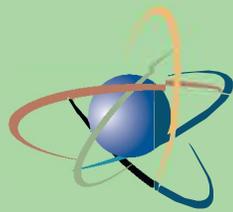


NUREG-1100
Volume 35



U.S. NRC

United States Nuclear Regulatory Commission

Protecting People and the Environment

**CONGRESSIONAL
BUDGET
JUSTIFICATION
FISCAL YEAR
2020**

AVAILABILITY OF REFERENCE MATERIALS IN NRC PUBLICATIONS

NRC Reference Material

As of November 1999, you may electronically access NUREG-series publications and other NRC records at NRC's Library at www.nrc.gov/reading-rm.html. Publicly released records include, to name a few, NUREG-series publications; *Federal Register* notices; applicant, licensee, and vendor documents and correspondence; NRC correspondence and internal memoranda; bulletins and information notices; inspection and investigative reports; licensee event reports; and Commission papers and their attachments.

NRC publications in the NUREG series, NRC regulations, and Title 10, "Energy," in the *Code of Federal Regulations* may also be purchased from one of these two sources.

1. The Superintendent of Documents

U.S. Government Publishing Office
Washington, DC 20402-0001
Internet: bookstore.gpo.gov
Telephone: (202) 512-1800
Fax: (202) 512-2104

2. The National Technical Information Service

5301 Shawnee Road
Alexandria, VA 22312-0002
www.ntis.gov
1-800-553-6847 or, locally, (703) 605-6000

A single copy of each NRC draft report for comment is available free, to the extent of supply, upon written request as follows:

Address: **U.S. Nuclear Regulatory Commission**
Office of Administration
Multimedia, Graphics, and Storage &
Distribution Branch
Washington, DC 20555-0001
E-mail: distribution.resource@nrc.gov
Facsimile: (301) 415-2289

Some publications in the NUREG series that are posted at NRC's Web site address www.nrc.gov/reading-rm/doc-collections/nuregs are updated periodically and may differ from the last printed version. Although references to material found on a Web site bear the date the material was accessed, the material available on the date cited may subsequently be removed from the site.

Non-NRC Reference Material

Documents available from public and special technical libraries include all open literature items, such as books, journal articles, transactions, *Federal Register* notices, Federal and State legislation, and congressional reports. Such documents as theses, dissertations, foreign reports and translations, and non-NRC conference proceedings may be purchased from their sponsoring organization.

Copies of industry codes and standards used in a substantive manner in the NRC regulatory process are maintained at—

The NRC Technical Library

Two White Flint North
11545 Rockville Pike
Rockville, MD 20852-2738

These standards are available in the library for reference use by the public. Codes and standards are usually copyrighted and may be purchased from the originating organization or, if they are American National Standards, from—

American National Standards Institute

11 West 42nd Street
New York, NY 10036-8002
www.ansi.org
(212) 642-4900

Legally binding regulatory requirements are stated only in laws; NRC regulations; licenses, including technical specifications; or orders, not in NUREG-series publications. The views expressed in contractor prepared publications in this series are not necessarily those of the NRC.

The NUREG series comprises (1) technical and administrative reports and books prepared by the staff (NUREG-XXXX) or agency contractors (NUREG/CR-XXXX), (2) proceedings of conferences (NUREG/CP-XXXX), (3) reports resulting from international agreements (NUREG/IA-XXXX), (4) brochures (NUREG/BR-XXXX), and (5) compilations of legal decisions and orders of the Commission and Atomic and Safety Licensing Boards and of Directors' decisions under Section 2.206 of NRC's regulations (NUREG-0750).

DISCLAIMER: This report was prepared as an account of work sponsored by an agency of the U.S. Government. Neither the U.S. Government nor any agency thereof, nor any employee, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product, or process disclosed in this publication, or represents that its use by such third party would not infringe privately owned rights.

NUREG-1100
Volume 35



**CONGRESSIONAL
BUDGET
JUSTIFICATION
FISCAL YEAR
2020**

CONTENTS

Executive Summary ix

About the U.S. Nuclear Regulatory Commission..... 1

Proposed Fiscal Year 2020 Appropriations Legislation..... 5

Nuclear Reactor Safety..... 11

 Operating Reactors 13

 New Reactors..... 31

Nuclear Materials and Waste Safety 43

 Spent Fuel Storage and Transportation 45

 Nuclear Materials Users 53

 Decommissioning and Low-Level Waste 65

 High-Level Waste 73

 Fuel Facilities..... 75

Corporate Support 83

Integrated University Program 93

Annual Performance Plan 95

Office of the Inspector General 119

Appendix A: Full Cost of U.S. Nuclear Regulatory Commission Programs..... 131

Appendix B: Budget Authority by Function 133

Appendix C: Agency Fee Recovery 135

Appendix D: Summary of Reimbursable Work 139

Appendix E: Federal Information Technology Acquisition Reform Act Requirements .. 141

Appendix F: Summary of Planned Rulemaking Activities 147

Appendix G: Obligations by Control Point..... 157

Appendix H: Report on Drug Testing..... 159

Appendix I: FY 2019 Total Budget Authority Comparison..... 161

Appendix J: Glossary 167

Appendix K: Acronym List..... 169

FIGURES

| | |
|---|----|
| U.S. Nuclear Regulatory Commission FY 2014-FY 2020 Budget..... | ix |
| NRC Organizational Chart | 2 |
| U.S. Operating Commercial Nuclear Power Reactors Anticipated to be Operating as of October 1, 2019 | 14 |
| New Reactor Applications under Review | 34 |
| Licensed and Operating ISFSIs by State | 46 |
| Spent Fuel Storage and Transportation Workload..... | 48 |
| Current Agreement States | 54 |
| Nuclear Materials Users Workload | 56 |
| Locations of NRC-Regulated Sites Undergoing Decommissioning | 66 |
| Uranium Recovery Licensed Facilities and Major Licensing Actions | 68 |
| Research and Test Reactors and Power/Early Demonstration Reactors Undergoing Decommissioning..... | 68 |
| Locations of Licensed Fuel Cycle Facilities | 76 |
| Fuel Facilities Workload..... | 78 |

TABLES

| | |
|---|-----|
| Budget Authority and Full-Time Equivalents | x |
| Budget Authority by Appropriation | xi |
| Nuclear Reactor Safety | 11 |
| Operating Reactors by Product Line | 13 |
| License Renewal and Medical Radioisotope Facility Review Schedule | 18 |
| Status of Reactors Transitioning from Operating to Decommissioning | 19 |
| New Reactors by Product Line | 31 |
| New Reactor Applications under Review | 35 |
| Nuclear Materials and Waste Safety | 43 |
| Spent Fuel Storage and Transportation by Product Line | 45 |
| Nuclear Materials Users by Product Line | 53 |
| Decommissioning and Low-Level Waste by Product Line | 65 |
| High-Level Waste by Product Line | 73 |
| Fuel Facilities by Product Line | 75 |
| Corporate Support by Product Line | 83 |
| Integrated University Program | 93 |
| Alignment of Resources to NRC Goals | 96 |
| Strategic Plan Strategies and Supporting Business Lines | 116 |
| NRC OIG Budget Authority and Full-Time Equivalents | 119 |
| Audits Budget Authority | 119 |
| Investigations Budget Authority | 121 |
| NRC OIG Budget Resources Linked to OIG’s Strategic Goals | 125 |
| Full Cost Budget Authority and Full-Time Equivalents | 131 |
| Corporate Support by Business Line | 132 |
| Budget Authority by Function | 133 |
| Crosswalk of Business Line Allocation to Fee Classes | 136 |
| Agency Fee Recovery | 137 |
| Summary of Reimbursable Work | 139 |
| NRC IT Spending | 142 |
| NRC IT Table | 143 |
| Summary of Planned Rulemaking Activities | 147 |
| Nuclear Regulatory Commission Monthly Congressional Status Report | 158 |
| Budget Authority and Full-Time Equivalents FY 2019 Total Budget Authority Comparison | 161 |
| Operating Reactors by Product Line FY 2019 Total Budget Authority Comparison | 162 |
| Spent Fuel Storage and Transportation by Product Line FY 2019 Total Budget Authority Comparison | 163 |
| Decommissioning and Low-Level Waste by Product Line FY 2019 Total Budget Authority Comparison | 164 |
| Corporate Support by Product Line FY 2019 Total Budget Authority Comparison | 165 |

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. To sustain the agency’s mission success while providing enhanced regulatory infrastructure to address future challenges and innovation in the nuclear sector, the NRC’s fiscal year (FY) 2020 budget request is \$921.1 million, including 3,062 full-time equivalents (FTE). The FY 2020 budget request reflects an increase of \$10.1 million, approximately 1.1 percent, when compared with the FY 2019 Enacted Budget. The increase is principally the result of \$38.5 million, including 77 FTE, requested to support licensing activities for the proposed Yucca Mountain deep geologic repository for spent nuclear fuel and other high-level radioactive waste. Please refer to Appendix I, “FY 2019 Total Budget Authority Comparison,” which provides a comparison of the FY 2020 request to the FY 2019 Budget Authority.

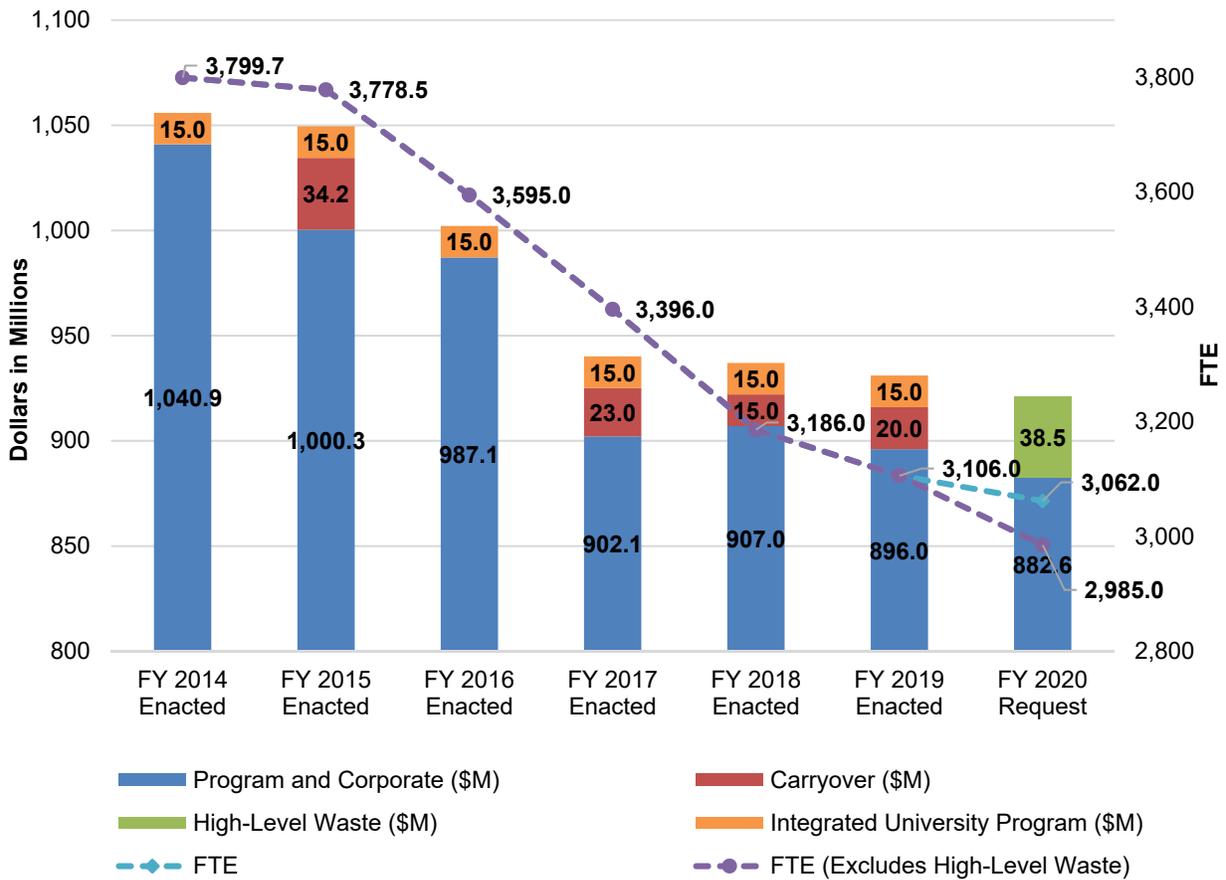


Figure 1: NRC FY 2014–FY 2020 Budget (Includes the Office of the Inspector General)

As shown in Figure 1, since FY 2014, the agency budget has decreased by 15 percent, excluding resources for Yucca Mountain and the Integrated University Program. The agency has also reduced FTE by 21 percent during this period.

