A	12/14/2018	TBD	TBD	TBD	TBD	TBD

<sup>2</sup> The NRC staff, after reconsidering the need for additional requirements, provided a recommendation to discontinue the rulemaking to the Commission on October 1, 2019. The Commission is currently considering the recommendation.

## APPENDIX H: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

Item #	Category	Title	CPR Priority	RIN <sup>1</sup>	Docket ID	Associated PRM Numbers	Rulemaking Initiation Date	Regulatory Basis Publication Date	Proposed Rule to Signature Authority	Proposed Rule Publication Date	Final Rule to Signature Authority	Final Rule Publication Date
16	Rulemaking Actions	Greater-Than-Class-C and Transuranic Waste	High	3150-AK00	NRC-2017-0081	N/A	12/22/2015	7/22/2019	TBD	TBD	TBD	TBD
17	Rulemaking Actions	Independent Spent Fuel Storage Installation Security Requirements <sup>3</sup>	High	3150-AI78	NRC-2009-0558	PRM-72-6	N/A	N/A	9/30/2020	12/28/2020	9/30/2021	12/28/2021
18	Rulemaking Actions	Industrial Radiographic Operations and Training	High		NRC-2017-0022	PRM-34-6	N/A	TBD	TBD	TBD	TBD	TBD
19	Rulemaking Actions	Integrated Radioactive Source Security and Accountability	High		NRC-2015-0094	PRM-37-1	N/A	TBD	TBD	TBD	TBD	TBD
20	Rulemaking Actions	List of Approved Spent Fuel Storage Casks [This is a placeholder for several annually recurring rules.]	High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
21	Rulemaking Actions	List of Approved Spent Fuel Storage Casks: NAC International MAGNASTOR® Storage System, CoC No. 1031, Amendment No. 8	High	3150-AK38	NRC-2019-0195	N/A	10/1/2019	N/A	11/26/2019	1/21/2020	11/26/2019	1/21/2020
22	Rulemaking Actions	List of Approved Spent Fuel Storage Casks: Standardized NUHOMS® System, Certificate of Compliance No. 1004, Renewed Amendment No. 16	High	3150-AK39	NRC-2019-0202	N/A	10/1/2019	N/A	3/20/2020	4/24/2020	3/20/2020	4/24/2020
23	Rulemaking Actions	List of Approved Spent Fuel Storage Casks: TN Americas LLC NUHOMS EOS Dry Spent Fuel Storage System, Certificate of Compliance No. 1042, Amendment No. 1	High	3150-AK40	NRC-2019-0224	N/A	12/3/2019	N/A	2/20/2020	3/20/2020	2/20/2020	3/20/2020
24	Rulemaking Actions	Low-Level Radioactive Waste Disposal	High	3150-AI92	NRC-2011-0012	N/A	3/18/2009	N/A	7/18/2013	3/26/2015	11/30/2020	8/31/2021

<sup>3</sup> The NRC staff, after reconsidering the need for additional requirements, provided a recommendation to discontinue the rulemaking to the Commission on October 9, 2019. The Commission is currently considering the recommendation.

**APPENDIX H: SUMMARY OF PLANNED RULEMAKING ACTIVITIES**

Item #	Category	Title	CPR Priority	RIN <sup>1</sup>	Docket ID	Associated PRM Numbers	Rulemaking Initiation Date	Regulatory Basis Publication Date	Proposed Rule to Signature Authority	Proposed Rule Publication Date	Final Rule to Signature Authority	Final Rule Publication Date
25	Rulemaking Actions	NuScale Small Modular Reactor Design Certification	High	3150-AJ98	NRC-2017-0029	N/A	3/23/2017	N/A	3/19/2020	6/1/2020	11/23/2020	1/27/2021
26	Rulemaking Actions	Performance-Based Emergency Core Cooling System Acceptance Criteria	High	3150-AH42	NRC-2008-0332	PRM-50-71, PRM-50-84	3/31/2003	7/31/2008	3/1/2012	3/24/2014	3/16/2016	4/17/2020
27	Rulemaking Actions	Reactor Vessel Material Surveillance Testing During Period of Extended Operation	High		NRC-2018-0295	N/A	N/A	TBD	TBD	TBD	TBD	TBD
28	Rulemaking Actions	Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning	High	3150-AJ59	NRC-2015-0070	N/A	12/30/2014	11/27/2017	5/7/2018	4/30/2020	3/31/2021	10/15/2021
29	Rulemaking Actions	Revision of Fee Schedules: Fee Recovery for FY 2021	High	3150-AK24	NRC-2018-0292	N/A	11/1/2018	N/A	1/12/2021	1/25/2021	5/12/2021	5/30/2021
30	Rulemaking Actions	Revision of Fee Schedules: Fee Recovery for FY 2020	High	3150-AK10	NRC-2017-0228	N/A	11/13/2019	N/A	1/13/2020	1/31/2020	5/12/2020	5/29/2020
31	Rulemaking Actions	Risk-Informed, Technology Inclusive Regulatory Framework for Advanced Reactors	High	3150-AK31	NRC-2019-0062	N/A	N/A	12/15/2022	9/30/2024	4/30/2026	12/15/2026	8/31/2027
32	Rulemaking Actions	U.S. Advanced Pressurized Water Reactor (US-APWR) Design Certification	High	3150-AI83	NRC-2010-0133	N/A	2/29/2008	N/A	TBD	TBD	TBD	TBD
33	Rulemaking Actions	Updates for Emerging Medical Technologies	High		NRC-2018-0297	N/A	N/A	TBD	TBD	TBD	TBD	TBD
34	Rulemaking Actions	Adjustment of Civil Penalties for Inflation for Fiscal Year 2021	Medium	3150-AK25	NRC-2018-0293	N/A	12/12/2018	N/A	N/A	N/A	12/20/2020	1/15/2021
35	Rulemaking Actions	Adjustment of Civil Penalties for Inflation for FY 2020	Medium	3150-AK11	NRC-2018-0048	N/A	11/13/2019	N/A	N/A	N/A	12/20/2019	1/15/2020
36	Rulemaking Actions	Alignment of Licensing Processes and Lessons Learned from New Reactor Licensing	Medium	3150-AI66	NRC-2009-0196	N/A	9/22/2015	8/30/2020	2/22/2022	5/23/2022	12/19/2023	3/19/2024

## APPENDIX H: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

Item #	Category	Title	CPR Priority	RIN <sup>1</sup>	Docket ID	Associated PRM Numbers	Rulemaking Initiation Date	Regulatory Basis Publication Date	Proposed Rule to Signature Authority	Proposed Rule Publication Date	Final Rule to Signature Authority	Final Rule Publication Date
37	Rulemaking Actions	Alternative Physical Security Requirements for Advanced Reactors	Medium	3150-AK19	NRC-2017-0227	N/A	11/19/2018	7/16/2019	1/19/2021	4/19/2021	5/19/2022	8/19/2022
38	Rulemaking Actions	Categorical Exclusions from Environmental Review	Medium		NRC-2018-0300	N/A	N/A	TBD	TBD	TBD	TBD	TBD
39	Rulemaking Actions	Controlled Unclassified Information	Medium	3150-AK30	NRC-2019-0060	N/A	1/18/2019	N/A	1/10/2020	4/10/2020	5/31/2021	8/31/2021
40	Rulemaking Actions	Decommissioning Financial Assurance for Germanium-68/Gallium-68 Generators Returned to Manufacturers or Distributors	Medium		NRC-2017-0031	N/A	N/A	TBD	TBD	TBD	TBD	TBD
41	Rulemaking Actions	Definition of Utilization Facility for Medical Radioisotope Facilities	Medium		NRC-2018-0299	N/A	N/A	TBD	TBD	TBD	TBD	TBD
42	Rulemaking Actions	Emergency Preparedness Requirements for Small Modular Reactors and Other New Technologies	Medium	3150-AJ68	NRC-2015-0225	N/A	6/22/2016	11/15/2017	10/12/2018	1/31/2020	1/31/2021	4/30/2021
43	Rulemaking Actions	Financial Qualifications Requirements for Reactor Licensing	Medium	3150-AJ43	NRC-2014-0161	N/A	4/24/2014	N/A	2/28/2018	2/29/2020	11/24/2020	4/29/2021
44	Rulemaking Actions	Geologic Repository Operations Area (GROA) Fitness-For-Duty Requirements <sup>4</sup>	Medium	3150-AI38	NRC-2009-0089	N/A	N/A	9/17/2040	3/17/2042	9/17/2042	9/17/2043	3/17/2044
45	Rulemaking Actions	Geologic Repository Operations Area Security and Material Control and Accounting Requirements <sup>5</sup>	Medium	3150-AI06	NRC-2007-0670	N/A	N/A	3/16/2040	9/16/2041	3/16/2042	3/16/2043	7/15/2043

<sup>4</sup> This rulemaking activity is currently on hold. The dates listed are temporary placeholders pending the scheduling of an adjudicatory hearing on the DOE license application, which must be completed before the Commission decides whether to authorize construction of a geologic repository for high-level nuclear waste at Yucca Mountain, NV. The NRC will initiate requisite rulemaking activities pending the outcome of the licensing decision.

<sup>5</sup> This rulemaking activity is currently on hold. The dates listed are temporary placeholders pending the scheduling of an adjudicatory hearing on the DOE license application, which must be completed before the Commission decides whether to authorize construction of a geologic repository for high-level nuclear waste at Yucca