EXECUTIVE SUMMARY

| Budget Authority and Full-Time Equivalents | | | | | | | | |
|--|-----------------|----------------|------------------|----------------|-----------------|----------------|----------------------|---------------|
| (Dollars in Millions) | | | | | | | | |
| Business Line/Major Program | FY 2018 Actuals | | FY 2019 Enacted* | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Operating Reactors | 367.0 | 1,504.5 | 365.2 | 1,533.0 | 361.6 | 1,485.0 | (3.6) | (48.0) |
| New Reactors | 95.7 | 381.2 | 94.1 | 386.0 | 87.8 | 339.0 | (6.3) | (47.0) |
| Nuclear Reactor Safety | \$462.6 | 1,885.7 | \$459.4 | 1,919.0 | \$449.5 | 1,824.0 | \$(9.9) | (95.0) |
| Spent Fuel Storage and Transportation | 26.0 | 96.6 | 22.5 | 100.0 | 24.2 | 101.0 | 1.7 | 1.0 |
| Nuclear Materials Users Decommissioning and Low-Level Waste | 62.3 | 211.4 | 60.6 | 215.0 | 59.1 | 205.0 | (1.4) | (10.0) |
| High-Level Waste | 27.1 | 107.5 | 24.8 | 104.0 | 22.9 | 93.0 | (1.9) | (11.0) |
| Fuel Facilities | 0.1 | 0.4 | 0.0 | 0.0 | 38.5 | 77.0 | 38.5 | 77.0 |
| Nuclear Materials and Waste Safety Major Program Subtotal | \$140.1 | 523.0 | \$131.0 | 515.0 | \$165.7 | 564.0 | \$34.7 | 49.0 |
| Subtotal | \$602.8 | 2,408.6 | \$590.4 | 2,434.0 | \$615.2 | 2,388.0 | \$24.8 | (46.0) |
| Corporate Support | 296.4 | 594.0 | 292.9 | 609.0 | 292.6 | 611.0 | (0.4) | 2.0 |
| Integrated University Program | 15.5 | 0.0 | 15.0 | 0.0 | 0.0 | 0.0 | (15.0) | 0.0 |
| Subtotal | \$914.7 | 3,002.6 | \$898.4 | 3,043.0 | \$907.8 | 2,999.0 | \$9.4 | (44.0) |
| Inspector General | 13.3 | 60.8 | 12.6 | 63.0 | 13.3 | 63.0 | 0.7 | 0.0 |
| Total | \$928.1 | 3,063.4 | \$911.0 | 3,106.0 | \$921.1 | 3,062.0 | \$10.1 | (44.0) |

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

*In FY 2019, research and licensing activities within the Operating Reactors, Spent Fuel Storage and Transportation, Decommissioning and Low-Level Waste, and Corporate Support Business Lines were funded \$20 million through the use of authorized prior-year carryover which is not reflected in the FY 2019 Enacted Budget. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," for details.

Resources requested for the Nuclear Reactor Safety Program decrease by \$9.9 million, including 95 FTE, primarily as a result of a decline in workload, efficiencies in processing licensing actions; the merger of activities within the Office of Nuclear Reactor Regulation and the Office of New Reactors; and the upcoming closures of the Pilgrim, Oyster Creek, and Three Mile Island nuclear generating stations. The requested resources for the Nuclear Reactor Safety Program also include \$15.5 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 \$34.7 million, including 49 FTE. This request includes \$38.5 million, including 77 FTE, for licensing activities related to the proposed Yucca Mountain deep geologic repository for the disposal of spent nuclear fuel and other high-level radioactive waste, which accounts for the increase in

comparison to the FY 2019 Enacted Budget. The four remaining business lines in the Nuclear Materials and Waste Safety Program reflect a decrease of \$3.8 million, including 28 FTE, primarily as a result of the anticipated decline in workload.

Resources requested for Corporate Support remain relatively flat, with a total decrease of \$0.4 million, including an increase of 2 FTE, when compared with the FY 2019 Enacted Budget. The decrease is primarily the result of cost reductions in information technology (IT), as a result of successful efforts to modernize IT by moving to a more secure and cost-effective infrastructure. The decreases are partially offset by increases for (1) permanent-change-of-station costs, (2) renovations at NRC Headquarters to reduce the agency’s real estate footprint and costs, and (3) salaries and benefits for a Commission at its full complement of five members.

The Office of the Inspector General’s (OIG) component of the FY 2020 proposed budget is \$13.3 million, including 63 FTE, of which \$12.1 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).

| Budget Authority by Appropriation (Dollars in Millions) | | | |
|---|----------------------------|----------------------------|---------------------------------|
| | FY 2019 Enacted | FY 2020 Request | Changes from FY 2019 |
| | \$M | \$M | \$M |
| NRC Appropriation | | | |
| Salaries and Expenses (S&E) | | | |
| Budget Authority | 898.4 | 907.8 | 9.4 |
| Offsetting Fees | 770.5 | 748.7 | (21.8) |
| Net Appropriated S&E | \$127.9 | \$159.1 | \$31.2 |
| Office of the Inspector General (OIG) | | | |
| Budget Authority | 12.6 | 13.3 | 0.7 |
| Offsetting Fees | 10.4 | 10.9 | 0.6 |
| Net Appropriated OIG | \$2.3 | \$2.4 | \$0.1 |
| Total NRC | | | |
| Budget Authority | 911.0 | 921.1 | 10.1 |
| Offsetting Fees | 780.8 | 759.6 | (21.2) |
| Total Net Appropriated | \$130.1 | \$161.5 | \$31.4 |

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

In accordance with the provisions of the Omnibus Budget Reconciliation Act of 1990 (OBRA-90), as amended, the NRC’s FY 2020 budget request provides for approximately 90-percent fee recovery, less amounts appropriated from the Nuclear Waste Fund, and amounts appropriated for generic homeland security activities, and for Waste Incidental to Reprocessing activities under Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005. The proposed FY 2020 appropriations language will

EXECUTIVE SUMMARY

also exclude from OBRA-90's fee recovery requirement the amounts appropriated for advanced reactor regulatory infrastructure activities and OIG services for DNFSB, as well as part of the amount appropriated for international activities.

The NRC will recover \$759.6 million of the FY 2020 budget from fees assessed to NRC licensees. This will result in a net appropriation of \$161.5 million, which is an increase of \$31.4 million when compared with the FY 2019 Enacted Budget. The increase in net appropriation is primarily the result of \$38.5 million requested from the Nuclear Waste Fund for licensing activities related to Yucca Mountain, which is nonfee-recoverable.

Appendix A, "Full Cost of U.S. Nuclear Regulatory Commission Programs," to this document provides the full cost of NRC programs, in accordance with the requirements defined in Section 51.2, "Requirements for Program Justification," of the U.S. Office of Management and Budget Circular A-11, "Preparation, Submission, and Execution of the Budget," issued July 2016.

SIGNIFICANT AGENCYWIDE ACCOMPLISHMENTS IN FY 2018

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 reactor and small modular reactor applications and conducted regulatory oversight of construction activities.
- Conducted hundreds of public meetings across the country, as part of the agency's efforts to maintain regular and transparent communications with stakeholders.
- Met or exceeded the FY 2018 performance goals for operating power reactor licensing actions and other licensing tasks.
- Prepared several draft proposed rules, including rules on reactor decommissioning, emergency preparedness for small modular reactors and other new technologies, and financial qualifications for merchant plants.
- Trained over 95 percent of identified staff across the agency on key concepts in licensing basis and backfitting.
- Continued to implement actions in the agency's vision and strategy to achieve advanced non-light-water reactor readiness.
- Finalized the agreement authoring the State of Wyoming to become an Agreement State and to assume regulatory authority for uranium recovery facilities.

Additional FY 2018 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 material 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 U.S. Nuclear Regulatory Commission (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 or 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

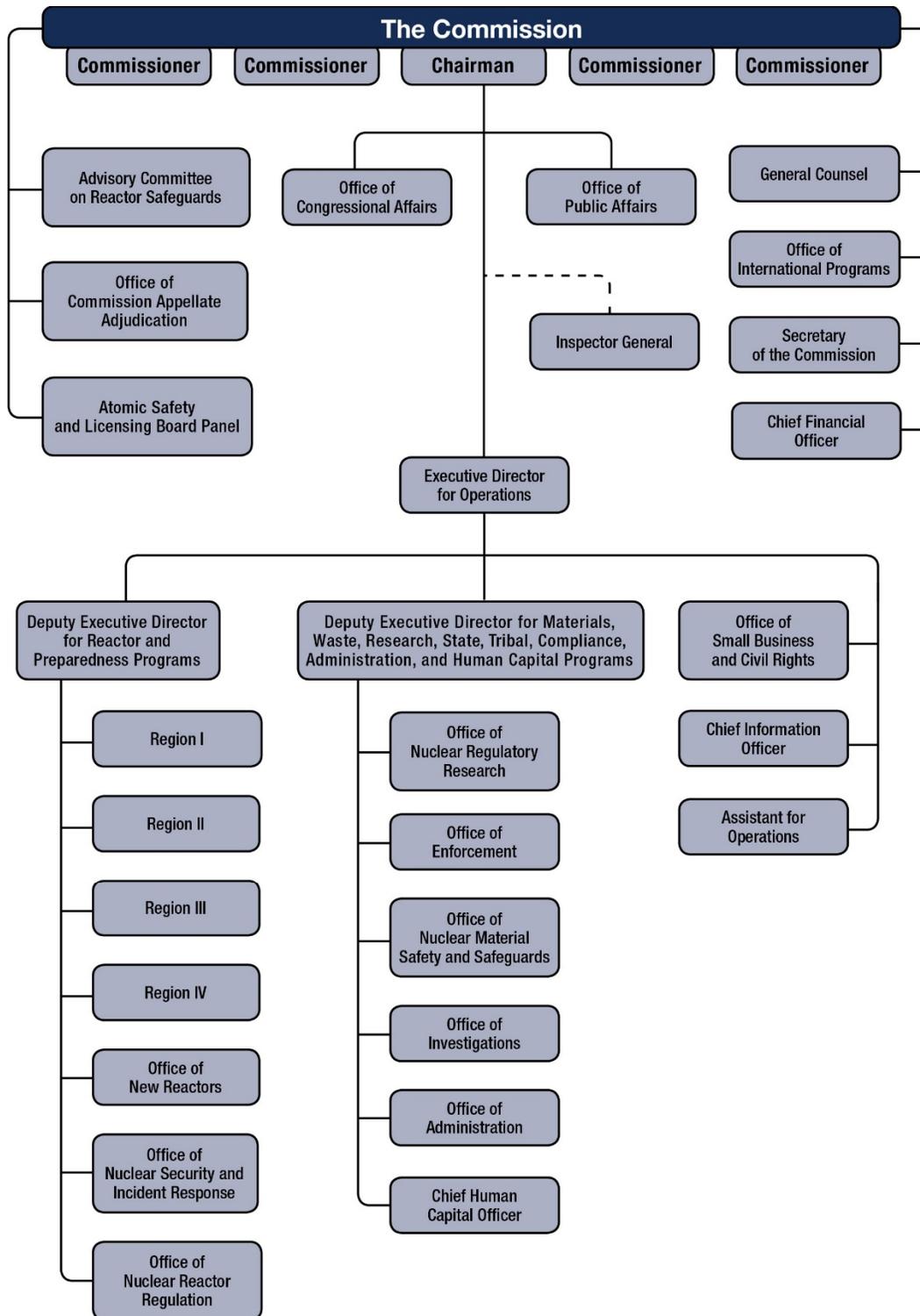


Figure 2: NRC Organizational Chart

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.
- The *Office of New Reactors* licenses and oversees the 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 helps develop 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 2020 APPROPRIATIONS LEGISLATION

The NRC's proposed appropriation legislation for Fiscal Year (FY) 2020 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, \$907,765,000, including official representation expenses not to exceed \$25,000, to remain available until expended: *Provided*, That of the amount appropriated herein, \$38,529,000 shall be derived from the Nuclear Waste Fund: *Provided further*, That of the amount appropriated herein, not more than \$10,500,000 may be made available for salaries, travel, and other support costs for the Office of the Commission, to remain available until September 30, 2021: *Provided further*, That revenues from licensing fees, inspection services, and other services and collections estimated at \$748,669,000 in fiscal year 2020 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 of the amounts appropriated under this heading, not less than \$15,478,000 shall be for activities related to the development of regulatory infrastructure for advanced nuclear reactor technologies, except that the amounts provided under this proviso shall not be derived from fee revenues, notwithstanding 42 U.S.C. 2214: *Provided further*, That of the amounts appropriated under this heading, \$6,451,000 of the amount used for international activities shall not be derived from fee revenues, notwithstanding 42 U.S.C. 2214: *Provided further*, That the sum herein appropriated shall be reduced by the amount of revenues received during fiscal year 2020 so as to result in a final fiscal year 2020 appropriation estimated at not more than \$159,096,000.

OFFICE OF THE INSPECTOR GENERAL

For expenses necessary for the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978, \$13,314,000, to remain available until September 30, 2021: *Provided*, That revenues from licensing fees, inspection services, and other services and collections estimated at \$10,929,000 in fiscal year 2020 shall be retained and be available until September 30, 2021, 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 2020 so as to result in a final fiscal year 2020 appropriation estimated at not more than \$2,385,000: *Provided further*, That of the amounts appropriated under this heading, \$1,171,000 shall be for Inspector General services for the Defense Nuclear Facilities Safety Board, which shall not be available from fee revenues.