## APPENDIX H: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

Item #	Category	Title	CPR Priority	RIN <sup>1</sup>	Docket ID	Associated PRM Numbers	Rulemaking Initiation Date	Regulatory Basis Publication Date	Proposed Rule to Signature Authority	Proposed Rule Publication Date	Final Rule to Signature Authority	Final Rule Publication Date
46	Rulemaking Actions	Groundwater Protection In Situ Leach Uranium Recovery Facilities	Medium	3150-AI40	NRC-2008-0421	N/A	3/24/2006	N/A	1/30/2021	4/30/2021	1/31/2022	4/30/2022
47	Rulemaking Actions	Harmonization of Transportation Safety Requirements with IAEA Standards	Medium	3150-AJ85	NRC-2016-0179	N/A	8/19/2016	4/12/2019	10/30/2020	3/2/2021	1/28/2022	4/29/2022
48	Rulemaking Actions	Individual Monitoring Devices	Medium	3150-AK29	NRC-2019-0031	PRM-34-7	1/4/2019	N/A	7/9/2020	10/9/2020	7/9/2020	10/9/2020
49	Rulemaking Actions	Items Containing Byproduct Material Incidental to Production	Medium	3150-AJ54	NRC-2015-0017	PRM-30-65	8/13/2012	TBD	TBD	TBD	TBD	TBD
50	Rulemaking Actions	Miscellaneous Administrative Rulemaking [This is a placeholder for one or more rules making administrative or corrective changes to the CFR]	Medium		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
51	Rulemaking Actions	Modification of Administrative Requirements	Medium		NRC-2018-0298	N/A	N/A	TBD	TBD	TBD	TBD	TBD
52	Rulemaking Actions	Non-power Production or Utilization Facility License Renewal	Medium	3150-AI96	NRC-2011-0087	N/A	8/26/2009	10/2/2012	4/7/2016	3/30/2017	6/17/2019	6/26/2020
53	Rulemaking Actions	Reactor Vessel Material Surveillance Program Requirements (Appendix H)	Medium	3150-AK07	NRC-2017-0151	N/A	8/8/2014	4/3/2019	1/14/2020	4/14/2020	1/14/2020	4/14/2020
54	Rulemaking Actions	Receipts-Based Small Business Size Standards	Medium	3150-AJ51	NRC-2014-0264	N/A	N/A	TBD	TBD	TBD	TBD	TBD
55	Rulemaking Actions	Revision to the NRC's Acquisition Regulation (NRCAR)	Medium	3150-AJ36	NRC-2014-0033	N/A	6/1/2014	N/A	12/2/2019	3/2/2020	9/15/2020	12/15/2020
56	Rulemaking Actions	Social Security Number Fraud Prevention	Medium	3150-AK27	NRC-2018-0303	N/A	12/12/2018	N/A	11/22/2019	2/21/2020	11/22/2019	2/21/2020
57	Rulemaking Actions	Spent Fuel Cask Certificate of Compliance Format and Content	Medium		NRC-2014-0067	PRM-72-7	N/A	TBD	TBD	TBD	TBD	TBD

Mountain, NV. The NRC will initiate requisite rulemaking activities pending the outcome of the licensing decision.

## APPENDIX H: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

Item #	Category	Title	CPR Priority	RIN <sup>1</sup>	Docket ID	Associated PRM Numbers	Rulemaking Initiation Date	Regulatory Basis Publication Date	Proposed Rule to Signature Authority	Proposed Rule Publication Date	Final Rule to Signature Authority	Final Rule Publication Date
58	Rulemaking Actions	Spent Fuel Reprocessing <sup>6</sup>	Medium	3150-AJ53	NRC-2015-0016	N/A	N/A	7/26/2021	7/26/2022	10/26/2023	7/26/2023	10/26/2024
59	Rulemaking Actions	Updates and Clarifications on the Export of Deuterium	Medium	3150-AJ45	NRC-2014-0201	N/A	9/1/2014	N/A	2/28/2020	5/30/2020	2/28/2021	5/4/2021
60	Rulemaking Actions	Updates and Clarifications on the Export of Nuclear Material	Medium	3150-AK26	NRC-2018-0294	N/A	12/12/2018	N/A	N/A	N/A	10/16/2019	1/31/2020
61	Rulemaking Actions	Alternatives to the Use of Credit Ratings	Low	3150-AJ92	NRC-2017-0021	N/A	9/1/2014	N/A	6/30/2020	9/30/2020	6/30/2021	9/30/2021
62	Petition Actions	Access to the Decommissioning Trust Fund for the Disposal of Large Components	N/A	N/A	NRC-2019-0083	PRM-50-119	N/A	N/A	N/A	N/A	N/A	N/A
63	Petition Actions	Alternative Method for Calculating Embrittlement for Steel Reactor Vessels	N/A	N/A	NRC-2019-0180	PRM-50-120	N/A	N/A	N/A	N/A	N/A	N/A
64	Petition Actions	Calculated Maximum Fuel Element Cladding Temperature	N/A	N/A	NRC-2009-0554	PRM-50-93	N/A	N/A	N/A	N/A	N/A	N/A
65	Petition Actions	Calculated Maximum Fuel Element Cladding Temperature	N/A	N/A	NRC-2009-0554	PRM-50-95	N/A	N/A	N/A	N/A	N/A	N/A
66	Petition Actions	Categorization of the Licensee Fee Category for Full-Cost Recovery	N/A	N/A	NRC-2018-0172	PRM-170-7	N/A	N/A	N/A	N/A	N/A	N/A
67	Petition Actions	Criteria to Return Retired Nuclear Power Reactors to Operations	N/A	N/A	NRC-2019-0063	PRM-50-117	N/A	N/A	N/A	N/A	N/A	N/A
68	Petition Actions	Determining Which Structures, Systems, and Components and Functions Are Important to Safety	N/A	N/A	NRC-2015-0213	PRM-50-112	N/A	N/A	N/A	N/A	N/A	N/A
69	Petition Actions	Elimination of Immediate Notification Requirements for Non-Emergency Events	N/A	N/A	NRC-2018-0201	PRM-50-116	N/A	N/A	N/A	N/A	N/A	N/A

<sup>6</sup> NRC staff is reconsidering the need for additional requirements and will be providing a recommendation to the Commission in 2020.

**APPENDIX H: SUMMARY OF PLANNED RULEMAKING ACTIVITIES**

Item #	Category	Title	CPR Priority	RIN <sup>1</sup>	Docket ID	Associated PRM Numbers	Rulemaking Initiation Date	Regulatory Basis Publication Date	Proposed Rule to Signature Authority	Proposed Rule Publication Date	Final Rule to Signature Authority	Final Rule Publication Date
70	Petition Actions	Erik Erb—Minimum Day Off Requirement for Security Officers	N/A	N/A	NRC-2010-0310	PRM-26-6	N/A	N/A	N/A	N/A	N/A	N/A
71	Petition Actions	Fire Protection Compensatory Measures	N/A	N/A	NRC-2017-0132	PRM-50-115	N/A	N/A	N/A	N/A	N/A	N/A
72	Petition Actions	Linear No-Threshold Model and Standards for Protection against Radiation	N/A	N/A	NRC-2015-0057	PRM-20-28	N/A	N/A	N/A	N/A	N/A	N/A
73	Petition Actions	Linear No-Threshold Model and Standards for Protection against Radiation	N/A	N/A	NRC-2015-0057	PRM-20-29	N/A	N/A	N/A	N/A	N/A	N/A
74	Petition Actions	Linear No-Threshold Model and Standards for Protection against Radiation	N/A	N/A	NRC-2015-0057	PRM-20-30	N/A	N/A	N/A	N/A	N/A	N/A
75	Petition Actions	Measurement and Control of Combustible Gas Generation and Dispersal	N/A	N/A	NRC-2011-0189	PRM-50-103	N/A	N/A	N/A	N/A	N/A	N/A
76	Petition Actions	Measurement Standards Used at U.S. Nuclear Power Plants	N/A	N/A	NRC-2019-0071	PRM-50-118	N/A	N/A	N/A	N/A	N/A	N/A
77	Petition Actions	Naturally-Occurring and Accelerator-Produced Radioactive Materials	N/A	N/A	NRC-2017-0159	PRM-30-66	N/A	N/A	N/A	N/A	N/A	N/A
78	Petition Actions	Nuclear Energy Institute—Fitness-for-Duty Programs	N/A	N/A	NRC-2010-0304	PRM-26-5	N/A	N/A	N/A	N/A	N/A	N/A
79	Petition Actions	Power Reactors in Extended Shutdowns	N/A	N/A	NRC-2016-0204	PRM-50-114	N/A	N/A	N/A	N/A	N/A	N/A
80	Petition Actions	Professional Reactor Operator Society—Fitness-for-Duty Programs	N/A	N/A	NRC-2009-0482	PRM-26-3	N/A	N/A	N/A	N/A	N/A	N/A
81	Petition Actions	Protection of Digital Computer and Communication Systems and Networks	N/A	N/A	NRC-2014-0165	PRM-73-18	N/A	N/A	N/A	N/A	N/A	N/A
82	Petition Actions	Requirements for the Indefinite Storage of Spent Nuclear Fuel	N/A	N/A	NRC-2018-0017	PRM-72-8	N/A	N/A	N/A	N/A	N/A	N/A



**APPENDIX H: SUMMARY OF PLANNED RULEMAKING ACTIVITIES**

Item #	Category	Title	CPR Priority	RIN <sup>1</sup>	Docket ID	Associated PRM Numbers	Rulemaking Initiation Date	Regulatory Basis Publication Date	Proposed Rule to Signature Authority	Proposed Rule Publication Date	Final Rule to Signature Authority	Final Rule Publication Date
83	Petition Actions	Risk-Informed Categorization and Treatment of Structures, Systems, and Components for Nuclear Power Reactors	N/A	N/A	NRC-2015-0028	PRM-50-110	N/A	N/A	N/A	N/A	N/A	N/A



**APPENDIX I: OBLIGATIONS BY CONTROL POINT**

The table below provides the status of the U.S. Nuclear Regulatory Commission's (NRC) budget allowance and execution data by control points as of the end of fiscal year (FY) 2019 and the available prior-year carryover for allocation.

**APPENDIX I: OBLIGATIONS BY CONTROL POINT**

Nuclear Regulatory Commission  
 Monthly Congressional Status Report  
 As of September 30, 2019  
 (Dollars in Thousands)

Control Points	Current Year Funds									
	FY 2019 Explanatory Statement		Total	Carryover Allocated <sup>f</sup>	Total	Current Obligations	Current Year Expenditures	Current Year Unobligated	Current Year Unliquidated	Prior Year Unliquidated
	Enacted	Carryover								
Nuclear Reactor Safety	\$ 459,366	\$ 10,401	\$ 469,767	\$ 575	\$ 470,342	\$ 373,528	\$ 26,911	\$ 89,902	\$ 30,594	
Nuclear Materials and Waste Safety	106,204	2,405	108,609	0	108,609	86,538	2,571	19,500	5,592	
Decommissioning and Low-Level Waste	24,831	562	25,393	0	25,393	20,898	1,725	2,769	3,293	
Corporate Support	292,949	6,632	299,581	1,242	300,823	182,613	9,646	108,564	38,813	
Integrated University Program	15,000	0	15,000	363	15,363	4	532	14,827	28,273	
<b>Control Points Total</b>	<b>\$ 898,350</b>	<b>\$ 20,000</b>	<b>\$ 918,350</b>	<b>\$ 2,181</b>	<b>\$ 920,531</b>	<b>\$ 663,582</b>	<b>\$ 41,385</b>	<b>\$ 215,563</b>	<b>\$ 106,565</b>	
Advanced Reactor Regulatory Infrastructure Activities <sup>1</sup>	10,300	0	10,300	575	10,875	6,275	531	4,069	2,598	
International Activities <sup>2</sup>	16,080	0	16,080	0	16,080	13,256	954	1,870	723	
Office of the Commission <sup>3</sup>	9,500	0	9,500	1,242	10,742	6,030	4,679	33	0	
University Research and Development <sup>4</sup>	10,000	0	10,000	185	10,185	9,899	285	9,899	20,249	
Nuclear Science & Engineering Grant Program <sup>4</sup>	5,000	0	5,000	178	5,178	4,932	247	4,927	8,024	
<b>Programs</b>										
Nuclear Waste Fund	0	0	0	50	50	28	22	0	26	
Office of Inspector General	11,506	0	11,506	397	11,903	10,063	605	1,236	547	
OIG DNFSB	1,103	0	1,103	166	1,269	681	230	368	163	
<b>Total Agency</b>	<b>\$ 910,959</b>	<b>\$ 20,000</b>	<b>\$ 930,959</b>	<b>\$ 2,793</b>	<b>\$ 933,752</b>	<b>\$ 674,354</b>	<b>\$ 42,242</b>	<b>\$ 217,157</b>	<b>\$ 107,301</b>	

Funds Source	Prior Year Unobligated Funds			
	Beginning Balance	Year to Date Deobligations	Total Carryover	Available Carryover
Feebased	\$ 24,788	\$ 8,250	\$ 33,038	\$ 13,038
Special Purpose Funds	\$ 7,248	\$ 273	\$ 7,520	\$ 5,340
Advanced Reactor Regulatory Infrastructure Activities	599	9	598	575
International Activities	660	(45)	635	635
Office of the Commission	4,746	8	4,754	3,511
Integrated University Program	358	287	644	363
General Fund	858	15	873	873
Official Representation Fund	16	0	16	16
<b>Feebased &amp; Special Purpose Funds Subtotal</b>	<b>\$ 32,036</b>	<b>\$ 8,523</b>	<b>\$ 40,559</b>	<b>\$ 22,181</b>
Nuclear Waste Fund	431	4	435	50
Office of Inspector General	1,613	37	1,650	397
OIG DNFSB	239	0	239	166
<b>Total Agency</b>	<b>\$ 34,319</b>	<b>\$ 8,564</b>	<b>\$ 42,882</b>	<b>\$ 22,793</b>

Note: Numbers may not add due to rounding.

<sup>1</sup>Advanced Reactor Regulatory Infrastructure Activities is part of the Nuclear Reactor Safety control point.  
<sup>2</sup>International Activities is part of the Nuclear Reactor Safety, Nuclear Materials and Waste Safety, and Decommissioning and Low-Level Waste control points.  
<sup>3</sup>Office of the Commission is part of the Corporate Support control point. The Office of the Commission has been allocated \$1,242K of carryover, which is in addition to the \$9,500K of FY 2019 enacted funding. The NRC will obligate no more than a total of \$9,500K for the Office of the Commission.  
<sup>4</sup>University Research and Development and Nuclear Science & Engineering Grant Program comprise the Integrated University Program control point.  
<sup>5</sup>This does not include the \$20,000K of carryover that was authorized for use by the FY 2019 Explanatory Statement.

## **APPENDIX J: REPORT ON DRUG TESTING**

The U.S. Congress and the U.S. Department of Health and Human Services (HHS) initially approved the U.S. Nuclear Regulatory Commission's (NRC) Drug Testing Program in August 1988, and the agency subsequently updated the program in November 1997. The NRC revised the program again and received approval from HHS on August 23, 2007. This report does not cover the NRC's drug testing requirements for the nuclear industry (licensees), as imposed by agency regulations, which is separate and distinct from this program. The NRC's Drug Testing Program, administered in accordance with Executive Order 12564, "Drug-Free Federal Workplace," dated September 15, 1986, includes random, applicant, voluntary, follow-up, reasonable suspicion, and accident-related drug testing. The NRC initiated testing for nonbargaining-unit employees in November 1988, and in December 1990 for bargaining-unit employees, after negotiating an agreement with the National Treasury Employees Union. On August 25, 2008, the NRC expanded its testing program to include all NRC sensitive positions as designated for testing; therefore, all employees became subject to random drug testing.

During fiscal year (FY) 2019, the NRC conducted 2,999 tests of all types. This resulted in eight positive drug test results (one for cocaine, seven for marijuana). Five of the eight positive drug tests were pre-employment tests. All occurrences were appropriately addressed by the agency.

The NRC also completed internal quality control reviews during FY 2019 to ensure that the agency continues to administer its Drug Testing Program in a fair, confidential, and effective manner.

The NRC's Drug Testing Program follows the principles and guidance contained in Executive Order 12564, Public Law 100-71, HHS guidelines, and Commission decisions.



**APPENDIX K: SUMMARY OF OUTSTANDING U.S. GOVERNMENT ACCOUNTABILITY OFFICE  
AND INSPECTOR GENERAL RECOMMENDATIONS  
(AS OF DECEMBER 31, 2019)**

The table below lists public recommendations to the U.S. Nuclear Regulatory Commission’s (NRC) that are reported as open or closed, unimplemented by the U.S. Government Accountability Office and open by the NRC’s Office of the Inspector General. The recommendations listed below were issued by the respective audit organization on or before February 3, 2019.

<b>Report Number</b>	<b>Report Title</b>	<b>Recommendation Text</b>	<b>Reported Status/Explanation</b>
GAO-10-1039R	2010 Resubmission of the U.S.-Russia Nuclear Cooperation Agreement: Further Actions Needed by State and Other Agencies to Improve the Review of the Classified Nuclear Proliferation Assessment	Recommendation 8: The Secretary of State, in collaboration with the Secretary of Energy, the Secretary of Defense, the Chairman of the Nuclear Regulatory Commission, and the Director of National Intelligence, should take steps to strengthen the written procedures governing nuclear cooperation agreements. Specifically, these procedures should contain provisions that ensure appropriate consideration of any conflicting views from interagency partners about the proposed agreement and its accompanying documents prior to the submission to the President.	Closed, Unimplemented <sup>1</sup>
GAO-10-251	Managing Sensitive Information: Actions Needed to Prevent Unintended Public Disclosures of U.S. Nuclear Sites and Activities	Recommendation 1: To ensure that corrective actions are taken to prevent the inadvertent public disclosure of sensitive information in future draft declarations or other documents prepared for the International Atomic Energy Agency (IAEA) by multiple U.S. agencies, the Secretaries of Commerce, Energy, and State, and the Chairman of the Nuclear Regulatory Commission (NRC) should enter into an interagency agreement concerning the designation, marking, and handling of such information, and make any policy or regulatory changes necessary to reach such an agreement. This agreement should be revised, as	Closed, Unimplemented <sup>2</sup>

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
		<p>necessary, to take into account future direction from the President or the Controlled Unclassified Information Council regarding standardization of the procedures for designating, marking, and handling documents that are unclassified but are not intended for public release.</p>	
GAO-12-925	<p>Nuclear Nonproliferation: Additional Actions Needed to Improve Security of Radiological Sources at U.S. Medical Facilities</p>	<p>Recommendation 2: To help address the security vulnerabilities at U.S. hospitals and medical facilities that contain high-risk radiological materials, the Chairman of the Nuclear Regulatory Commission should strengthen NRC security requirements by providing hospitals and medical facilities with specific measures they must take to develop and sustain a more effective security program, including specific direction on the use of cameras, alarms, and other relevant physical security measures.</p>	Closed, Unimplemented <sup>3</sup>
GAO-13-243	<p>Emergency Preparedness: NRC Needs to Better Understand Likely Public Response to Radiological Incidents at Nuclear Power Plants</p>	<p>Recommendation 1: To better inform efforts for nuclear power plant emergency preparedness and planning, NRC Commissioners should obtain information on public awareness of radiological emergency preparedness for communities outside the 10-mile emergency planning zone and the likely response of those communities in the event of a radiological incident at a nuclear facility and consider how these results may affect estimates for shadow evacuations outside the zone.</p>	Closed, Unimplemented <sup>4</sup>
GAO-14-109	<p>Nuclear Safety: Countries' Regulatory Bodies Have Made Changes in Response to the Fukushima Daiichi Accident</p>	<p>Recommendation 2: To increase the likelihood of NRC's access to timely, accurate, and comprehensive information during nuclear accidents, the NRC Chairman should consider expediting NRC's decision on whether or how to upgrade the Emergency Response Data System</p>	Closed, Unimplemented <sup>5</sup>



Report Number	Report Title	Recommendation Text	Reported Status/Explanation
		so that it would remain functional during a severe accident.	
GAO-14-413	Federal Software License: Better Management Needed to Achieve Significant Savings Government-Wide	Recommendation 113: To ensure the effective management of software licenses, the Chairman of the Nuclear Regulatory Commission should provide software license management training to appropriate agency personnel addressing contract terms and conditions, negotiations, laws and regulations, acquisition, security planning, and configuration management.	Open  Implementation complete - auditor validation pending.
GAO-15-98	Nuclear Regulatory Commission: NRC Needs to Improve Its Cost Estimates by Incorporating More Best Practices	Recommendation 1: To improve the reliability of its cost estimates, as NRC revises its cost estimating procedures, the NRC Chairman should ensure that the agency aligns the procedures with relevant cost estimating best practices identified in the GAO Cost Estimating and Assessment Guide and ensure that future cost estimates are prepared in accordance with relevant cost estimating best practices.	Open  Implementing, estimated completion – 03/31/2020.
GAO-16-323	Data Center Consolidation: Agencies Making Progress, but Planned Savings Goals Need to Be Established	Recommendation 30: The Chairman of the Nuclear Regulatory Commission should take action to improve progress in the data center optimization areas that we reported as not meeting OMB's established targets, including addressing any identified challenges.	Open  Implementation complete - auditor validation pending.
GAO-16-330	Nuclear Security: NRC Has Enhanced the Controls of Dangerous Radioactive Materials, but Vulnerabilities Remain	Recommendation 1: Because some quantities of radioactive materials are potentially dangerous to human health if not properly handled, NRC should take action to better track and secure these materials and verify the legitimacy of the licenses for those who seek to possess them. Specifically, the NRC should take the steps needed to include category 3 sources in the National Source	Open  Staff recommendation under Commission review.

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
		Tracking System and add agreement state category 3 licenses to the Web-based Licensing System as quickly as reasonably possible.	
GAO-16-330	Nuclear Security: NRC Has Enhanced the Controls of Dangerous Radioactive Materials, but Vulnerabilities Remain	Recommendation 2: Because some quantities of radioactive materials are potentially dangerous to human health if not properly handled, NRC should take action to better track and secure these materials and verify the legitimacy of the licenses for those who seek to possess them. Specifically, the NRC should at least until such time that category 3 licenses can be verified using the License Verification System, require that transferors of category 3 quantities of radioactive materials confirm the validity of a would-be purchaser's radioactive materials license with the appropriate regulatory authority before transferring any category 3 quantities of licensed materials.	Open  Staff recommendation under Commission review.
GAO-16-330	Nuclear Security: NRC Has Enhanced the Controls of Dangerous Radioactive Materials, but Vulnerabilities Remain	Recommendation 3: Because some quantities of radioactive materials are potentially dangerous to human health if not properly handled, NRC should take action to better track and secure these materials and verify the legitimacy of the licenses for those who seek to possess them. Specifically, the NRC should, as part of the ongoing efforts of NRC working groups meeting to develop enhancements to the precicensing requirements for category 3 licenses, consider requiring that an on-site security review be conducted for all unknown applicants of category 3 licenses to verify that each applicant is prepared to implement the required security measures before taking possession of licensed radioactive materials.	Open  Staff recommendation under Commission review.