ANALYSIS OF PROPOSED FY 2020 APPROPRIATIONS LEGISLATION

The analysis of the NRC's proposed appropriations legislation for FY 2020 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:

Title 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. SHALL BE DERIVED FROM THE NUCLEAR WASTE FUND:

Title 42 USC 10131(b)(4) provides for the establishment of a Nuclear Waste Fund to ensure that the costs of carrying out activities relating to the disposal of high-level radioactive waste and spent nuclear fuel will be borne by the persons responsible for generating such waste and spent fuel.

Title 42 USC 10134 specifically requires the NRC to consider an application for a repository for the disposal of high-level radioactive waste and spent nuclear fuel and sets forth certain licensing procedures. Title 42 USC 10133 also assigns review responsibilities to the NRC in the steps leading to submission of the license application. Thus, the Nuclear Waste Policy Act of 1982, as amended, establishes the NRC's responsibility throughout the repository siting process, culminating in the requirement for NRC licensing as a prerequisite to construction and operation of the repository.

Title 42 USC 10222(d) specifies that expenditures from the Nuclear Waste Fund can be used for purposes of radioactive waste disposal activities, including identification, development, licensing, construction, operation, decommissioning, and post-decommissioning maintenance and monitoring of any repository constructed under the Nuclear Waste Policy Act of 1982, and for administrative costs of the high-level radioactive waste disposal program.

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, Public Law (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 42 USC 2214 (section 6101 of the Omnibus Budget Reconciliation Act of 1990 (OBRA-90)), 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 amendments to 42 USC 2214, enacted in the Energy Policy Act of 2005, and consistent with this appropriations request, the aggregate annual amount of collected fees shall approximate 90 percent of the Commission's budget authority, less amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to the Commission to implement Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, PL 108-375, and amounts appropriated to the Commission for generic homeland security activities.

Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 assigned new responsibilities to the NRC for waste determinations and monitoring of waste disposal actions for material stored at the U.S. Department of Energy sites in South Carolina and Idaho. Section 3116(b)(4) requires that, beginning with the FY 2006 budget, the Commission include in its budget justification materials submitted to Congress the amounts required, not offset by revenues, for performance of its responsibilities under Section 3116. The \$1,303,000 requested to implement Section 3116 is excluded from OBRA-90's fee recovery requirement.

Section 637 of the Energy Policy Act of 2005, PL 109-58, modified the NRC's fee legislation in 42 USC 2214 to exclude the amounts appropriated to the Commission for homeland security activities from OBRA-90's fee recovery requirement, except for reimbursable costs of fingerprinting and background checks and the costs of conducting security inspections. The \$14,150,000 requested for generic homeland security activities is thus excluded from OBRA-90's fee recovery requirement.

The aggregate amount of license fees and annual charges to be collected for FY 2020 approximates 90 percent of the Commission's budget authority, less the amount requested to be derived from the Nuclear Waste Fund, the amount requested to implement Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and the amount requested for generic homeland security activities pursuant to Section 637 of the Energy Policy Act of 2005.

Title 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. NOT LESS THAN \$15,478,000 SHALL BE FOR ACTIVITIES RELATED TO THE DEVELOPMENT OF REGULATORY INFRASTRUCTURE FOR ADVANCED NUCLEAR REACTOR TECHNOLOGIES, EXCEPT THAT THE AMOUNTS PROVIDED UNDER THIS PROVISO SHALL NOT BE DERIVED FROM FEE REVENUES, NOTWITHSTANDING 42 U.S.C. 2214:

The NRC is accelerating its activities related to the development of regulatory infrastructure to prepare for effective and efficient reviews of advanced reactor technologies. The proposed statutory language requires the NRC to use at least \$15,478,000 for activities related to the development of regulatory infrastructure for advanced nuclear reactor technologies.

Pursuant to 42 USC 2214, 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 amendments to 42 USC 2214, enacted in the Energy Policy Act of 2005, and consistent with this appropriations request, the aggregate annual amount of collected fees shall approximate 90 percent of the Commission's budget authority, less amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to the Commission to implement Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and amounts appropriated to the Commission for generic homeland security activities. This proposed appropriations language makes clear that the amount used for activities related to the development of regulatory infrastructure for advanced nuclear reactor technologies is excluded from OBRA-90's fee recovery requirement in the same manner as the amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to implement Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and amounts appropriated to the Commission for generic homeland security activities.

7. \$6,451,000 OF THE AMOUNT USED FOR INTERNATIONAL ACTIVITIES SHALL NOT BE DERIVED FROM FEE REVENUES, NOTWITHSTANDING 42 U.S.C. 2214:

Pursuant to 42 USC 2214, 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 amendments to 42 USC 2214, enacted in the Energy Policy Act of 2005, and consistent with this appropriations request, the aggregate annual amount of collected fees shall approximate 90 percent of the Commission's budget authority, less amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to the Commission to implement Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and amounts appropriated to the Commission for generic homeland security activities. This proposed appropriations language makes clear that \$6,451,000 of the amount used for international activities is excluded from OBRA-90's fee recovery requirement in the same manner as the amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to implement Section 3116 of the Ronald W.

Reagan National Defense Authorization Act for Fiscal Year 2005, and amounts appropriated to the Commission for generic homeland security activities.

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

Pursuant to 42 USC 2214, 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 amendments to 42 USC 2214, enacted in the Energy Policy Act of 2005, and consistent with this appropriations request, the aggregate annual amount of collected fees shall approximate 90 percent of the Commission's budget authority, less amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to the Commission to implement Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and amounts appropriated to the Commission for generic homeland security activities.

OFFICE OF THE INSPECTOR GENERAL

9. FOR EXPENSES NECESSARY FOR THE OFFICE OF 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.

10. TO REMAIN AVAILABLE UNTIL SEPTEMBER 30, 2021:

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.

11. REVENUES FROM LICENSING FEES, INSPECTION SERVICES, AND OTHER SERVICES AND COLLECTIONS SHALL BE RETAINED AND BE AVAILABLE UNTIL SEPTEMBER 30, 2021, FOR NECESSARY SALARIES AND EXPENSES IN THIS ACCOUNT, NOTWITHSTANDING SECTION 3302 OF TITLE 31, UNITED STATES CODE:

Under 31 USC 9701, the NRC is authorized to collect user fees from any person who receives a service or thing of value from the Commission. Pursuant to 42 USC 2214, 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 amendments to 42 USC 2214, enacted in the Energy Policy Act of 2005, and consistent with this appropriations request, the aggregate annual amount of collected fees shall approximate 90 percent of the Commission's budget authority, less amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to the Commission to implement Section 3116 of the

PROPOSED FY 2020 APPROPRIATIONS LEGISLATION

Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and amounts appropriated to the Commission for generic homeland security activities.

Title 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.

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

Pursuant to 42 USC 2214, 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 amendments to 42 USC 2214, enacted in the Energy Policy Act of 2005, and consistent with this appropriations request, the aggregate annual amount of collected fees shall approximate 90 percent of the Commission's budget authority, less amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to the Commission to implement Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and amounts appropriated to the Commission for generic homeland security activities.

13. AMOUNTS APPROPRIATED FOR INSPECTOR GENERAL SERVICES FOR THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD, WHICH SHALL NOT BE AVAILABLE FROM FEE REVENUES:

Pursuant to 42 USC 2214, 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 amendments to 42 USC 2214, enacted in the Energy Policy Act of 2005, and consistent with this appropriations request, the aggregate annual amount of collected fees shall approximate 90 percent of the Commission's budget authority, less amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to the Commission to implement Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and amounts appropriated to the Commission for generic homeland security activities. This proposed appropriations language makes clear that the \$1,171,000 requested to provide Inspector General Services for the Defense Nuclear Facilities Safety Board is excluded from OBRA-90's fee recovery requirement in the same manner as amounts appropriated to the Commission from the Nuclear Waste Fund, amounts appropriated to the Commission to implement Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and amounts appropriated to the Commission for generic homeland security activities. 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.

NUCLEAR REACTOR SAFETY

| Nuclear Reactor Safety (Dollars in Millions) | | | | | | | | |
|---|--------------------|----------------|---------------------|----------------|--------------------|----------------|-------------------------|---------------|
| Business Line | FY 2018 Actuals | | FY 2019 Enacted* | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Operating Reactors | 367.0 | 1,504.5 | 365.2 | 1,533.0 | 361.6 | 1,485.0 | (3.6) | (48.0) |
| New Reactors | 95.7 | 381.2 | 94.1 | 386.0 | 87.8 | 339.0 | (6.3) | (47.0) |
| Total | \$462.6 | 1,885.7 | \$459.4 | 1,919.0 | \$449.5 | 1,824.0 | \$(9.9) | (95.0) |

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

*In FY 2019, research activities within the Operating Reactors Business Line were funded \$10.4 million through the use of authorized prior-year carryover which is not reflected in the FY 2019 Enacted Budget. Please refer to Appendix I, "FY 2019 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 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 all applicable requirements.

Overall resources requested in the FY 2020 budget for the Nuclear Reactor Safety Program are \$449.5 million, including 1,824 FTE. This funding level represents a decrease of \$9.9 million, including 95 fewer FTE, when compared with the FY 2019 Enacted Budget. The budget request reflects reductions resulting from activities associated with the planned merger of the Office of Nuclear Reactor Regulation and the Office of New Reactors. Resources for the Nuclear Reactor Safety budget also include \$15.5 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 2018 Actuals | | FY 2019 Enacted* | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Event Response | 14.4 | 47.0 | 18.0 | 48.0 | 16.9 | 45.0 | (1.1) | (3.0) |
| Generic Homeland Security | 1.6 | 8.7 | 1.6 | 8.0 | 1.6 | 8.0 | (0.0) | 0.0 |
| International Activities | 3.4 | 19.0 | 3.6 | 19.0 | 3.4 | 18.0 | (0.2) | (1.0) |
| Licensing | 75.1 | 384.6 | 82.6 | 376.0 | 78.3 | 372.0 | (4.4) | (4.0) |
| Oversight | 112.6 | 498.2 | 114.2 | 536.0 | 115.5 | 520.0 | 1.3 | (16.0) |
| Research | 62.9 | 122.0 | 47.1 | 133.0 | 53.3 | 128.0 | 6.2 | (5.0) |
| Rulemaking | 8.9 | 40.0 | 9.6 | 47.0 | 7.5 | 38.0 | (2.1) | (9.0) |
| Mission Support and Supervisors | 67.2 | 362.4 | 65.2 | 340.0 | 63.4 | 330.0 | (1.8) | (10.0) |
| Training | 8.1 | 22.6 | 8.9 | 26.0 | 8.7 | 26.0 | (0.2) | 0.0 |
| Travel | 12.9 | 0.0 | 14.3 | 0.0 | 13.0 | 0.0 | (1.4) | 0.0 |
| Total | \$367.0 | 1,504.5 | \$365.2 | 1,533.0 | \$361.6 | 1,485.0 | \$(3.6) | (48.0) |

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

*In FY 2019, research activities within the Operating Reactors Business Line were funded \$10.4 million through the use of authorized prior-year carryover which is not reflected in the FY 2019 Enacted Budget. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," for details.

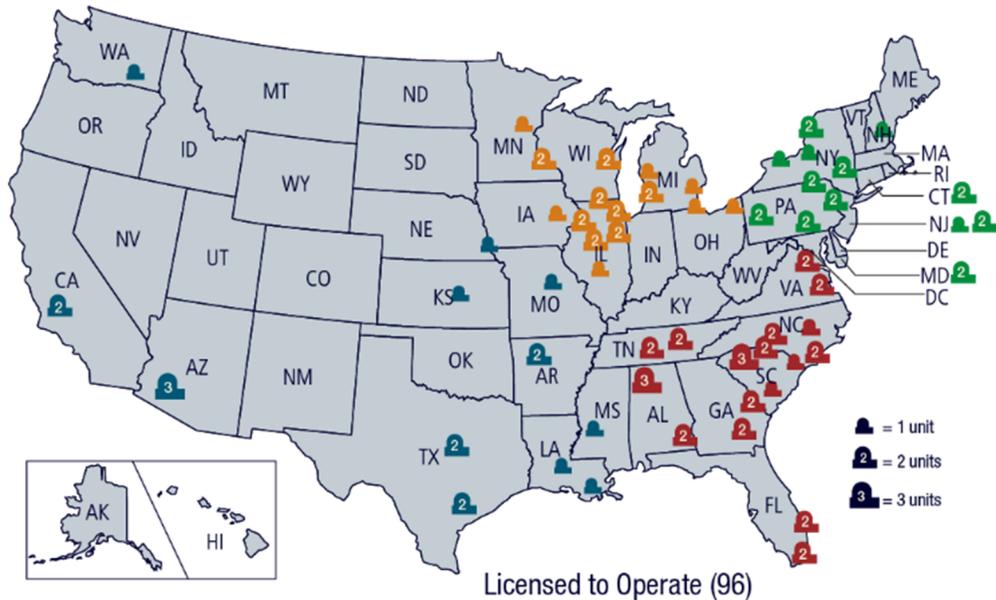
The Operating Reactors Business Line encompasses the regulation of 96 operating civilian nuclear power reactors and 31 research and test reactors in a manner that provides for reasonable assurance of adequate protection of public health and safety, and promotes the common defense and security.