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
GAO-16-713	Nuclear Material: Agencies Have Sound Procedures for Managing Exchanges but Could Improve Inventory Monitoring	Recommendation 2. To help ensure compliance with the United States' nuclear cooperation agreements, the Under Secretary for Nuclear Security, as the Administrator of the National Nuclear Security Administration, and the Nuclear Regulatory Commission, should clarify in guidance the conditions under which facilities may carry negative obligation balances.	Open  Implementing, estimated completion 06/30/2020.
GAO-16-511	Information Technology: Agencies Need to Improve Their Application Inventories to Achieve Additional Savings	Recommendation 19. To improve federal agencies' efforts to rationalize their portfolio of applications, the heads of the Departments of Agriculture, Commerce, Education, Energy, Health and Human Services, Housing and Urban Development, the Interior, Labor, State, Transportation, the Treasury, and Veterans Affairs; and heads of the Environmental Protection Agency; National Aeronautics and Space Administration; National Science Foundation; Nuclear Regulatory Commission; Office of Personnel Management; Small Business Administration; Social Security Administration; and U.S. Agency for International Development should direct their Chief Information Officers (CIOs) and other responsible officials to improve their inventories by taking steps to fully address the practices we identified as being partially met or not met.	Open  Implementation complete - auditor validation pending.
GAO-17-58	Radioactive Sources: Opportunities Exist for Federal Agencies to Strengthen Transportation Security	Recommendation 1. To improve the awareness of how risk-significant radioactive sources are transported within the United States and to better determine whether Nuclear Regulatory Commission (NRC) is meeting its goal of providing reasonable assurance for preventing the theft or diversion of these dangerous materials,	Open  Not Implementing. <sup>6</sup>

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
		the Chairman of NRC should take actions to collect information from licensees on the number of shipments and mode of transport for such sources--for example, by identifying the extent to which an existing NRC database (e.g., the National Source Tracking System) may be used to capture this information.	
GAO-17-233	Strategic Human Capital Management: NRC Could Better Manage the Size and Composition of Its Workforce by Further Incorporating Leading Practices	Recommendation 1. To improve NRC's ability to strategically manage the size and composition of its workforce and respond to changes in the nuclear industry, the Chairman of the Nuclear Regulatory Commission should set agencywide goals, which could be ranges, for overall workforce size and skills composition that extend beyond the 2-year budget cycle.	Open  Implementation complete - auditor validation pending.
GAO-17-233	Strategic Human Capital Management: NRC Could Better Manage the Size and Composition of Its Workforce by Further Incorporating Leading Practices	Recommendation 2. To improve NRC's ability to strategically manage the size and composition of its workforce and respond to changes in the nuclear industry, the Chairman of the Nuclear Regulatory Commission should establish a systematic, comprehensive approach for tracking employee skills information, either through the system developed through the competency modeling pilot program or some other system.	Open  Implementation complete- auditor validation pending.
GAO-17-233	Strategic Human Capital Management: NRC Could Better Manage the Size and Composition of Its Workforce by Further Incorporating Leading Practices	Recommendation 3. To improve NRC's ability to strategically manage the size and composition of its workforce and respond to changes in the nuclear industry, the Chairman of the Nuclear Regulatory Commission should consistently train managers and supervisors in strategic human capital management and assessing employee skillsets.	Open  Implementation complete - auditor validation pending.

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
GAO-17-448	Data Center Optimization: Agencies Need to Address Challenges and Improve Progress to Achieve Cost Savings Goal	Recommendation 18. The Secretaries of Agriculture, Commerce, Defense, Homeland Security, Energy, HHS, Interior, Labor, State, Transportation, Treasury, and VA; the Attorney General of the United States; the Administrators of EPA, GSA, and SBA; the Director of OPM; and the Chairman of NRC should take action to, within existing OMB reporting mechanisms, complete plans describing how the agency will achieve OMB's requirement to implement automated monitoring tools at all agency-owned data centers by the end of fiscal year 2018.	Open  Implementation complete- auditor validation pending.
GAO-18-318	Nuclear Regulatory Commission: Additional Action Needed to Improve Process for Billing Licensees	Recommendation 1. The Chief Financial Officer of NRC should formally communicate to all licensees that supplemental billing information--including biweekly reports and monthly status reports on contractor charges--is available and how to request it. Formal communication that would reach all licensees could include adding information to their quarterly invoices.	Open  Implementation complete - auditor validation pending.
GAO-18-318	Nuclear Regulatory Commission: Additional Action Needed to Improve Process for Billing Licensees	Recommendation 2. The Chief Financial Officer of NRC should develop agency policy and guidance for staff on what billing information related to contractor charges NRC staff can provide to licensees and how it should be provided.	Open  Implementation complete - auditor validation pending.
GAO-18-318	Nuclear Regulatory Commission: Additional Action Needed to Improve Process for Billing Licensees	Recommendation 3. As NRC plans its transition to electronic billing, the Chief Financial Officer of NRC should develop a project plan that incorporates standards for project management, which includes establishing plans for schedule and cost.	Open  Implementation complete - auditor validation pending.

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
GAO-18-318	Nuclear Regulatory Commission: Additional Action Needed to Improve Process for Billing Licensees	Recommendation 4. In developing the project plan for electronic billing, the Chief Financial Officer of NRC should include steps to involve licensees in developing system capabilities, which includes soliciting and considering licensees' information needs.	Open  Implementation complete - auditor validation pending.
GAO-18-318	Nuclear Regulatory Commission: Additional Action Needed to Improve Process for Billing Licensees	Recommendation 5. In developing the project plan for electronic billing, the Chief Financial Officer of NRC should include steps to assess the results of implementing electronic billing, which includes comparing the actual performance to intended outcomes.	Open  Implementation complete - auditor validation pending.
GAO-18-93	Federal Chief Information Officers: Critical Actions Needed to Address Shortcomings and Challenges in Implementing Responsibilities	Recommendation 23. The Chairman of the Nuclear Regulatory Commission should ensure that the agency's IT management policies address the role of the CIO for key responsibilities in the five areas we identified.	Open  Disagree in part <sup>7</sup> Remaining areas being implemented – Estimated completion 03/31/2020.
OIG-11-A-15	Audit of NRC's Shared S Drive	Recommendation 2. Revise current information security training for NRC staff to address specific practices for protecting Sensitive Unclassified Non-Safeguards Information (SUNSI) on the agency's shared network drives.	Open  Implementing, estimated completion 04/30/2020.

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
OIG-11-A-15	Audit of NRC's Shared S Drive	<p>Recommendation 3. Develop Controlled Unclassified Information (CUI) policies and guidance for storing and protecting CUI in agency shared drives, and:</p> <p>a. post this guidance on the NRC intranet; and</p> <p>b. include this guidance in annual training.</p>	<p>Open</p> <p>Implementing, estimated completion 09/30/2020.</p>
OIG-13-A-16	Audit of NRC's Safeguards Information Local Area Network and Electronic Safe	<p>Recommendation 3. Evaluate and update the current folder structure to meet user needs.</p>	<p>Open</p> <p>Implementing, estimated completion 12/31/2020.</p>
OIG-13-A-16	Audit of NRC's Safeguards Information (SGI) Local Area Network and Electronic Safe	<p>Recommendation 7. Develop a structured access process that is consistent with the SGI need-to-know requirement and least privilege principle. This should include:</p> <ul style="list-style-type: none"> <li>· Establishing folder owners within SLES and providing the owners the authority to approve the need-to-know authorization (as opposed to branch chiefs).</li> <li>· Conducting periodic reviews of user access to folders.</li> <li>· Developing a standard process to grant user access.</li> </ul>	<p>Open</p> <p>Implementing, estimated completion 04/30/2021.</p>
OIG-13-A-18	Audit of NRC's Budget Execution Process	<p>Recommendation 3. Enforce the use of correct budget object codes (BOCs).</p>	<p>Open</p> <p>Implementing, estimated completion 12/31/2021.</p>

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
OIG-15-A-06	Audit of NRC's Oversight of Spent Fuel Pools	Recommendation 1. Provide a generic regulatory solution for spent fuel pool criticality analysis by developing and issuing detailed licensee guidance along with the NRC internal procedures.	Open Implementing, estimated completion 03/31/2020.
OIG-15-A-12	Audit of NRC's Internal Controls Over Fee Revenue	Recommendation 1. Establish policies and procedures to centralize the control of Technical Assignment Control (TAC) setup.	Open Implementing, estimated completion 02/28/2020.
OIG-15-A-17	Audit of NRC's Web-Based Licensing System (WBL)	Recommendation 2. Revise Web-Based Licensing (WBL) roles to require license reviewers and materials inspectors to process their work directly in WBL.	Open Implementation complete - auditor validation pending.
OIG-16-A-06	Evaluation of NRC's Agencywide Documents Access and Management System (ADAMS) Functional and Operational Capabilities	Recommendation 1. Expedite and fully implement the ADAMS RM module so that records retention schedules can be attached to all the official records within ADAMS.	Open Implementation complete - auditor validation pending.
OIG-16-A-06	Evaluation of NRC's Agencywide Documents Access and Management System (ADAMS) Functional and Operational Capabilities	Recommendation 3. Reduce the number of templates, study applicability of automation techniques to pre-fill profile metadata, and attain better standardization and consistency.	Open Implementation complete – auditor validation pending.
OIG-16-A-16	Audit of NRC's Decommissioning Funds Program	Recommendation 1. Clarify guidance to further define “legitimate decommissioning activities” by developing objective criteria for this term.	Open Implementing, estimated completion 03/15/2021.



Report Number	Report Title	Recommendation Text	Reported Status/Explanation
OIG-16-A-16	Audit of NRC's Decommissioning Funds Program	Recommendation 2. Develop and issue clarifying guidance to NRC staff and licensees specifying the instances when an exemption is not needed.	Open  Implementing, estimated completion 03/15/2021.
OIG-16-A-17	Audit of NRC's Implementation of Federal Classified Information Laws and Policies	Recommendation 1(b). Complete the current inventories of classified information in safes and secure storage areas.	Open  Implementing, estimated completion 12/31/2020.
OIG-16-A-21	Audit of NRC's Significance Determination Process (SDP) for Reactor Safety	Recommendation 2. Clarify Inspection Manual Chapter (IMC) 0612 Appendix B issue screening questions, so that they are readily understood and easily applied.	Open  Implementation complete – auditor validation pending.
OIG-17-A-07	Audit of NRC's Foreign Assignee Program	Recommendation 2. Develop a secure, cost-efficient method to provide foreign assignees an email account that allows for the U.S. Nuclear Regulatory Commission (NRC) detection and mitigation of inadvertent transmission of sensitive information and seek Commission approval to implement it.	Open  Implementing, estimated completion 04/30/2020.
OIG-17-A-07	Audit of NRC's Foreign Assignee Program	Recommendation 3. When an NRC approved email account is available, develop specific Computer Security Rules of Behavior for foreign assignees using the approved email.	Open  Implementing, estimated completion 04/30/2020.

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
OIG-17-A-08	Audit of NRC's Oversight of Source Material Exports to Foreign Countries	Recommendation 1. Coordinate among the Office of International Programs (OIP), Office of Nuclear Materials Safety and Safeguards (NMSS), and regional offices, as appropriate, in developing and implementing an export inspection program to include pre-licensing site visits and periodic post-licensing inspections at Part 110 applicant and licensee locations. The pre-licensing visits may only apply to export applicants who do not already possess another Nuclear Regulatory Commission license.	Open  Implementation complete – auditor validation pending. <sup>8</sup>
OIG-17-A-09	Audit of NRC's Oversight of Security at Decommissioning Reactors	Recommendation 1. Clarify the fitness-for-duty elements that are necessary to comply with Title 10 of the Code of Federal Regulations (10 CFR) 73.55(b)(9)(ii), insider mitigation program (IMP).	Open  Implementing, estimated completion 04/30/2020.
OIG-17-A-09	Audit of NRC's Oversight of Security at Decommissioning Reactors	Recommendation 2. Develop rule language in 10 CFR Part 26 that describes the necessary fitness-for-duty requirements for decommissioning licensees.	Open  Implementing, estimated completion 03/15/2021.
OIG-17-A-18	Audit of NRC's PMDA/DRMA Functions to Identify Program Efficiencies	Recommendation 1. Complete implementation of all Mission Support Task Force recommendations that may assist in optimizing the use of resources and result in improving standardization and centralization throughout the agency.	Open  Implementing, estimated completion 01/30/2020.
OIG-17-A-19	Evaluation of NRC's Network Storage Interruption	Recommendation 2. Develop and implement an internal Office of the Chief Information Officer (OCIO) policy that requires NRC subject matter experts to re-evaluate the storage system architecture.	Open  Implementation complete – auditor validation pending.

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
OIG-17-A-19	Evaluation of NRC's Network Storage Interruption	Recommendation 3. Develop and implement GLINDA (Global Infrastructure and Development Acquisition) Service Level Requirement(s) that specify required service availability and performance requirements, from an end user's perspective, for email access and network file access (e.g., P:, G:, R:, S: drives).	Open  Implementation complete – auditor validation pending.
OIG-17-A-19	Evaluation of NRC's Network Storage Interruption	Recommendation 4. Develop and implement a GLINDA contract governance plan.	Open  Implementation complete – auditor validation pending.
OIG-17-A-21	Audit of NRC's Oversight for Issuing Certificates of Compliance for Radioactive Material Packages	Recommendation 2. Document and communicate to stakeholders NRC's analysis results identifying the bases for an appropriate term for Part 71 certificates of compliance.	Open  Implementation complete – auditor validation pending.
OIG-18-A-06	Evaluation of the Shared S Drive	Recommendation 3. Review the shared "S" drive for PII on a periodic timeframe.	Open  Implementation complete – auditor validation pending.
OIG-18-A-06	Evaluation of the Shared S Drive	Recommendation 4. Remove or delete PII from the shared "S" drive.	Open  Implementing, estimated completion 06/30/2020.

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
OIG-18-A-09	Audit of NRC's Decommissioning Financial Assurance Instrument Inventory	<p>Recommendation 1. Update guidance to reflect current practices, including, but not limited to:</p> <p>A. Define what is to be kept in the files and/or safe and implement the guidance.</p> <p>B. Define the filing methodology for the safe (e.g., by licensee, site, license, or instrument).</p> <p>C. Require supporting documentation of completion of every step in the Office of Nuclear Material Safety and Safeguards (NMSS) and the Office of Nuclear Reactor Regulation (NRR) evaluations.</p> <p>D. Describe procedural steps for NRR to complete the evaluations or state expectations for NRR to complete the same steps as NMSS.</p> <p>E. Require written follow-up from the NMSS and NRR evaluations by the auditee to the evaluator, to ensure any identified discrepancies are corrected.</p> <p>F. Require NMSS and NRR evaluation reports and the Inventory List to be marked Official Use Only, as appropriate.</p> <p>G. Require segregation of duties between the person in NMSS who maintains the Inventory List and the person who completes the annual evaluation.</p>	<p>Open</p> <p>Implementation complete – auditor validation pending.</p>

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
OIG-18-A-10	Audit of NRC's Consultation Practices with Federally Recognized Native American Tribal Governments	Recommendation 1. Update MD [Management Directive] 5.1 to include FSTB [Federal, State, and Tribal Liaison Branch] when working with Tribes. The guidance should also clearly define FSTB's role and responsibilities with regard to Tribal outreach and consultation.	Open  Updated Management Directive, awaiting Commission action.
OIG-18-A-10	Audit of NRC's Consultation Practices with Federally Recognized Native American Tribal Governments	Recommendation 2. Update NRC office procedures to include more specific direction on how to coordinate with FSTB and how to work with Tribes.	Open  Implementing, estimated completion 03/31/2020.
OIG-18-A-13	Audit of NRC's Special and Infrequently Performed Inspections	Recommendation 1. Update IMC 2515, "Light-Water Reactor Inspection Program – Operations Phase," Appendix C, "Special and Infrequently Performed Inspections," and applicable Office of Nuclear Reactor Regulation (NRR) guidance to reflect the requirement to ensure consistent and periodic reviews of IMC 2515 Appendix C inspection procedures.	Open  Implementing, estimated completion 02/28/2020.
OIG-19-A-04	Audit of NRC's Exercise of Its Early Out/Buyout Authority	Recommendation 1: Conduct a formal evaluation assessing the value of VERA/VSIPs as workforce restructuring tools at NRC. This evaluation could include a. Program costs, b. Impact of buyout incentives on employees' decision to separate, c. Historical attrition rates compared to attrition rates during the years NRC ran a VERA/VSIP program, d. Timing of employee separations, e. VERA/VSIPs' impact on NRC and program offices' long-term restructuring goals, and	Open  Implementation complete – auditor validation pending.

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
		f. If the formal evaluation concludes that VERA/VSIPs are the right workforce restructuring tool for NRC to use to achieve its workforce goals, then formally assess the VERA/VSIP program after each future round for potential ways to improve program implementation.	
OIG-19-A-04	Audit of NRC's Exercise of Its Early Out/Buyout Authority	<p>Recommendation 2: Develop written procedures for implementing a VERA/VSIP program, which include</p> <ul style="list-style-type: none"> <li>a. Integrating the strategic workforce plan into VERA/VSIP planning and requests to OPM,</li> <li>b. Determining surplus positions at the office-level, and</li> <li>c. Developing a single tracking system to link VERA/VSIP separations to specific positions identified for elimination and restructuring, where possible.</li> </ul>	<p>Open</p> <p>Implementation complete – auditor validation pending.</p>
OIG-19-A-05	Audit of NRC's License Amendment Request Acceptance Review Process	Recommendation 3: Complete the Replacement Reactor Program System – Licensing Module upgrade efforts to generate automated reports.	<p>Open</p> <p>Implementing, estimated completion 03/31/2020.</p>
OIG-19-A-06	Audit of NRC's Process for Developing and Coordinating Research Activities	Recommendation 1: Involve RES and requesting office senior managers earlier in the work request development process to ensure work requests are properly understood, resourced, and achievable before they are formally submitted to RES.	<p>Open</p> <p>Implementing, estimated completion 03/31/2020.</p>
OIG-19-A-06	Audit of NRC's Process for Developing and Coordinating Research Activities	Recommendation 2: Implement a standard template for RES staff to use when preparing acceptance memorandum or email responses to all work request types.	<p>Open</p> <p>Implementing, estimated completion 03/31/2020.</p>
OIG-19-A-06	Audit of NRC's Process for Developing and	Recommendation 3: Implement a single agencywide tracking system with the capabilities	Open

Report Number	Report Title	Recommendation Text	Reported Status/Explanation
	Coordinating Research Activities	needed to effectively and efficiently keep the agency aware of research activities.	Implementing, estimated completion 06/30/2020.
OIG-19-A-06	Audit of NRC's Process for Developing and Coordinating Research Activities	Recommendation 4: Develop and implement a process for obtaining and using feedback from requesting offices. The process should include, but not be limited to, guidance on obtaining feedback during interim project milestones, creating access controls, and roles and responsibilities.	Open  Implementing, estimated completion 03/31/2020.

**Notes:**

1. The GAO recommended that the U.S. Department of State (DOS) strengthen procedures governing nuclear cooperation agreements to ensure the appropriate consideration of any conflicting views from interagency partners. Agencies affected by this recommendation were the DOS, the Department of Energy, the Office of the Director of National Intelligence, the NRC, and the Department of Defense. On its website providing a status of this recommendation, GAO states DOS developed procedures for negotiating agreements in August 2010 and, as of August 2014, DOS has not updated the existing procedures because the interagency review process is sufficient to address any potential conflicting view about a proposed agreement. NRC agrees with DOS on this matter. The NRC is confident that the current process governing nuclear cooperation agreements allows opportunity for its views to be taken into consideration. The NRC is also statutorily mandated to send its views on a proposed agreement for cooperation pursuant to Section 123 of the Atomic Energy Act, as amended, (123 agreement) directly to the President, which ensures NRC plays an appropriate role in the 123 process.

The established system of cooperation and communication on proposed 123 agreements across the interagency allows U.S. Government (USG) agencies, including the NRC, to provide their views from the beginning stages of negotiating an agreement to the time a proposed agreement is submitted to the President. Once a decision is made to negotiate a 123 agreement, the NRC participates in negotiations at the invitation of the DOS, which has the lead for negotiating 123 agreements. NRC typically offers information related to whether there is current and ongoing civil nuclear safety and/or security cooperation on regulatory matters with the prospective country. The NRC is also afforded the opportunity to review and provide comments on drafts of proposed agreements. If the NRC raises concerns or identifies an issue, it is addressed by the interagency. The DOS seeks the concurrence of the relevant USG agencies before finalizing a draft 123 agreement. And finally, a draft and its supporting documentation is not sent to the President without the concurrence of the relevant USG agencies.

NRC agrees with the DOS position that the existing procedures and interagency review process are sufficient to address any potential conflicting views about a proposed agreement.