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. 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 the plants. 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 NRC'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 defend successfully against a set of hypothetical threats that the agency refers to as the

OPERATING REACTORS

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 2 and 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
 - Edwin I. Hatch 1 and 2
 - Vogtle 1 and 2
- 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
- IOWA
 - Duane Arnold
- 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. Operating Commercial Nuclear Power Reactors Anticipated To Be Operating as of October 1, 2019

CHANGES FROM FY 2019 ENACTED BUDGET

Resources decrease as a result of (1) the closure of Oyster Creek Nuclear Generating Station and the announced closure of the Pilgrim and Three Mile Island nuclear generating stations, (2) a reduction in the number of States requiring potassium iodide replenishment (seven States instead of nine States), (3) efficiencies in processing licensing actions, (4) the completion of flooding and integrated assessment work related to lessons learned from the accident at Fukushima Dai-ichi in Japan, (5) decreased workload for the Decommissioning Transition Rulemaking, (6) the expected completion of the Non-Power Production and Utilization License Renewal Rulemaking, (7) increased accuracy in travel budget estimates to align with projected workload, and (8) efficiencies gained from the merger of the Office of Nuclear Reactor Regulation and the Office of New Reactors.

The resources for research activities increase when compared with the FY 2019 Enacted Budget; however, they decrease when compared to the FY 2019 Total Budget Authority. This variance is because \$10.4 million of research activities was funded in FY 2019 through the application of authorized prior-year carryover. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," which provides a comparison of the FY 2020 request to the FY 2019 Budget Authority. IT resources increase within the Oversight Product Line as a result of an adjustment of resources from the Corporate Support Business Line to properly align Technical Library subscriptions and operations and maintenance of the Safeguards Local Area Network/Electronic Safe with the mission area these resources support.

The decrease in the Rulemaking Product Line includes a shift of resources to the Licensing Product Line for work under the regulatory guide update program.

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 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 Reactor Oversight Process uses both NRC inspection findings and performance indicators from licensees to assess the safety performance of each plant.
- Conduct license renewal safety and environmental reviews in accordance with published schedules, including completing the review of three subsequent license renewal applications for six units (Turkey Point Nuclear Plant, Units 3 and 4, Peach Bottom Atomic Power Station, Units 2 and 3, and Surry Power Station, Units 1 and 2).
- Support the continued implementation of the Tier 1 lessons learned from the Fukushima accident. Requested resources will support the completion of the review and oversight associated with licensees' implementation of the Mitigation of Beyond-Design-Basis Events Rule and continued implementation of the order related to severe-accident-capable hardened vents, as well as the review of licensee responses to the requests for information associated with seismic hazard reevaluations.

OPERATING REACTORS

- Complete approximately 700 licensing actions, including license amendment requests related to risk-informed initiatives such as adopting standard technical specifications, implementing Title 10 of the *Code of Federal Regulations* (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.
- Enhance reviewer guidance and perform knowledge management and training activities to increase the staff’s capabilities to use risk-informed decision-making and focus on areas of higher risk significance.
- Perform project management activities and ensure that operators are qualified and licensed to perform their duties for the 96 operating power reactors and 31 licensed operating research and test reactors.
- Streamline the license renewal process for certain classes of nonpower production and utilization facilities.
- Conduct operating license application reviews for two proposed medical radioisotope (molybdenum-99) facilities, Northwest Medical Isotopes, LLC (NWMI) and SHINE Medical Technologies, Inc. (SHINE), and provide oversight of their construction.
- Conduct preapplication activities for reviews of license amendment applications requesting conversion from high-enriched uranium to low-enriched uranium fuel at research reactors.
- Conduct nine high-priority rulemakings and three medium-priority rulemakings as directed by the Commission, and continue the review of petitions for rulemaking.
- Complete approximately 300 other licensing tasks, including licensing-basis reviews, license renewal commitment reviews, and quality assurance and emergency plan reviews. Continue developing the licensing infrastructure for the review of accident tolerant fuel designs.
- Support cybersecurity program implementation, oversight, and program and policy issues.
- Provide potassium iodide replenishment to seven States.
- Conduct confirmatory and anticipatory research on topics such as seismic and structural stability; fire safety; probabilistic risk assessment (PRA), 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 accident tolerant fuel; 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. Continue management of the regulatory guide and generic issues programs.

- 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.
- Participate in international nuclear safety peer review missions (e.g., Integrated Regulatory Review Service (IRRS)), exchange information (including regulatory best practices) with established regulatory counterparts bilaterally and multilaterally, and participate in or lead international nuclear safety research activities.

OPERATING REACTORS

License Renewal and Medical Radioisotope Facility Review Schedule¹

| Project | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
|---|--|---|---|---|--|--|
| License Renewal | | | | | | |
| New Applications | | | | • Clinton | • Comanche Peak 1&2 | |
| Ongoing Complex Reviews (resulting from hearings or technical issues) | • Indian Point ² • Seabrook ⁴ | • Seabrook ^{2,3} | | | | |
| Ongoing Noncomplex Reviews (i.e., no hearings or technical issues) | • River Bend • Waterford | • River Bend ² • Waterford ² | | | • Clinton | • Clinton ² • Comanche Peak 1&2 |
| Subsequent License Renewal | | | | | | |
| New Applications | • Peach Bottom | • Surry | | • North Anna | | |
| Ongoing Noncomplex Reviews (i.e., no hearing) | | • Peach Bottom • Turkey Point ⁴ | • Turkey Point ^{2,4} • Surry • Peach Bottom ² | • Surry ² | • North Anna ² | |
| Medical Radioisotopes | | | | | | |
| New Applications | | • SHINE OL • NWMI OL | | • Oregon State Amendment (associated with NWMI) | • Unnamed Nonpower Reactor Amendment (associated with NWMI) | |
| Ongoing Reviews | | | • SHINE OL • NWMI OL | • SHINE OL ² • NWMI OL ² | • Oregon State Amendment (associated with NWMI) ² | • Unnamed Nonpower Reactor Amendment (associated with NWMI) ² |

Note: This schedule is subject to change and may not align with the budget because of schedule changes after the budget was formulated.

¹ Budgeting for the license renewal and medical radioisotope facility applications is based on information received from applicant correspondence or responses to NRC-issued regulatory information summaries (RISs).

² The review has been or is expected to be completed in the FY shown.

³ This is related to the resolution of technical issues related to the alkali silica reaction.

⁴ Work began in FY 2018.

Acronyms

SHINE—SHINE Medical Technologies, Inc.

NWMI—Northwest Medical Isotopes, LLC

OL—operating license

Status of Reactors Transitioning from Operating to Decommissioning

| Site | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
|-------------------|--------------------|---|---|--|---|---|
| Ft. Calhoun | 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 |
| Oyster Creek | Operating | Shut Down October 2018 (FY 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 |
| Pilgrim | Operating | Expected to Shut Down June 1, 2019 (FY 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 |
| Three Mile Island | Operating | Expected to Shut Down September 29, 2019 (FY 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 |
| Indian Point 2 | Operating | Operating | Expected to Shut Down April 2020 (FY 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 |
| Davis Besse | Operating | Operating | Expected to Shut Down May 2020 (FY 2020) 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 |
| Indian Point 3 | Operating | Operating | Operating | Expected to Shut Down April 2021 (FY 2021) Transitioning Year | Site Transfer Is Complete | Site Is with Decommissioning Group in Decommissioning and LLW Business Line |
| Perry | Operating | Operating | Operating | Expected to Shut Down May 2021 (FY 2021) Transitioning Year | Site Transfer Is Complete | Site Is with Decommissioning Group in Decommissioning and LLW Business Line |
| Beaver Valley 1 | Operating | Operating | Operating | Expected to Shut Down May 2021 (FY 2021) Transitioning Year until Beaver Valley 2 Shuts Down | Site Transfer Is Complete | Site Is with Decommissioning Group in Decommissioning and LLW Business Line |

OPERATING REACTORS

| Site | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
|-----------------|-----------|-----------|-----------|-----------|---|---|
| Beaver Valley 2 | Operating | Operating | Operating | Operating | Expected to Shut Down October 2021 (FY 2022) Site Transfer is Complete | Site is with Decommissioning Group in Decommissioning and LLW Business Line |
| Palisades | Operating | Operating | Operating | Operating | Expected to Shut Down May 31, 2022 (FY 2022) Transitioning Year | Site Transfer Is Complete |

Note: Duane Arnold is expected to shut down in September 2020 but is not included in the table because the NRC has not received official notification.

Data as of November 29, 2018. The status of the plants transitioning from operating to decommissioning is subject to change.

SIGNIFICANT ACCOMPLISHMENTS IN FY 2018

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

- Developed, in conjunction with stakeholders, and issued a project plan to support the review of licensing applications for accident tolerant fuel.
- Completed reviews of applications to use a risk-informed program (10 CFR 50.69) at the Limerick and Vogtle nuclear power plants that allows for a graded approach to the treatment and procurement of plant systems.
- Issued revised guidance for 10 CFR 50.59 evaluations of digital instrumentation and controls (RIS 2002-22, Supplement 1, "Clarification on Endorsement of Nuclear Energy Institute Guidance in Designing Digital Upgrades in Instrumentation and Control Systems," dated May 31, 2018) and supported workshops to better enable licensees to implement digital modifications without prior NRC approval.
- Began the review of the subsequent license renewal applications for Turkey Point and Peach Bottom nuclear power plants. These applications are the first to request to operate for an additional 20 years beyond their current, already renewed operating licenses.
- Completed the review of the license renewal application for Indian Point Nuclear Generating Units Nos. 2 and 3, which brings the total number of renewals to 91 reactor units.
- Published the Operating Reactors dashboard of NRC Performance on the NRC's public Web [site](#), which is intended to offer a user-friendly look at the staff's progress toward meeting established performance criteria.
- Issued a construction permit to Northwest Medical Isotopes, LLC for a molybdenum-99 radioisotope facility in Columbia, MO.
- Implemented and oversaw Joint Composite Adversary Force selection, training, qualification, and exercises for two licensees, as well as the scheduled Force-on-Force exercises throughout the operating reactor fleet.
- Conducted via webinar the first "virtual" Annual Assessment Meeting under the Reactor Oversight Process at Salem Nuclear Generating Station/Hope Creek Generating Station.
- Provided oversight of licensees' implementation of the post-Fukushima severe-accident-capable hardened vent order (EA-13-109). A milestone was achieved as the final operating power reactor, FitzPatrick Nuclear Power Plant, achieved compliance with Phase 1 (wetwell vent) of this order.
- Provided oversight of licensees' implementation of the post-Fukushima mitigating strategies order (EA-12-049). A milestone was achieved as the final operating power reactor, Quad Cities Units 1 and 2, achieved compliance with this order.

OPERATING REACTORS

- Issued the assessment of the Cooper Nuclear Station flood hazard mitigating strategies assessment, the first flood mitigating strategies assessment using a targeted hazard mitigating strategy.
- Coordinated with other Federal agencies to support the States affected by Hurricane Florence by monitoring the assessment of offsite infrastructure and response capabilities prior to support of the restart of the Brunswick Station.
- Participated in the Eagle Horizon 2018 National-Level Exercise, which included activation of the continuity of operations plan.
- Leveraged international cooperation through computer code development and maintenance programs, including thermal-hydraulics code applications and maintenance, cooperative severe accident research, and the radiation protection computer code and maintenance program, while enhancing controls against the misuse of NRC nuclear safety codes.
- Led and supported U.S. Government delegations in international meetings addressing the Convention on Nuclear Safety, the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, and the Convention on the Physical Protection of Nuclear Material. Served on multiple International Atomic Energy Agency (IAEA) regulatory peer review missions and guidance committees.
- Participated in high-level U.S. Government nuclear safety and security initiatives in collaboration with U.S. executive branch agencies and foreign regulatory counterparts through activities such as the Nuclear Suppliers Group and Joint Standing Committees on Nuclear Energy Cooperation.
- Provided training and capacity building to the Japan Nuclear Regulation Authority as the country transitions to a new inspection framework modeled on the NRC's Reactor Oversight Process.
- Conducted license renewal workshops and provided aging management support to China's National Nuclear Safety Administration and Mexico's National Commission for Nuclear Safety and Safeguards. During the workshops, the NRC shared information on nuclear power plant aging management and license renewal activities in the United States. This information will assist China and Mexico as they review their first license renewal applications.
- Led teams of international experts to complete IAEA IRRS missions to Belgium, France, and Hungary. These IRRS missions reviewed the hosts' regulatory frameworks for nuclear and radiation safety and compared the frameworks against the IAEA safety standards.
- Processed 12 escalated enforcement actions, with five of the escalated actions supported through an investigation by the NRC's Office of Investigations. Issued two confirmatory orders, one to Millstone and one to Grand Gulf.
- Published NUREG/CR-7237, "Correlation of Seismic Performance in Similar SSCs (Structures, Systems, and Components)," issued December 2017, as part of the methodology of seismic PRA for nuclear power plants.