2. The GAO recommended the Secretaries of Commerce, Energy, and State, and the Chairman of the NRC enter into an interagency agreement (IA) concerning the designation, marking, and handling of sensitive information, and make any policy or regulatory changes necessary to reach such an agreement. On its website providing a status of this recommendation, GAO explains that DOS stated the relevant agencies have coordinated on these issues. GAO expressed its concern that the agencies have not completed an IA. NRC agrees with the DOS that an interagency agreement is not necessary to address the recommendation. The staffs of the relevant agencies have coordinated on implementation of the proper means of controlling sensitive information for the annual report to IAEA under the Additional Protocol to ensure that inadvertent public release would not occur. This has proven effective as there have been no inadvertent public releases of the annual report in the 10 years since the initial declaration.
3. As stated in the NRC Chairman's March 12, 2014, letter to Congress (ADAMS Accession No. ML14055A525), while the NRC acknowledges that GAO favors more prescriptive security regulation, the NRC does not agree that the NRC's security requirements for risk-significant radioactive material need to be strengthened, or with GAO's conclusion regarding the need for prescriptive security controls. The NRC's existing performance-based security program for licensees who possess risk-significant radioactive materials, including those at medical facilities, is effective and provides adequate protection. Performance-based regulation is a key principle of the NRC's regulatory approach that applies to virtually all NRC-regulated activities. A performance-based requirement establishes measurable performance standards and provides appropriate flexibility to the regulated party as to the means of achieving the mandated outcomes.

The NRC and the Agreement States verify licensee performance during the inspection process. Because of the wide variety of nearly 3,000 licensed facilities affected by security requirements, prescribing specific security measures without regard to the type of facility and licensee operations may impose excessive and unnecessary requirements and burdens on licensees. In other cases, a prescriptive approach may result in a level of protection that is too low. A "one-size-fits-all" prescriptive approach is neither practical nor desirable from a safety or security perspective. Security concerns such as those mentioned in the GAO report are effectively addressed through established NRC and Agreement State inspection and enforcement processes and are not indicative of a weakness in the regulations.

4. As stated in the NRC Chairman's March 12, 2014 letter to Congress (ADAMS Accession No. ML14055A525), the NRC generally disagrees with the GAO's finding on shadow evacuations. The NRC does not consider the report to accurately capture the technical basis for the NRC's estimations for shadow evacuation outside of the 10-mile emergency planning zone. The NRC has studied evacuations of populations (greater than 1,000 people) from a variety of hazardous conditions in the



U.S. Shadow evacuations and the potential impacts on the evacuated population were among many factors studied. While the studies indicated that shadow evacuations occur, they also showed the impact on the overall evacuation to be relatively minor.

5. Consistent with the views expressed by the NRC in its May 12, 2014 letter to GAO (ADAMS Accession No. ML14121A423), the NRC’s role in incident response is to obtain and evaluate event information and to oversee licensees’ actions in assessing the potential impact of the event on public health and safety and the environment. The NRC provides expert consultation, support, and assistance to State and local public safety officials responding to the event. The Emergency Response Data System (ERDS) provides the data set that NRC has determined is required to support this role; but the NRC has no operational responsibility during an accident. ERDS would be activated by the licensees during declared emergencies classified at the Alert or higher level to begin transmission to the NRC Headquarters Operations Center. In the event ERDS is unavailable, alternate methods are available for the NRC to carry out its incident response role (e.g., through phone communication). The Emergency Notification System, a voice communication system, will still be available to transmit data and any other relevant information that is not available through ERDS.

The NRC staff conducted evaluations of the tasks under Recommendation 10.3 from SECY-15-0137. In order for the NRC to impose new requirements to enhance the capabilities of the existing ERDS, the NRC would need to demonstrate that such a requirement represents a cost-justified substantial safety improvement, pursuant to Title 10 of the Code of Federal Regulations Part 50, Section 50.109, “Backfitting.” Given our role in incident response, the staff does not believe that additional enhancements would represent such a safety improvement. On February 8, 2016, the Commission approved the staff’s recommendation to close Recommendation 10.3.

6. As stated in the NRC Chairman’s February 26, 2018, letter to Congress (ADAMS Accession No. ML18031A480), the NRC disagrees with the recommendation to expand its existing data collection requirements or to transition such information from its existing NRC databases to the NSTS. As required by 10 CFR Part 37, “Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material,” the NRC currently collects the number of shipments and mode of transport for domestic transfers, and the import and export of Category 1 quantities of radioactive material. Additionally, under the provisions of 10 CFR Part 110, “Export and Import of Nuclear Material,” the NRC collects the number of shipments and mode of transport for the import and export of shipments containing Category 2 or higher quantities of radioactive material. The current information collected provides the NRC with an understanding of the potential modes of transport for Category 1 and 2 quantities of radioactive material and existing regulatory requirements provide robust protection for all such modes. Consequently, the NRC does not consider the proposed additional information collection activity to be of sufficient safety or security benefit to justify the associated regulatory actions it would require.
7. As stated in the NRC Chairman’s March 7, 2019, letter to Congress (ADAMS Accession No. ML19031C855), the NRC disagrees that the requirement for the Chief Information Officer (CIO) to report to the head of the agency is not met. NRC-

specific organizational legislation (Reorganization Plan No. 1 of 1980) assigns the agency's "administrative functions" to the Chairman and then requires the Chairman to delegate them to the Executive Director for Operations (EDO). The NRC's CIO reports directly to the EDO, who serves as the Chief Operating Officer (COO). The CIO also has direct access to the Chairman. This is consistent with the requirements in Element 01 of the Federal Information Technology Acquisition Reform Act Common Baseline.

## APPENDIX L: FY 2020 TOTAL BUDGET AUTHORITY COMPARISON

This appendix provides the U.S. Nuclear Regulatory Commission's (NRC) adjusted FY 2021 Congressional Budget Justification tables to reflect its FY 2020 total budget authority, which includes the use of authorized prior-year carryover as shown here. Consistent with NRC's FY 2020 Congressional Budget Execution Plan, event response, research, licensing, oversight, rulemaking, state, tribal, and federal programs, and mission support activities were funded with the use of authorized prior-year carryover within the Operating Reactors, New Reactors, Spent Fuel Storage and Transportation, Nuclear Materials Users, Decommissioning and Low-Level Waste, Fuel Facilities, and Corporate Support Business Lines.

**Budget Authority and Full-Time Equivalents FY 2020 Total Budget Authority Comparison**  
(Dollars in Millions)

Business Line/Major Program	(A)		(B)		(C)		(D) = B + C		(E)		(F) = E - D	
	FY 2019 Actuals		Authorized Carryover		FY 2020 Enacted		FY 2020 Total Budget Authority		FY 2021 Request		Changes from FY 2020 Total Budget Authority	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Operating Reactors	363.2	1,463.1	20.5	0.0	342.6	1,483.0	363.0	1,483.0	372.8	1,470.0	9.8	(13.0)
New Reactors	80.3	328.4	0.4	0.0	84.1	332.0	84.5	332.0	80.0	285.0	(4.5)	(47.0)
<b>Nuclear Reactor Safety</b>	<b>\$443.4</b>	<b>1,791.5</b>	<b>\$20.9</b>	<b>0.0</b>	<b>\$426.7</b>	<b>1,815.0</b>	<b>\$447.6</b>	<b>1,815.0</b>	<b>\$452.8</b>	<b>1,755.0</b>	<b>\$5.3</b>	<b>(60.0)</b>
Spent Fuel Storage and Transportation	27.1	104.2	1.5	0.0	22.9	102.0	24.4	102.0	28.1	102.0	3.7	0.0
Nuclear Materials Users	58.2	206.7	2.9	0.0	56.2	205.0	59.1	205.0	55.5	201.0	(3.7)	(4.0)
Decommissioning and Low-Level Waste	23.7	92.8	1.1	0.0	21.8	93.0	22.9	93.0	22.8	86.0	(0.1)	(7.0)
High-Level Waste	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Facilities	20.7	87.9	0.4	0.0	19.2	81.0	19.7	81.0	19.3	73.0	(0.4)	(8.0)
<b>Nuclear Materials and Waste Safety</b>	<b>\$129.7</b>	<b>491.8</b>	<b>\$5.9</b>	<b>0.0</b>	<b>\$120.2</b>	<b>481.0</b>	<b>\$126.1</b>	<b>481.0</b>	<b>\$125.6</b>	<b>462.0</b>	<b>\$(0.5)</b>	<b>(19.0)</b>
<b>Major Program Subtotal</b>	<b>\$573.2</b>	<b>2,283.3</b>	<b>26.8</b>	<b>0.0</b>	<b>\$546.8</b>	<b>2,296.0</b>	<b>573.7</b>	<b>2,296.0</b>	<b>\$578.5</b>	<b>2,217.0</b>	<b>\$4.8</b>	<b>(79.0)</b>
Corporate Support	291.2	570.5	13.2	0.0	279.4	611.0	292.6	611.0	271.4	588.0	(21.2)	(23.0)
Integrated University Program	14.8	0.0	0.0	0.0	16.0	0.0	16.0	0.0	0.0	0.0	(16.0)	0.0
<b>Subtotal</b>	<b>\$879.2</b>	<b>2,853.8</b>	<b>40.0</b>	<b>0.0</b>	<b>\$842.2</b>	<b>2,907.0</b>	<b>\$882.2</b>	<b>2,907.0</b>	<b>\$849.9</b>	<b>2,805.0</b>	<b>\$(32.4)</b>	<b>(102.0)</b>
Inspector General	12.3	58.5	0.0	0.0	13.3	63.0	13.3	63.0	13.5	63.0	0.2	0.0
<b>Total</b>	<b>\$891.5</b>	<b>2,912.3</b>	<b>40.0</b>	<b>0.0</b>	<b>\$855.5</b>	<b>2,970.0</b>	<b>\$895.5</b>	<b>2,970.0</b>	<b>\$863.4</b>	<b>2,868.0</b>	<b>\$(32.2)</b>	<b>(102.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