- Published a joint NRC/Electric Power Research Institute report, NUREG/CR-7150, “Joint Assessment of Cable Damage and Quantification of Effects from Fire (JACQUE-FIRE),” Volume 3, “Technical Resolution to Open Issues on Nuclear Power Plant Fire-Induced Circuit Failure,” issued November 2017, to better understand failure modes that might occur in electrical control circuits of nuclear power plants as a result of fire damage to electric cables.

OTHER INDICATORS

LICENSING

| Number of License Renewal Applications (Units) on which Final Decision Has Been Made* (OR-01) | | | |
|--|---------------|---------------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 0 | 0 | |
| FY 2015 | 7** | 5*** | **The FY 2015 Congressional Budget Justification target was shown as 9 in error. ***Byron Units 1 and 2 and Braidwood Units 1 and 2 rescheduled for FY 2016. |
| FY 2016 | 7 | 5 | Diablo Canyon was expected to be completed in FY 2016 but was delayed, and the application has now been suspended. Other units, such as Fermi 2, Grand Gulf, and Seabrook, were expected to be completed in FY 2016 but were all delayed as a result of technical issues. |
| FY 2017 | 7 | 6 | The target was not met as result of the licensee’s decision to discontinue pursuit of the Diablo Canyon license renewal. |
| FY 2018 | 1 | 2 | |
| FY 2019 | 1 | | |
| FY 2020 | 2 | | |
| *The targets are based on the scheduled completion of the license renewal applications under review and the schedule of future applications. | | | |

| Percentage of Licensing Actions Completed in 1 Year or Less* (OR-03) | | | |
|--|---------------|---------------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 95 | 87 | 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 has 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 | 95 | 88 | |
| FY 2016 | 95 | 95 | |
| FY 2017 | 95 | 96 | |
| FY 2018 | 95 | 98 | |
| FY 2019 | 95 | | |
| FY 2020 | 95 | | |
| *Excludes improved Standard Technical Specification conversions, licensing actions associated with the Fukushima Near-Term Task Force (NTTF) recommendations (beginning in FY 2014), and power uprates. Also excludes license amendment requests that are unusually complex. | | | |

OPERATING REACTORS

| Percentage of Licensing Actions Completed in 2 Years or Less* (OR-04) | | | |
|---|--------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 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 has 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 | 100 | 99 | |
| 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 | | |
| FY 2020 | 100 | | |

*Excludes improved Standard Technical Specification conversions, licensing actions associated with the Fukushima NTTF recommendations (beginning in FY 2014), and power uprates. Also excludes license amendment requests that are unusually complex.

| Percentage of Other Licensing Tasks Completed in 1 Year or Less* (OR-07) | | | |
|--|--------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 90 | 87 | 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 has 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 | | |
| FY 2020 | 90 | | |

*Excludes multiplant actions, licensing tasks associated with the Fukushima NTTF recommendations (beginning in FY 2014), and other unusually complex licensing tasks.

| Percentage of Other Licensing Tasks Completed in 2 Years or Less* (OR-08) | | | |
|---|--------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 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 has 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 | 100 | 97 | |
| FY 2016 | 100 | 99 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | 100 | | |

*Excludes multiplant actions, licensing tasks associated with the Fukushima NTTF recommendations (beginning in FY 2014), and other unusually complex licensing tasks.

OVERSIGHT

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

| Percentage of Final Significance Determinations Made within 90 Days for All Potentially Greater Than Green Findings (OR-13) | | | |
|--|---------------|---------------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 90 | 86 | The 90-day target was exceeded by 1 day for one action because of one particularly complicated issue. |
| 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 staff made the decision to exceed the target by 2 weeks to take the necessary time for the staff to conduct a thorough review of the high volume of additional information provided by the licensee. |
| FY 2019 | 90 | | |
| FY 2020 | 90 | | |

| Percentage of Technical Allegation Reviews Completed in 180 Days or Less (OR-15) | | | |
|---|---------------|---------------|----------------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 95 | 99 | |
| FY 2015 | 95 | 99 | |
| FY 2016 | 95 | 99 | |
| FY 2017 | 95 | 99 | |
| FY 2018 | 95 | 99 | |
| FY 2019 | 95 | | |
| FY 2020 | 95 | | |

| Percentage of Technical Allegation Reviews Completed in 360 Days or Less (OR-16) | | | |
|---|---------------|---------------|----------------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | 100 | | |

| Percentage of Enforcement Actions Where No Investigation Is Involved Completed in 160 Days or Less (OR-17) | | | |
|---|---------------|---------------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| 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 | | |
| FY 2020 | 100 | | |

OPERATING REACTORS

| Percentage of Enforcement Actions Where Investigation Is Involved Completed in 330 Days or Less (OR-18) | | | |
|---|--------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| 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 | | |
| FY 2020 | 100 | | |

| Percentage of Investigations That Developed Sufficient Information To Reach a Conclusion Regarding Wrongdoing Completed in 12 Months or Less* (OR-19) | | | |
|---|--------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 80 | 84 | |
| FY 2015 | 80 | 98 | |
| FY 2016 | 80 | 95 | |
| FY 2017 | 80 | 97 | |
| FY 2018 | 80 | 95 | |
| FY 2019 | 85 | | |
| FY 2020 | 85 | | |

*Target for FY 2013 and FY 2014 was 9 months or less. The increase of time from 9 to 12 months reflects the implementation of added quality assurance checks during an investigation and the need to ensure that due professional care is used in conducting investigations and preparing related reports, as outlined in the Council of Inspectors General on Integrity and Efficiency's "Quality Standards for Investigations," dated November 15, 2011.

| Percentage of Investigations Completed in Time To Initiate Civil and/or Criminal Enforcement Action (OR-20) | | | |
|---|--------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | 100 | | |

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 2014 | 3.75 | 4.42 | |
| FY 2015 | 3.75 | 4.66 | |
| FY 2016 | 3.75 | 4.43 | |
| FY 2017 | 3.75 | 4.50 | |
| FY 2018 | Discontinued | | Indicator to be tracked internally. |
| FY 2019 | 4.0 | | 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 | | |

*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 value-added of the products. As appropriate, the NRC will develop and add other mechanisms of this process to measure the quality of research products.

DISCONTINUED INDICATORS

| Number of Licensing Actions Completed* (OR-02) | | | |
|--|-------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 900 | 607 | 737 license amendment requests were submitted in FY 2014. |
| 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 | | |
| FY2020 | Discontinue | | 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 in FY 2020 (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 the previous FY.

| 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 |
| FY 2014 | New indicator in 2016 | | |
| FY 2015 | | | |
| 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 FYs. |
| FY 2019 | N/A | | |
| FY 2020 | N/A | | |

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

OPERATING REACTORS

| Number of Other Licensing Tasks Completed* (OR-06) | | | |
|--|-------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 500 | 765 | 577 other licensing tasks were submitted in FY 2014. |
| 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 and 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 expected other licensing tasks completed under this new definition. |
| FY 2018 | 300 | 362 | |
| FY 2019 | 300 | | |
| | | | 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 in FY 2020 (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 | Discontinue | | |

*As limited by the number of other licensing task requests submitted or accepted the previous FY.

| 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 |
| FY 2014 | | | |
| FY 2015 | New indicator in 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 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 2014 | 55 | 55 | |
| 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 to be 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 2014 | 4 | 4 | |
| 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 to be 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 2014 | 100 | 100 | |
| 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 accounts for 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.

| Percentage of Technical Allegation Reviews Completed in 150 Days or Less (OR-14) | | | |
|--|--------------|--------|-------------------------------------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 90 | 97 | |
| FY 2015 | 90 | 98 | |
| FY 2016 | 90 | 97 | |
| FY 2017 | 90 | 97 | |
| FY 2018 | Discontinued | | Indicator to be tracked internally. |
| FY 2019 | N/A | | |
| FY 2020 | N/A | | |

| Percentage of Proposed Final Rules Completed in Accordance with Schedules Approved by the Commission (OR-21) | | | |
|--|------------------|--------|-------------------------------------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in | | |
| FY 2015 | FY 2016 | | |
| FY 2016 | 80 | 100 | |
| FY 2017 | 80 | 100 | |
| FY 2018 | 80 | 100 | |
| FY 2019 | 80 | | |
| FY 2020 | Discontinue | | Indicator to be tracked internally. |

| Percentage of Major Milestones for Critical Research Programs Completed On or Before Their Due Date* (OR-22) | | | |
|--|--------------|--------|-------------------------------------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 90 | 100 | |
| FY 2015 | 90 | 100 | |
| FY 2016 | 90 | 100 | |
| FY 2017 | 90 | 100 | |
| FY 2018 | Discontinued | | Indicator to be 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 FY.

OPERATING REACTORS

| 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 2014 | 100 | 100 | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | Discontinue | | Indicator to be 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 |
| FY 2014 | New indicator in | | |
| FY 2015 | FY 2016 | | |
| FY 2016 | 90 | 100 | No threat met the threshold for the issuance of an Information Assessment Team for FY 2016. |
| FY 2017 | 90 | 100 | No threat met the threshold for the issuance of an Information Assessment Team for FY 2017. |
| FY 2018 | 90 | 100 | |
| FY 2019 | 90 | | |
| FY 2020 | Discontinue | | 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 2018 Actuals | | FY 2019 Enacted | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| International Activities | 1.1 | 6.1 | 1.0 | 5.0 | 0.8 | 4.0 | (0.2) | (1.0) |
| Licensing | 44.5 | 188.2 | 39.7 | 167.0 | 33.8 | 133.0 | (6.0) | (34.0) |
| Oversight | 12.4 | 66.6 | 14.9 | 75.0 | 12.9 | 66.0 | (2.0) | (9.0) |
| Research | 17.7 | 29.1 | 14.6 | 33.0 | 19.2 | 47.0 | 4.6 | 14.0 |
| Rulemaking | 1.2 | 6.2 | 1.9 | 10.0 | 1.7 | 9.0 | (0.2) | (1.0) |
| Mission Support and Supervisors | 14.4 | 77.7 | 16.9 | 87.0 | 14.1 | 71.0 | (2.8) | (16.0) |
| Training | 2.4 | 7.3 | 2.8 | 9.0 | 2.7 | 9.0 | (0.0) | 0.0 |
| Travel | 1.8 | 0.0 | 2.3 | 0.0 | 2.6 | 0.0 | 0.3 | 0.0 |
| Total | \$95.7 | 381.2 | \$94.1 | 386.0 | \$87.8 | 339.0 | \$(6.3) | (47.0) |

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

The New Reactors Business Line is responsible for licensing and overseeing the design, siting, and construction of new nuclear power reactors, including small modular reactors (SMRs) and advanced reactors. The new reactors activities ensure that new civilian nuclear power reactor facilities are developed in a manner that protects the health, safety, and security of the public in an efficient manner.

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 regulated under 10 CFR Part 50—which was implemented for all currently operating reactors—involves separate applications for the issuance of construction permits and operating licenses.

The NRC continues to perform technical reviews of large, light-water reactors (LLWR) 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.

NEW REACTORS

CHANGES FROM FY 2019 ENACTED BUDGET

Resources decrease as a result of (1) a delay in the receipt of the Utah Associated Municipal Power System (UAMPS) SMR application and withdrawal of the Blue Castle LLWR application, (2) a delay in the submittal of the Advanced Passive 1000 (AP1000) DC renewal application, (3) the near completion of the NuScale DC review, (4) the completion of the Clinch River ESP technical review (only the mandatory hearing is projected to be completed in FY 2020), (5) the anticipated reduced number of license amendment requests as the units for Vogtle Electric Generating Plant (Vogtle) near completion, (6) the reduced demand for operator licensing work as the support will be limited to Vogtle Units 3 and 4, (7) lower project management costs now that enterprisewide contracts are in place, (8) delays in 10 CFR Part 50 construction and operating license application review activities for Bellefonte Nuclear Station, Units 1 and 2, (9) efficiencies in the areas of enforcement, vendor inspection, and emergency planning and security, and (10) efficiencies gained from the merger of the Office of Nuclear Reactor Regulation and the Office of New Reactors.

The increase in the Research Product Line primarily results from an increase in workload in the area of advanced nuclear reactors technologies in order to accelerate readiness activities consistent with stakeholder plans and readiness. The small increase in the Travel Product Line results from increased field work and meetings associated with the licensee's planned completion of construction and the resultant NRC 10 CFR 52.103(g) finding for Vogtle Unit 3.

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:

- Perform construction inspection activities at the two reactors units under construction (Vogtle Units 3 and 4).
- Develop infrastructure for advanced reactors at a rate consistent with NRC projections for interest in new technologies and cognizance of the industry's plans.
- Continue the reviews for two DC applications for NuScale (SMR) and the U.S. Advanced Pressurized-Water Reactor (US-APWR) (LLWR).
- Continue the review of one DC renewal application for the General Electric-Hitachi Advanced Boiling-Water Reactor (ABWR) design (LLWR).
- Review one ESP application for the Clinch River site (SMR).
- Conduct preapplication activities for one COL application (UAMPS).
- Perform activities related to the advanced reactor preapplication and review for one anticipated custom COL application.
- Review license amendments for post-COL activities.

- Inspect vendors supplying products and services as part of a formal agencywide program to monitor and evaluate counterfeit, fraudulent, and suspect items.
- Conduct two high-priority rulemakings and three medium-priority rulemakings as directed by the Commission, and review petitions for rulemaking.
- Provide research support for LLWR 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.
- Provide international support for the 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.
- Continue to implement strategic bilateral and multilateral cooperation with countries on the regulatory oversight of AP1000 reactor construction. The program also supports IAEA activities, such as those related to 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.
- Complete the plan for the transition of regulatory oversight as the new AP1000 units move from construction to operation.

NEW REACTORS

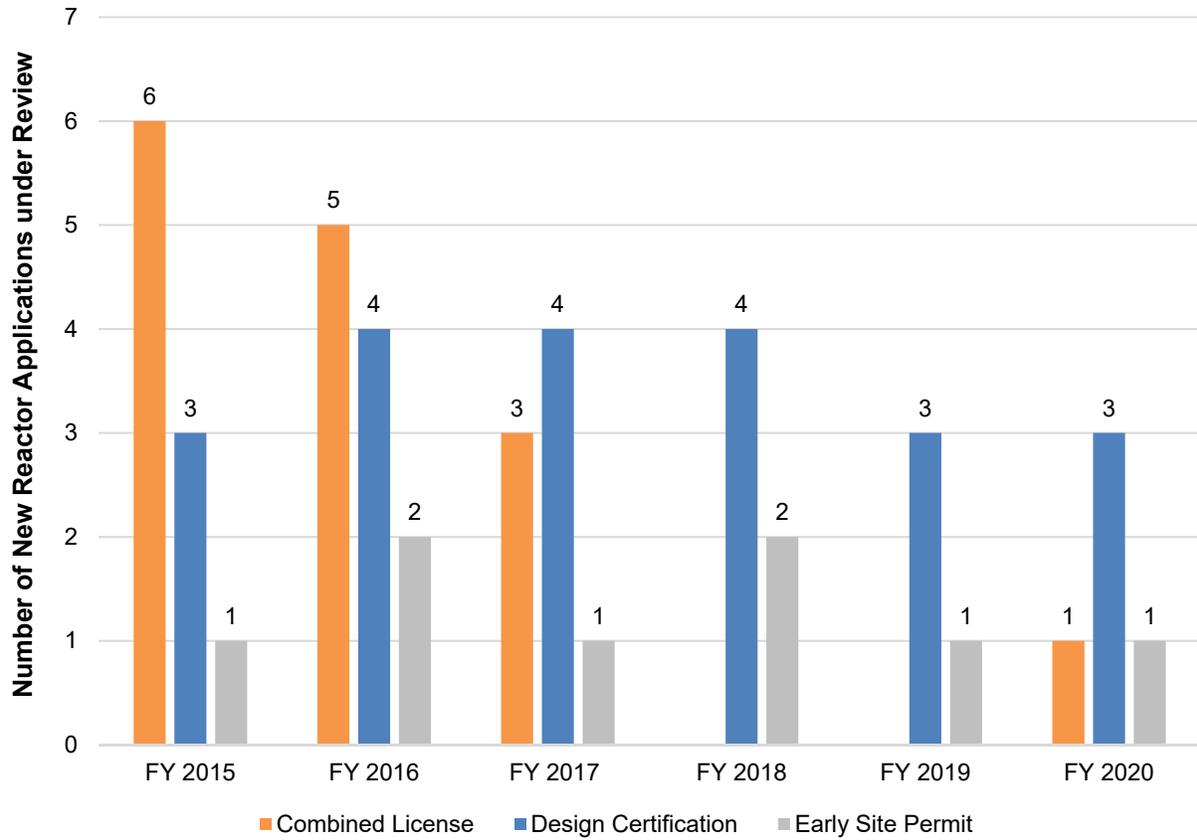


Figure 4: New Reactor Applications under Review

New Reactor Applications under Review

| New Reactor Reviews | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
|---------------------|--|---|---|---|--|--|
| COL | <ul style="list-style-type: none"> • Bell Bend • Lee Station • Levy County • North Anna • South Texas Project • Turkey Point | <ul style="list-style-type: none"> • Lee Station • Levy County • North Anna • South Texas Project • Turkey Point | <ul style="list-style-type: none"> • Lee Station • North Anna • Turkey Point | | | <ul style="list-style-type: none"> • Unnamed Applicant (Advanced Reactor)** |
| DC | <ul style="list-style-type: none"> • U.S. EPR • US-APWR • KHNP (APR-1400) | <ul style="list-style-type: none"> • US-APWR • ABWR • KHNP (APR-1400) • NuScale* | <ul style="list-style-type: none"> • US-APWR • ABWR • KHNP (APR-1400) • NuScale | <ul style="list-style-type: none"> • US-APWR • ABWR • KHNP (APR-1400) • NuScale | <ul style="list-style-type: none"> • US-APWR • ABWR • NuScale | <ul style="list-style-type: none"> • US-APWR • ABWR • NuScale |
| ESP | <ul style="list-style-type: none"> • PSEG | <ul style="list-style-type: none"> • PSEG • TVA Clinch River* | <ul style="list-style-type: none"> • TVA Clinch River | <ul style="list-style-type: none"> • TVA Clinch River | <ul style="list-style-type: none"> • TVA Clinch River | <ul style="list-style-type: none"> • TVA Clinch River |

*Preapplication review

**Unnamed applicant. The NRC received a proprietary letter on July 22, 2018.

NEW REACTORS

SIGNIFICANT ACCOMPLISHMENTS IN FY 2018

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

- Completed the mandatory hearing for the Turkey Point COL application and subsequently issued the licenses.
- Completed the Advanced Power Reactor 1400 (APR1400) DC review within the scheduled 42 months.
- Issued the draft safety evaluation in response to a request for exemption to the requirements for emergency preparedness for the Clinch River ESP application. Issued the draft environmental impact statement for the Clinch River ESP application for comment.
- Completed Phase 1 of six phases in the NuScale DC application review.
- Issued a license amendment for Vogtle that revised the criteria for design and licensing changes that require prior NRC approval (“Tier 2”).
- Developed an Integrated Project Plan that will ensure coordinated and timely consideration of activities associated with the completion of construction, initial testing, implementation of operational programs, and transition to operations for Vogtle Units 3 and 4, including inspections, tests, analyses, and acceptance criteria closure notifications and licensing actions.
- Observed preoperational and startup testing at the Sanmen Nuclear Power Plant in China, the first AP1000 to begin commercial power operations, which provided the NRC with unique insights about AP1000 startup issues that will facilitate NRC oversight of the construction and commissioning of the Vogtle AP1000 units.
- Chaired the IAEA SMR Forum, and associated working group meetings, to foster international collaboration on the regulation of SMRs, advancing U.S. views on a number of technical and regulatory challenges associated with reviewing and providing oversight of new reactor technologies.

OTHER INDICATORS

LICENSING

| Non-LWR Reactor Licensing Application Review Timeliness* (NR-19) | | | |
|---|--------------------------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in FY 2019 | | |
| FY 2015 | | | |
| FY 2016 | | | |
| FY 2017 | | | |
| FY 2018 | | | |
| FY 2019 | 85 | | |
| FY 2020 | 85 | | |
| *Percentage of interim milestones supporting non-LWR regulatory engagement plans and license applications reviews that are completed on time in accordance with the schedules agreed upon with reactor designers and applicants (within the NRC's control). | | | |

| Light-Water Reactor Application Review Timeliness* (NR-20) | | | |
|---|----------------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| | New in FY 2020 | | Consolidated indicators NR-02, NR-04, NR-06, and NR-14. |
| FY 2020 | 85 | | |
| *Percentage of LWR application review milestones (for ESPs, COLs, DCs, and license amendment requests) completed on the schedules agreed upon with the applicants (within the NRC's control). | | | |

RESEARCH

| Acceptable Technical Quality of Agency Research Technical Products* (NR-18) | | | |
|--|--------------------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in FY 2015 | | |
| 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 to be 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 | | |
| FY 2020 | 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 value-added 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 Early Site Permit Review Interim Milestones Completed on Time (NR-02) | | | |
|---|------------------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in | | |
| FY 2015 | FY 2016 | | |
| FY 2016 | 85 | 100 | |
| FY 2017 | 85 | 100 | |
| FY 2018 | 85 | 100 | |
| FY 2019 | 85 | | |
| FY 2020 | Discontinue | | This indicator was consolidated into NR-20 to streamline timeliness indicators for LWR application review timeliness. |

| Percentage of Design Certification Review Interim Milestones Completed on Time (NR-04) | | | |
|--|------------------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in | | |
| FY 2015 | FY 2016 | | |
| FY 2016 | 85 | 100 | |
| FY 2017 | 85 | 100 | |
| FY 2018 | 85 | 100 | |
| FY 2019 | 85 | | |
| FY 2020 | Discontinue | | This indicator was consolidated into NR-20 to streamline timeliness indicators for LWR application review timeliness. |

| 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 |
| FY 2014 | New indicator in | | |
| FY 2015 | FY 2016 | | |
| FY 2016 | 85 | 100 | |
| FY 2017 | 85 | 100 | |
| FY 2018 | 85 | 100 | |
| FY 2019 | 85 | | |
| FY 2020 | Discontinue | | This indicator was consolidated into NR-20 to streamline timeliness indicators for LWR application review timeliness. |

| 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 |
| FY 2014 | New indicator in | | |
| FY 2015 | FY 2016 | | |
| FY 2016 | 85 | NA | No reactor design submitted for review. |
| FY 2017 | 85 | 100 | |
| FY 2018 | Discontinued | | Indicator to be 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 2014 | 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 2015 | | All milestones completed as appropriate. | |
| FY 2016 | | 100 | |
| FY 2017 | | 100 | |
| FY 2018 | Discontinued | | Indicator to be 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 |
| FY 2014 | New indicator in | | |
| FY 2015 | 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 will be tracked internally. |
| FY 2019 | N/A | | |
| FY 2020 | N/A | | |

| Percentage of Interim Milestones for SMR COL and Construction Permit Application Reviews Completed in Accordance with the Schedule Agreed Upon with the Applicants (NR-13) | | | |
|--|------------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in | | |
| FY 2015 | FY 2016 | | |
| FY 2016 | 85 | N/A | The NRC had no SMR COL or SMR construction permit application for review during FY 2016. |
| FY 2017 | 85 | N/A | The NRC had no SMR COL or SMR construction permit application for review during FY 2017. |
| FY 2018 | Discontinued | | Indicator to be 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 |
| FY 2014 | New indicator in | | |
| FY 2015 | 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 | | |
| FY 2020 | Discontinue | | This indicator was consolidated into NR-20 to streamline timeliness indicators for LWR application review timeliness. |

| Number of Domestic and International Vendor Inspections Completed (NR-15) | | | |
|---|-------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 30 | 36 | |
| 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 | | The target was decreased based on decreased workload. |
| FY 2020 | Discontinue | | Workload is expected to decrease. Indicator to be tracked internally. |

| Percent of Proposed Final Rules Completed in Accordance with the Schedule Approved by the Commission (NR-16) | | | |
|--|------------------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in | | |
| FY 2015 | 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 | | |
| FY 2020 | Discontinue | | Rulemaking will be tracked with a different indicator internally. |

| Timeliness of Completing Actions on Critical Research Program* (NR-17) | | | |
|---|---|--|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in FY 2015 | | |
| FY 2015 | 90% of major milestones met on or before their due date | No critical research program actions completed in FY 2015. | |
| FY 2016 | 90% of major milestones met on or before their due date | N/A | There were no critical milestones 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 | There were no critical milestones associated with the research activities conducted in this business line in FY 2017; thus, there are no performance data to report. |
| FY 2018 | Discontinued | | Indicator to be 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 FY. | | | |

NUCLEAR MATERIALS AND WASTE SAFETY

| Nuclear Materials and Waste Safety | | | | | | | | |
|---|------------------------|--------------|-------------------------|--------------|------------------------|--------------|-----------------------------|-------------|
| (Dollars in Millions) | | | | | | | | |
| Business Line | FY 2018 Actuals | | FY 2019 Enacted* | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Spent Fuel Storage and Transportation | 26.0 | 96.6 | 22.5 | 100.0 | 24.2 | 101.0 | 1.7 | 1.0 |
| Nuclear Materials Users | 62.3 | 211.4 | 60.6 | 215.0 | 59.1 | 205.0 | (1.4) | (10.0) |
| Decommissioning and Low-Level Waste | 27.1 | 107.5 | 24.8 | 104.0 | 22.9 | 93.0 | (1.9) | (11.0) |
| High-Level Waste | 0.1 | 0.4 | 0.0 | 0.0 | 38.5 | 77.0 | 38.5 | 77.0 |
| Fuel Facilities | 24.6 | 107.0 | 23.2 | 96.0 | 21.0 | 88.0 | (2.2) | (8.0) |
| Total | \$140.1 | 523.0 | \$131.0 | 515.0 | \$165.7 | 564.0 | \$34.7 | 49.0 |

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

*In FY 2019, licensing activities within the Spent Fuel Storage and Transportation and Decommissioning and Low-Level Waste Business Lines were funded \$2.4 million and \$0.6 million, respectively, through the use of authorized prior-year carryover which is not reflected in the FY 2019 Enacted Budget. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," for details.