Operating Reactors by Product Line FY 2020 Total Budget Authority Comparison (Dollars in Millions)												
Product Line	(A)		(B)		(C)		(D) = B + C		(E)		(F) = E - D	
	FY 2019 Actuals		Authorized Carryover		FY 2020 Enacted		FY 2020 Total Budget Authority		FY 2021 Request		Changes from FY 2020 Total Budget Authority	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Event Response	17.5	47.4	2.8	0.0	14.2	45.0	16.9	45.0	15.5	45.0	(1.5)	0.0
Generic Homeland Security	1.4	7.5	0.0	0.0	1.6	8.0	1.6	8.0	1.6	8.0	0.0	0.0
International Activities	3.7	19.5	0.0	0.0	3.4	18.0	3.4	18.0	3.6	18.0	0.2	0.0
Licensing	77.1	380.8	1.5	0.0	73.5	369.0	75.0	369.0	82.0	378.0	7.0	9.0
Oversight	111.9	497.9	5.7	0.0	108.8	516.0	114.5	516.0	116.5	497.0	2.0	(19.0)
Research	60.5	118.2	10.0	0.0	47.8	128.0	57.8	128.0	54.2	121.0	(3.6)	(7.0)
Rulemaking	7.2	34.4	0.0	0.0	7.5	38.0	7.5	38.0	6.9	33.0	(0.6)	(5.0)
Mission Support and Supervisors	62.5	336.7	0.6	0.0	62.5	326.0	63.1	326.0	66.5	324.0	3.4	(2.0)
Training	7.8	20.6	0.0	0.0	10.4	35.0	10.4	35.0	13.2	46.0	2.8	11.0
Travel	13.6	0.0	0.0	0.0	13.0	0.0	13.0	0.0	12.9	0.0	(0.1)	0.0
<b>Total</b>	<b>\$363.2</b>	<b>1,463.1</b>	<b>20.5</b>	<b>0.0</b>	<b>\$342.6</b>	<b>1,483.0</b>	<b>\$363.0</b>	<b>1,483.0</b>	<b>\$372.8</b>	<b>1,470.0</b>	<b>\$9.8</b>	<b>(13.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

**New Reactors by Product Line FY 2020 Total Budget Authority Comparison**  
(Dollars in Millions)

Product Line	(A)		(B)		(C)		(D) = B + C		(E)		(F) = E - D	
	FY 2019 Actuals		Authorized Carryover		FY 2020 Enacted		FY 2020 Total Budget Authority		FY 2021 Request		Changes from FY 2020 Total Budget Authority	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
International Activities	0.8	3.8	0.0	0.0	0.8	4.0	0.8	4.0	0.7	3.0	(0.1)	(1.0)
Licensing	35.1	145.5	0.4	0.0	32.0	132.0	32.4	132.0	29.0	107.0	(3.4)	(25.0)
Oversight	10.9	56.7	0.0	0.0	12.7	65.0	12.7	65.0	10.8	51.0	(1.9)	(14.0)
Research	15.3	40.4	0.0	0.0	19.3	47.0	19.3	47.0	16.8	37.0	(2.4)	(10.0)
Rulemaking	1.7	8.3	0.0	0.0	1.7	9.0	1.7	9.0	4.9	22.0	3.2	13.0
Mission Support and Supervisors	12.9	67.5	0.0	0.0	12.4	64.0	12.4	64.0	10.8	51.0	(1.6)	(13.0)
Training	2.1	6.3	0.0	0.0	3.1	11.0	3.1	11.0	4.7	14.0	1.5	3.0
Travel	1.6	0.0	0.0	0.0	2.2	0.0	2.2	0.0	2.3	0.0	0.1	0.0
<b>Total</b>	<b>\$80.3</b>	<b>328.4</b>	<b>\$0.4</b>	<b>0.0</b>	<b>\$84.1</b>	<b>332.0</b>	<b>\$84.5</b>	<b>332.0</b>	<b>\$80.0</b>	<b>285.0</b>	<b>\$(4.5)</b>	<b>(47.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

**Spent Fuel Storage and Transportation by Product Line FY 2020 Total Budget Authority Comparison**  
(Dollars in Millions)

Product Line	(A)		(B)		(C)		(D) = B + C		(E)		(F) = E - D	
	FY 2019 Actuals		Authorized Carryover		FY 2020 Enacted		FY 2020 Total Budget Authority		FY 2021 Request		Changes from FY 2020 Total Budget Authority	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
International Activities	0.4	1.0	0.0	0.0	0.4	2.0	0.4	2.0	0.2	1.0	(0.2)	(1.0)
Licensing	15.9	62.4	1.5	0.0	13.9	61.0	15.4	61.0	16.6	61.0	1.3	0.0
Oversight	2.9	16.1	0.0	0.0	2.5	13.0	2.5	13.0	2.7	13.0	0.3	0.0
Research	1.9	1.5	0.0	0.0	1.1	3.0	1.1	3.0	2.7	4.0	1.6	1.0
Rulemaking	2.2	7.4	0.0	0.0	1.1	6.0	1.1	6.0	1.3	6.0	0.1	0.0
Mission Support and Supervisors	3.2	16.0	0.0	0.0	3.0	16.0	3.0	16.0	3.2	15.0	0.1	(1.0)
Training	0.1	0.0	0.0	0.0	0.3	1.0	0.3	1.0	0.7	2.0	0.4	1.0
Travel	0.5	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.6	0.0	0.1	0.0
<b>Total</b>	<b>\$27.1</b>	<b>104.2</b>	<b>\$1.5</b>	<b>0.0</b>	<b>\$22.9</b>	<b>102.0</b>	<b>\$24.4</b>	<b>102.0</b>	<b>\$28.1</b>	<b>102.0</b>	<b>\$3.7</b>	<b>0.0</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

**Nuclear Materials Users by Product Line FY 2020 Total Budget Authority Comparison**  
(Dollars in Millions)

Product Line	(A)		(B)		(C)		(D) = B + C		(E)		(F) = E - D	
	FY 2019 Actuals		Authorized Carryover		FY 2020 Enacted		FY 2020 Total Budget Authority		FY 2021 Request		Changes from FY 2020 Total Budget Authority	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Event Response	0.4	2.1	0.0	0.0	0.5	3.0	0.5	3.0	0.6	3.0	0.0	0.0
Generic Homeland Security	9.7	10.6	0.0	0.0	10.2	15.0	10.2	15.0	7.5	14.0	(2.8)	(1.0)
International Activities	8.2	12.7	0.0	0.0	7.8	12.0	7.8	12.0	7.6	12.0	(0.2)	0.0
Licensing	8.3	47.1	0.5	0.0	8.1	43.0	8.7	43.0	8.9	43.0	0.3	0.0
Oversight	12.4	51.9	1.5	0.0	9.0	47.0	10.6	47.0	10.7	46.0	0.1	(1.0)
Research	0.4	1.8	0.0	0.0	0.9	2.0	0.9	2.0	0.4	2.0	(0.5)	0.0
Rulemaking	1.3	7.6	0.1	0.0	2.4	12.0	2.5	12.0	2.2	10.0	(0.3)	(2.0)
State, Tribal and Federal Programs	4.6	23.0	0.3	0.0	4.4	24.0	4.7	24.0	4.7	23.0	0.0	(1.0)
Mission Support & Supervisors	8.7	47.0	0.5	0.0	8.3	43.0	8.8	43.0	8.8	44.0	0.0	1.0
Training	1.6	2.9	0.0	0.0	1.7	4.0	1.7	4.0	1.7	4.0	(0.0)	0.0
Travel	2.6	0.0	0.0	0.0	2.8	0.0	2.8	0.0	2.4	0.0	(0.4)	0.0
<b>Total</b>	<b>\$58.2</b>	<b>206.7</b>	<b>\$2.9</b>	<b>0.0</b>	<b>\$56.2</b>	<b>205.0</b>	<b>\$59.1</b>	<b>205.0</b>	<b>\$55.5</b>	<b>201.0</b>	<b>\$(3.7)</b>	<b>(4.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

Decommissioning and Low-Level Waste by Product Line FY 2020 Total Budget Authority Comparison (Dollars in Millions)													
Product Line	(A) FY 2019 Actuals		(B) Authorized Carryover		(C) FY 2020 Enacted		(D) = B + C FY 2020 Total Budget Authority		(E) FY 2021 Request		(F) = E - D Changes from FY 2020 Total Budget Authority		
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	
International Activities	0.5	2.7	0.0	0.0	0.8	4.0	0.8	4.0	0.7	3.0	(0.1)	(1.0)	
Licensing	11.7	46.6	1.1	0.0	10.0	43.0	11.1	43.0	10.6	39.0	(0.5)	(4.0)	
Oversight	4.9	23.5	0.0	0.0	4.9	23.0	4.9	23.0	4.8	21.0	(0.2)	(2.0)	
Research	0.8	1.8	0.0	0.0	0.5	1.0	0.5	1.0	0.8	1.0	0.3	0.0	
Rulemaking	1.5	5.6	0.0	0.0	1.6	8.0	1.6	8.0	1.5	7.0	(0.0)	(1.0)	
Mission Support and Supervisors	2.6	12.6	0.0	0.0	2.4	13.0	2.4	13.0	2.7	13.0	0.3	0.0	
Training	0.8	0.0	0.0	0.0	0.8	1.0	0.8	1.0	0.9	2.0	0.1	1.0	
Travel	0.8	0.0	0.0	0.0	0.7	0.0	0.7	0.0	0.8	0.0	0.1	0.0	
<b>Total</b>	<b>\$23.7</b>	<b>92.8</b>	<b>\$1.1</b>	<b>0.0</b>	<b>\$21.8</b>	<b>93.0</b>	<b>\$22.9</b>	<b>93.0</b>	<b>\$22.8</b>	<b>86.0</b>	<b>\$(0.1)</b>	<b>(7.0)</b>	

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.



**Fuel Facilities by Product Line FY 2020 Total Budget Authority Comparison**  
(Dollars in Millions)

Product Line	(A) FY 2019 Actuals		(B) Authorized Carryover		(C) FY 2020 Enacted		(D) = B + C FY 2020 Total Budget Authority		(E) FY 2021 Request		(F) = E - D Changes from FY 2020 Total Budget Authority	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Event Response	0.3	1.6	0.0	0.0	0.4	2.0	0.4	2.0	0.4	2.0	0.0	0.0
Generic Homeland Security	2.4	2.9	0.0	0.0	2.4	3.0	2.4	3.0	2.7	3.0	0.3	0.0
International Activities	1.4	7.2	0.0	0.0	1.3	7.0	1.3	7.0	1.4	7.0	0.1	0.0
Licensing	4.9	23.5	0.0	0.0	4.2	18.5	4.2	18.5	4.9	19.0	0.7	0.5
Oversight	6.0	31.3	0.4	0.0	5.4	28.5	5.8	28.5	5.6	26.0	(0.2)	(2.5)
Rulemaking	0.5	2.6	0.0	0.0	0.6	3.0	0.6	3.0	0.2	1.0	(0.4)	(2.0)
Mission Support and Supervisors	3.8	18.8	0.0	0.0	3.5	19.0	3.5	19.0	2.8	14.0	(0.7)	(5.0)
Training	0.6	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.5	1.0	(0.0)	1.0
Travel	0.8	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.8	0.0	(0.3)	0.0
<b>Total</b>	<b>\$20.7</b>	<b>87.9</b>	<b>\$0.4</b>	<b>0.0</b>	<b>\$19.2</b>	<b>81.0</b>	<b>19.7</b>	<b>81.0</b>	<b>\$19.3</b>	<b>73.0</b>	<b>\$(0.4)</b>	<b>(8.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