The Nuclear Materials and Waste Safety Program reflects the NRC’s effort to license and oversee 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 and 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 (LLW), High-Level Waste, and Fuel Facilities Business Lines.

Overall resources requested in the FY 2020 budget for the Nuclear Materials and Waste Safety Program are \$165.7 million, including 564 FTE. This funding level represents an increase of \$34.7 million, including 49 FTE, when compared with the FY 2019 Enacted Budget. This budget includes \$38.5 million, including 77 FTE for the proposed Yucca Mountain deep geologic repository for spent nuclear fuel (SNF) and other high-level radioactive waste. These resources are derived from the Nuclear Waste Fund and are nonfee-recoverable.

SPENT FUEL STORAGE AND TRANSPORTATION

| Spent Fuel Storage and Transportation by Product Line | | | | | | | | |
|--|--------------------|-------------|---------------------|--------------|--------------------|--------------|-------------------------|------------|
| (Dollars in Millions) | | | | | | | | |
| Product Line | FY 2018 Actuals | | FY 2019 Enacted* | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| International Activities | 0.3 | 1.7 | 0.6 | 2.0 | 0.4 | 2.0 | (0.2) | 0.0 |
| Licensing | 15.5 | 56.9 | 13.7 | 62.0 | 15.5 | 62.0 | 1.8 | 0.0 |
| Oversight | 2.4 | 13.2 | 2.5 | 13.0 | 2.5 | 13.0 | 0.0 | 0.0 |
| Research | 1.7 | 1.9 | 1.0 | 2.0 | 1.1 | 3.0 | 0.1 | 1.0 |
| Rulemaking | 2.5 | 6.2 | 1.1 | 6.0 | 1.1 | 6.0 | 0.0 | 0.0 |
| Mission Support and Supervisors | 3.1 | 16.6 | 2.9 | 15.0 | 2.9 | 15.0 | (0.0) | 0.0 |
| Training | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Travel | 0.5 | 0.0 | 0.6 | 0.0 | 0.6 | 0.0 | (0.0) | 0.0 |
| Total | \$26.0 | 96.6 | \$22.5 | 100.0 | \$24.2 | 101.0 | \$1.7 | 1.0 |

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

*In FY 2019, licensing activities within the Spent Fuel Storage and Transportation Business Line were funded \$2.4 million through the use of authorized prior-year carryover which is not reflected in the FY 2019 Enacted Budget. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," for details.

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

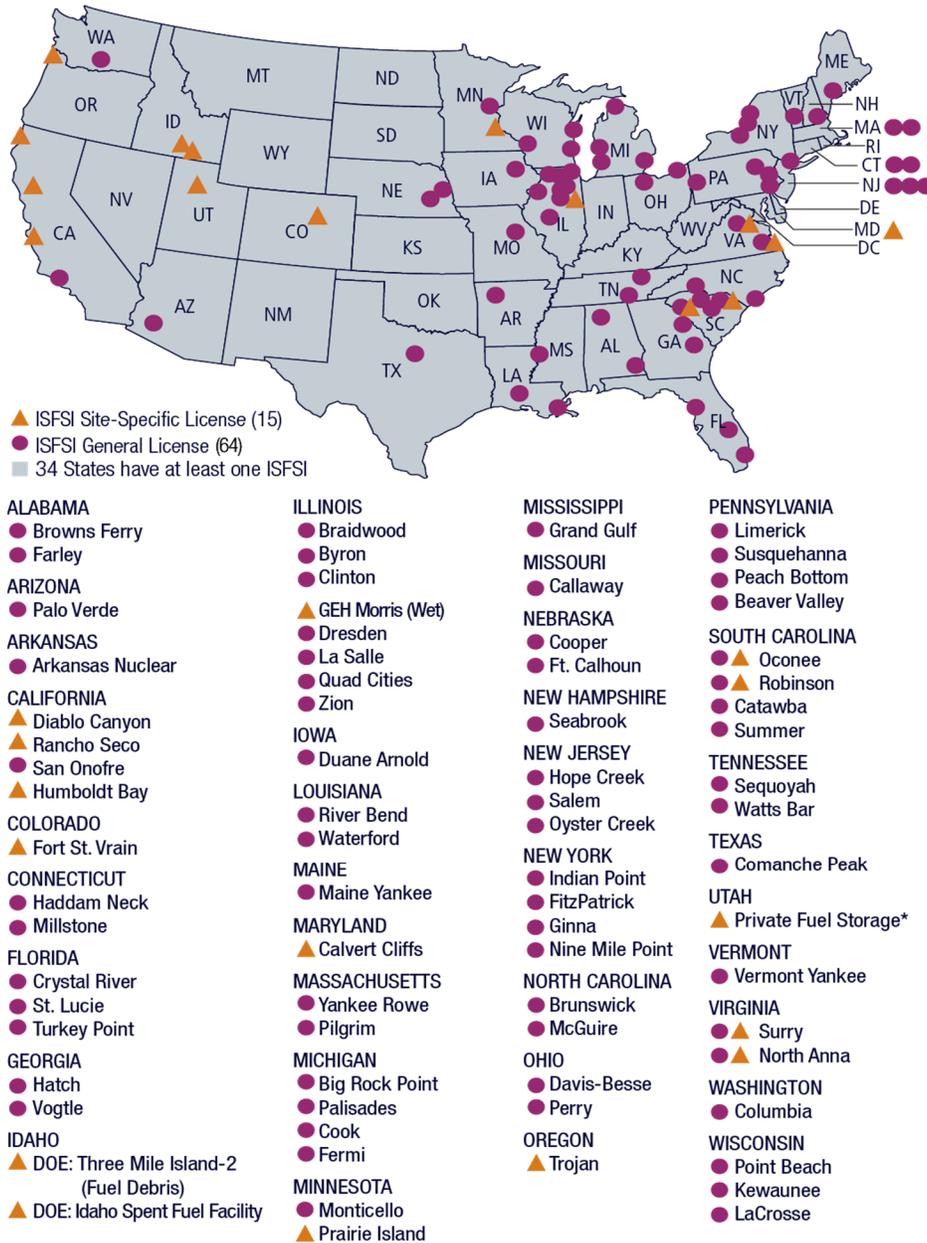


Figure 5: Licensed and Operating ISFSIs by State

CHANGES FROM FY 2019 ENACTED BUDGET

Resources for licensing activities increase when compared with the FY 2019 Enacted Budget; however, resources decrease when compared to the FY 2019 Total Budget Authority. This variance is because \$2.4 million of licensing activities was funded in FY 2019 through the application of authorized prior-year carryover. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," which provides a comparison of the FY 2020 request to the FY 2019 Budget Authority. In addition, requested resources increase to support (1) reviews of storage license renewal applications, (2) inspection activities for four ISFSI pad construction sites in preparation for site decommissioning, and (3) fuel performance research (e.g., licensing technical basis for evaluating fuel cladding performance with regard to gross ruptures during loading and unloading).

These increases are partially offset by decreases as a result of (1) the completion of the effort to consolidate standard review plans, (2) the completion of knowledge management activities related to thermal modeling, (3) the delay of certain enhancements to the SCALE code, (4) the implementation of the Safeguards and Security Inspection Program, and (5) budget estimates that are better aligned with projected workload.

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 Spent Fuel Storage and Transportation Business Line include the following:

- Review new applications, amendment requests, and license renewal applications for transportation packages and SNF storage applications to ensure the safe and secure storage of SNF and the safe and secure transport of other radioactive materials.
- Conduct safety inspections of storage and transportation cask vendors, fabricators, and designers, as well as ISFSI pad construction, dry-run operations, initial loading campaigns, and routine operations.
- Perform the technical, legal, and environmental reviews for consolidated interim storage facility applications.
- Conduct security-related activities associated with radioactive materials in quantities of concern and with transportation security route approvals.
- Conduct spent fuel storage and transportation rulemakings and develop associated regulatory guidance documents.
- 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.

SPENT FUEL STORAGE AND TRANSPORTATION

- 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.
- Provide oversight of the NRC's safeguards and ISFSI security inspection program.

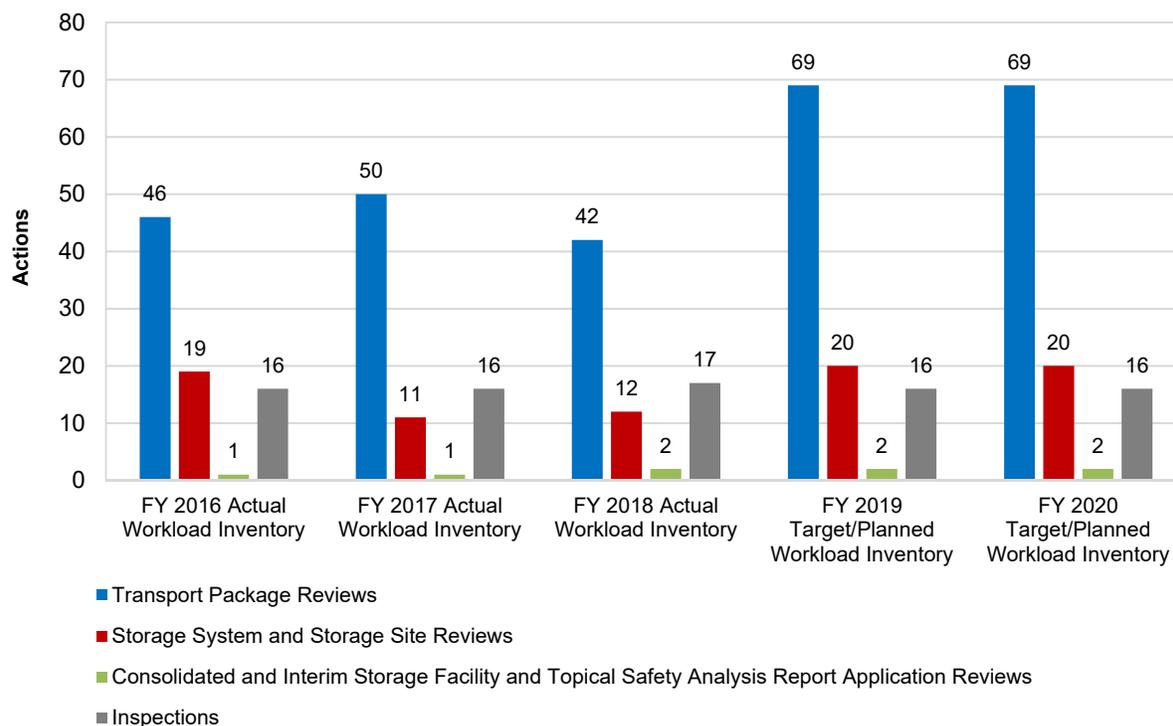


Figure 6: Spent Fuel Storage and Transportation Workload

SIGNIFICANT ACCOMPLISHMENTS IN FY 2018

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

- Accepted and began the review of the Holtec International application for a consolidated interim storage facility (CISF) and resumed the review of the CISF application from Interim Storage Partners, a joint venture between Waste Control Specialists (WCS) and Orano. The applicant previously requested a pause in the staff's review of the application.
- Issued the renewed license for the ISFSI at the North Anna Power Station. The license was renewed for an additional 40-year term expiring on June 30, 2058. The license contains a condition that requires the implementation of an aging management program (AMP) to ensure that structures, systems, and components important to safety will continue to perform their intended functions during the extended storage period authorized by the renewal.

SPENT FUEL STORAGE AND TRANSPORTATION

- Held six public scoping meetings in support of the environmental review for the Holtec HI-STORE CISF license application. The staff held open houses before the meetings to address questions from the public and conducted multiple government-to-government meetings with local and State officials.
- Issued an Information Notice 2018-01, “Noble Fission Gas Releases during Spent Fuel Casks Loading Operations,” dated February 21, 2018. The notice provides information on operating experience related to noble fission gas releases during spent fuel loading operations.
- Published guidance NUREG/CR-7239, “Review of Exemptions and General Licenses for Fissile Material in 10 CFR 71,” issued January 2018, that explains the provisions for exemptions from classification as fissile material based upon the 2004 rulemaking. The guidance assists fissile material licensees in their interpretation and application of the provisions such that criticality safety is ensured during transportation activities.
- Issued a Temporary Instruction (TI) (2690/011, “Review of Aging Management Programs at Independent Spent Fuel Storage Installations,” dated January 30, 2018), that applies to a renewed license of a specific ISFSI or a renewed Certificate of Compliance (CoC). The purpose of the TI is to evaluate, through inspection, whether licensees have adequate processes or procedures planned or in place to implement Aging Management Programs provided in the renewed license or CoC.
- Completed 42 transport package design and 12 storage cask and facility license reviews. The agency also conducted 17 inspections of activities related to radioactive material package certificate holders and spent fuel storage cask certificate holders, as well as support to regional inspections at ISFSIs to ensure the casks are being designed, fabricated, and used according to approved safety requirements.
- Published a revised document (NUREG/CR-7198, Revision 1, “Mechanical Fatigue Testing of High-Burnup Fuel for Transportation Applications,” issued October 2017), that documented testing at Oak Ridge National Laboratory to assess whether high-burnup SNF maintains its integrity under storage and transport conditions. This document will serve as the technical basis for multiple updates to the agency’s position on the storage and transportation of high-burnup fuel.