Corporate Support by Product Line FY 2020 Total Budget Authority Comparison												
(Dollars in Millions)												
Product Line	(A)		(B)		(C)		(D) = B + C		(E)		(F) = E - D	
	FY 2019 Actuals		Authorized Carryover		FY 2020 Enacted		FY 2020 Total Budget Authority		FY 2021 Request		Changes from FY 2020 Total Budget Authority	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Acquisitions	75.6	67.2	0.0	0.0	86.2	78.0	86.2	78.0	73.6	71.0	(12.6)	(7.0)
Administrative Services	34.9	95.7	6.4	0.0	29.9	96.0	36.3	96.0	32.9	93.0	(3.4)	(3.0)
Financial Management	18.9	44.6	0.0	0.0	20.3	44.0	20.3	44.0	20.2	43.0	(0.2)	(1.0)
Human Resource Management	113.0	175.6	0.0	0.0	91.1	179.0	91.1	179.0	94.9	174.0	3.8	(5.0)
IT/IM Resources	3.5	11.8	6.8	0.0	3.2	13.0	9.9	13.0	3.2	13.0	(6.7)	0.0
Outreach	26.7	116.7	0.0	0.0	29.3	137.0	29.3	137.0	29.8	133.0	0.5	(4.0)
Policy Support	4.2	13.1	0.0	0.0	4.2	13.0	4.2	13.0	3.9	12.0	(0.3)	(1.0)
Training	14.4	45.8	0.0	0.0	15.2	51.0	15.2	51.0	12.9	49.0	(2.3)	(2.0)
<b>Total</b>	<b>\$291.2</b>	<b>570.5</b>	<b>\$13.2</b>	<b>0.0</b>	<b>\$279.4</b>	<b>611.0</b>	<b>\$292.6</b>	<b>611.0</b>	<b>\$271.4</b>	<b>588.0</b>	<b>\$(21.2)</b>	<b>(23.0)</b>

\$M includes FTE costs as well as contract support and travel. Numbers may not add due to rounding.

## APPENDIX M: GLOSSARY

### **Actuals**

Obligations against budget authority for salaries and benefits, contract support, and travel. Obligations are legally binding agreements that will result in an outlay of funds.

### **Agency Support**

Agency support costs are located in executive, administrative, and other support offices such as the Office of the Commission, the Office of the Secretary, the Office of the Executive Director for Operations, the Office of Congressional Affairs, the Office of Public Affairs, the Office of the Inspector General, the Office of Administration, the Office of the Chief Financial Officer, the Office of the Chief Information Officer, the Office of the Chief Human Capital Officer, and the Office of Small Business and Civil Rights. These budgeted costs administer the corporate or shared efforts that more broadly support the activities of the agency. These activities also include information technology services, human capital services, financial management, and administrative support.

### **Authorized Prior-Year Carryover**

Unobligated carryover amount from prior fiscal year appropriations that has been authorized for use by Congress during the current fiscal year. This amount is identified in the Joint Explanatory Statement accompanying NRC's appropriation act.

### **Budget Authority**

Authority provided by law to incur financial obligations that will result in outlays. The U.S. Nuclear Regulatory Commission (NRC) budget authority is provided by appropriations and reimbursable budget authority. References to budget authority in this Congressional Budget Justification are to appropriations.

### **Corporate Support**

A set of centrally managed overhead activities that are necessary for the NRC staff and agency programs to achieve mission goals. It includes both general administrative overhead (e.g., facilities management, information technology, financial management, and human resource management) and agency policy support, including the Commission.

### **Excluded Activities**

Activities identified by the Commission and other specific activities excluded from fee recovery. Under Section 102(b)(1)(B) of Public Law 115-439, "Nuclear Energy Innovation and Modernization Act," (NEIMA) excluded activities include fee-relief activities identified by the Commission, Generic Homeland Security, Waste Incidental to Reprocessing, Nuclear Waste Fund, Advanced Reactors Regulatory Infrastructure, Office of the Inspector General services for the Defense Nuclear Facilities Safety Board, and the Integrated University Program.

### **Fee Relief**

Activities identified by the Commission excluded from fee recovery. Fee-relief activities identified by the Commission consistent with prior fee rules include Agreement State oversight, regulatory support to Agreement States, medical isotope production infrastructure, fee exemption for non-profit educational institutions, generic decommissioning/reclamation, uranium recovery program and unregistered general licenses, Potential U.S. Department of Defense Remediation Program Memorandum of Understanding Activities (Military Radium-226), and non-military radium sites.

## **APPENDIX M: GLOSSARY**

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### **Full Cost**

Total resources used to produce outputs under a major program business line. The full cost of a business line is the sum of (1) the cost of direct resources within the business line, (2) the cost of mission-indirect resources within the business line, and (3) a proportional share of corporate support costs budgeted at the agency level.

### **Full-Time Equivalent**

Basic measure of the levels of employment used in the budget. It is the total number of hours worked (or to be worked) divided by the number of compensable hours applicable to each fiscal year.

### **Generic Homeland Security**

Security-related activities related to intergovernmental coordination and communication on intelligence, threat demographic data, and information security activities not related to information technology. Activities also include the coordination and exchange of information among local, State, and Federal agencies on security-related matters, as well as international activities involving reviews of security-related matters.

### **Major Program**

An organized set of functions, processes, and activities directed toward execution of a major element of the agency's mission and the achievement of related strategic goals and objectives. The NRC's two major programs are Nuclear Reactor Safety and Nuclear Materials and Waste Safety.

### **Major Program Business Line (Business Line)**

A class of functions, processes, and activities that implement a significant component of a major program. The Nuclear Reactor Safety Program is implemented through the Operating Reactors and New Reactors Business Lines. The Nuclear Materials and Waste Safety Program is implemented through the Fuel Facilities, Nuclear Materials Users, Decommissioning and Low-Level Waste, and Spent Fuel Storage and Transportation Business Lines.

### **Mission Support**

Supervisory and nonsupervisory support for the core work activities of the program offices and the regions. Budgeted within the major program business lines in the Mission Support and Supervisors Product Line.

### **Net Budget Authority (Net Appropriated)**

The NRC's remaining budget authority after its appropriations are offset by fees collected. Represents the portion of appropriations that are funded from the general fund of the U.S. Treasury and the Nuclear Waste Fund.

### **Nonfee-Recoverable Items**

NRC activities that are funded from appropriations excluded from fee recovery by 42 USC 2214 (Section 6101 of the Omnibus Budget Reconciliation Act of 1990) and NRC appropriations language.

### **Product Line**

Categories of agency work functions performed under a business line.

**Reimbursable Budget Authority**

Budget authority provided by funds from other Federal agencies and receipts from non-Federal organizations. This authority represents additional funding in excess of the NRC's directly appropriated funds.

**Requested Activity**

Under Section 3(10) of NEIMA, a requested activity is defined as the processing of applications for (1) design certifications or approvals, (2) licenses, (3) permits, (4) license amendments, (5) license renewals, (6) certificates of compliance, (7) power uprates, and (8) any other activity requested by a licensee or applicant.

**Salaries and Benefits**

Resources budgeted for the cost of government personnel. Includes salaries and wages; awards; the agency's share of retirement contributions, benefits, and payroll taxes; and other personnel costs such as incentive and terminal leave payments.



**APPENDIX N: ABBREVIATION AND ACRONYM LIST**

**10 CFR:** Title 10 of the *Code of Federal Regulations*

**ABWR:** Advanced Boiling-Water Reactor

**ADAMS:** Agencywide Documents Access and Management System

**AEC:** Atomic Energy Commission

**AEA:** Atomic Energy Act

**AO:** Abnormal Occurrence

**APWR:** Advanced-Pressurized Water Reactor

**APR:** Advanced Power Reactor

**ATF:** Accident Tolerant Fuel

**CAL:** Confirmatory Action Letter

**CIO:** Chief Information Officer

**COL:** Combined License

**DC:** Design Certification

**DNFSB:** Defense Nuclear Facilities Safety Board

**DOE:** U.S. Department of Energy

**DOJ:** U.S. Department of Justice

**DOS:** U.S. Department of State

**EDO:** Executive Director for Operations

**ESP:** Early Site Permit

**FEVS:** Federal Employee Viewpoint Survey

**FISMA:** Federal Information Security Management Act

**FITARA:** Federal Information Technology Acquisition Reform Act

**FTE:** Full-Time Equivalent

**FY:** Fiscal Year

## **APPENDIX N: ABBREVIATION AND ACRONYM LIST**

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**GAO:** U.S. Government Accountability Office

**GLINDA:** Global Infrastructure and Development Acquisition

**GPRA:** Government Performance and Results Act

**HHS:** U.S. Department of Human and Health Services

**IA:** Interagency Agreement

**IAEA:** International Atomic Energy Agency

**IM:** Information Management

**IMC:** Inspection Manual Chapter

**IMPEP:** Integrated Materials Performance Evaluation Program

**ISFSI:** Interim Spent Fuel Storage Installation

**IT:** Information Technology

**ITAAC:** Inspections, Tests, Analyses, and Acceptance Criteria

**LER:** Licensee Event Report

**LLW:** Low-Level Waste

**LTA:** Lead Test Assembly

**LWR:** Light-Water Reactor

**NEIMA:** Nuclear Energy Innovation and Modernization Act

**NMED:** Nuclear Materials Event Database

**NMIP:** Nuclear Materials Information Program

**NRC:** U.S. Nuclear Regulatory Commission

**NSTS:** National Source Tracking System

**NTTF:** Near-Tear Task Force

**OBRA-90:** Omnibus Budget Reconciliation Act of 1990

**OIG:** Office of the Inspector General

**OMB:** Office of Management and Budget

**OPM:** Office of Personnel Management



## **APPENDIX N: ABBREVIATION AND ACRONYM LIST**

**OWFN:** One White Flint North

**PL:** Public Law

**RIC:** Regulatory Information Conference

**RIS:** Regulatory Issue Summary

**ROP:** Reactor Oversight Process

**S&E:** Salaries and Expenses

**SDA:** Standard Design Approval

**SER:** Safety Evaluation Report

**SMR:** Small Modular Reactor

**SNF:** Spent Nuclear Fuel

**SNM:** Special Nuclear Material

**SRM:** Staff Requirements Memorandum

**SWP:** Strategic Workforce Plan

**TWFN:** Two White Flint North

**UMTRCA:** Uranium Mill Tailings Radiation Control Act

**U.S.:** United States

**USC:** United States Code

**USF:** Usable Square Feet

**USG:** U.S. Government Agencies

**WBL:** Web-Based Licensing

**WIR:** Waste Incidental to Reprocessing

**3WFN:** Three White Flint North



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