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 in FY 2020 | | Consolidated indicators SF-01, SF-02, SF-03, and SF-04. |
| FY 2020 | 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. | | | |

| Percentage of Non-Spent-Fuel Transportation Container Design Reviews Completed in 1 Year or Less* (SF-11) | | | |
|--|----------------|--------|---------------------------|
| Fiscal Year | Target | Actual | Comment |
| | New in FY 2020 | | Previously part of SF-04. |
| FY 2020 | 85 | | |
| *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. | | | |

OVERSIGHT

| Number of Spent Fuel Storage and Transportation Inspections Completed (SF-06) | | | |
|---|--------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 16 | 18 | |
| FY 2015 | 16 | 19 | |
| FY 2016 | 16 | 16 | |
| FY 2017 | 16 | 16 | |
| FY 2018 | 16 | 17 | |
| FY 2019 | 16 | | |
| FY 2020 | 16 | | |

DISCONTINUED INDICATORS

| Percentage of Storage Container and Installation Design Reviews Completed in 13 Months or Less* (SF-01) | | | |
|---|-------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 80 | 94 | |
| 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 has developed staffing strategies to address timeliness. |
| FY 2018 | 80 | 100 | |
| FY 2019 | 80 | | |
| FY 2020 | Discontinue | | This indicator will be consolidated and tracked under SF-10. |
| *Modified from 12.6 months to 13 months in FY 2018 to simplify the measurement period. | | | |

SPENT FUEL STORAGE AND TRANSPORTATION

| Percentage of Storage Container and Installation Design Reviews Completed in 2 Years or Less (SF-02) | | | |
|--|-------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| 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 | | |
| FY 2020 | Discontinue | | This indicator will be consolidated and tracked under SF-10. |

| Percentage of Transportation Container Design Reviews Completed in 8 Months or Less* (SF-03) | | | |
|--|-------------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 80 | 96 | |
| FY 2015 | 80 | 90 | |
| FY 2016 | 80 | 93 | |
| FY 2017 | 80 | 96 | |
| FY 2018 | 80 | 88 | |
| FY 2019 | 80 | | |
| FY 2020 | Discontinue | | This indicator will be 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.

| Percentage of Transportation Container Design Reviews Completed in 2 Years or Less (SF-04) | | | |
|--|-------------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| 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 | | |
| FY 2020 | Discontinue | | This indicator will be incorporated and captured under SF-10 for spent fuel transportation design reviews and SF-11 for non-spent-fuel transportation design reviews. |

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

SPENT FUEL STORAGE AND TRANSPORTATION

| 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 2014 | 3.75 | 5.0 | |
| FY 2015 | 3.75 | 5.0 | |
| FY 2016 | 3.75 | 4.68 | |
| FY 2017 | 3.75 | 5.0 | |
| FY 2018 | Discontinued | | Indicator to be 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 value-added of the products. As appropriate, other mechanisms will be developed and added to this process to measure the quality of research products.

NUCLEAR MATERIALS USERS

| Nuclear Materials Users by Product Line | | | | | | | | |
|--|--------------------|--------------|--------------------|--------------|--------------------|--------------|-------------------------|---------------|
| (Dollars in Millions) | | | | | | | | |
| Product Line | FY 2018 Actuals | | FY 2019 Enacted | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Event Response | 0.5 | 2.6 | 0.6 | 3.0 | 0.5 | 3.0 | (0.0) | 0.0 |
| Generic Homeland Security | 11.8 | 15.0 | 10.6 | 15.0 | 10.2 | 15.0 | (0.4) | 0.0 |
| International Activities | 8.4 | 12.3 | 8.5 | 14.0 | 7.8 | 12.0 | (0.7) | (2.0) |
| Licensing | 8.9 | 44.3 | 9.6 | 48.0 | 8.8 | 44.0 | (0.7) | (4.0) |
| Oversight | 12.2 | 48.1 | 11.2 | 51.0 | 10.6 | 47.0 | (0.7) | (4.0) |
| Research | 0.2 | 0.8 | 0.2 | 1.0 | 0.9 | 2.0 | 0.7 | 1.0 |
| Rulemaking | 1.4 | 7.5 | 2.0 | 11.0 | 2.5 | 12.0 | 0.5 | 1.0 |
| State, Tribal and Federal Programs | 5.1 | 26.6 | 5.0 | 26.0 | 4.7 | 24.0 | (0.4) | (2.0) |
| Mission Support & Supervisors | 9.4 | 51.3 | 8.4 | 43.0 | 8.8 | 43.0 | 0.4 | 0.0 |
| Training | 1.8 | 2.9 | 1.6 | 3.0 | 1.5 | 3.0 | (0.1) | 0.0 |
| Travel | 2.5 | 0.0 | 2.9 | 0.0 | 2.8 | 0.0 | (0.1) | 0.0 |
| Total | \$62.3 | 211.4 | \$60.6 | 215.0 | \$59.1 | 205.0 | \$(1.4) | (10.0) |

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

Nuclear Materials Users Business Line activities support the licensing, inspection, event evaluation, research, incident response, allegations review, enforcement, import and export authorizations, rulemaking, programmatic oversight of Agreement States, Integrated Materials Performance Evaluation Program (IMPEP), and interactions with the Organization 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 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 Atomic Energy Act of 1954, as amended (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 Wyoming, was signed on September 25, 2018, and became effective on September 30, 2018. The State of Vermont has applied to become an Agreement State, which if approved would bring the total number of Agreements States to 39 by FY 2020.

NUCLEAR MATERIALS USERS

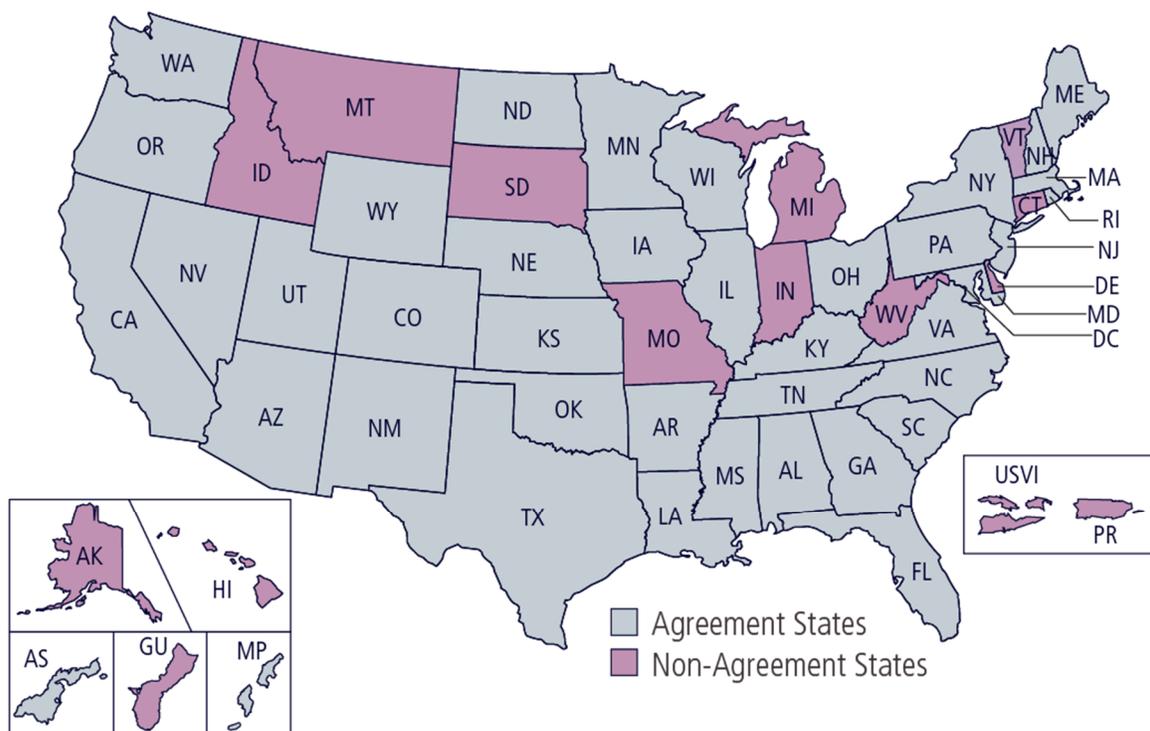


Figure 7: Current Agreement States

Security activities in the Nuclear Materials Users Business Line include the implementation of a national registry to ensure the control of radioactive sources of concern¹ and to prevent their malevolent use. The Integrated Source Management Portfolio has integrated three core systems: the National Source Tracking System (NSTS), Web-Based Licensing, and the License Verification System. The 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 preclicensing reviews of new materials license applicants.

CHANGES FROM FY 2019 ENACTED BUDGET

Resources decrease primarily as a result of a reduction in multilateral international assistance activities, the reduction of regional resources for the Nuclear Safety Professional Development Program, and budget estimates that are better aligned with projected workload.

These decreases are partially offset by an increase in resources to support (1) the update of regulatory guidance related to the release of patients treated with radioactive materials; (2) the reallocation of contract support resources to the Nuclear Materials Users Business Line to make budget execution more efficient; (3) the rulemaking activities involving 10 CFR Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material," and 10 CFR Part 34,

¹ "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."

“Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations”; and developing guidance for emerging medical technologies and radiopharmaceuticals.

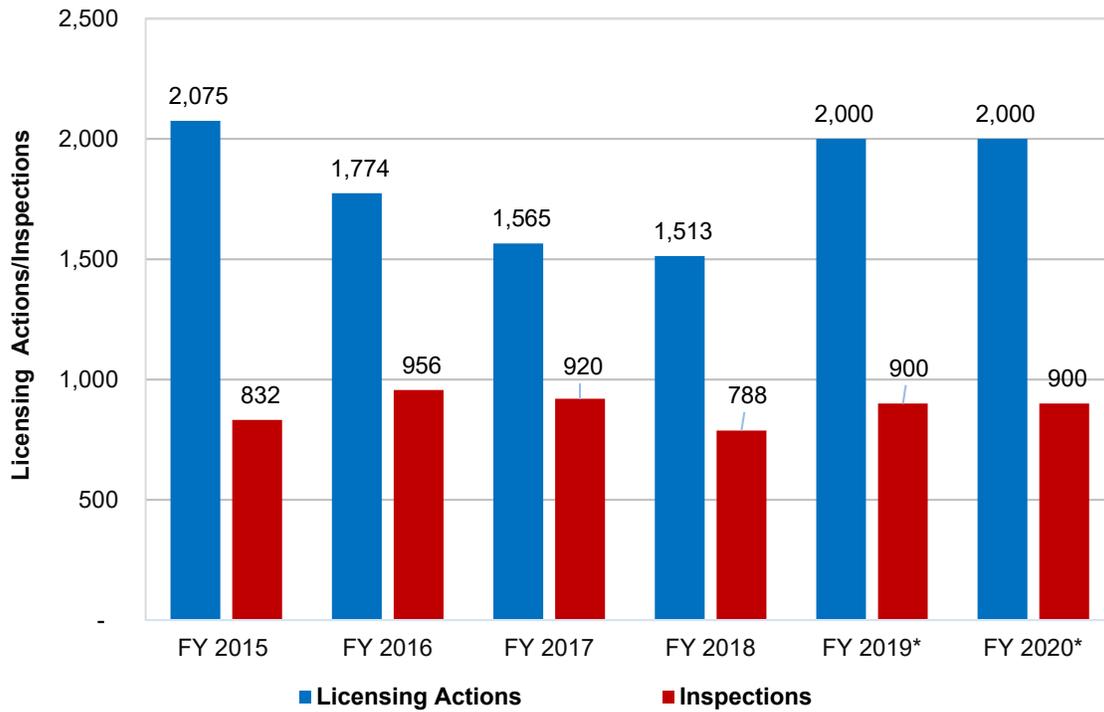
Generally, for the Nuclear Materials Users Business Line, budgeted resources impact annual fees charged to licensees in accordance with 10 CFR Part 171, “Annual Fees for Reactor Licenses and Fuel Cycle Licenses and Materials Licenses, Including Holders of Certificates of Compliance, Registrations, and Quality Assurance Program Approval and Government Agencies Licensed by NRC.”

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).
- Complete approximately 900 routine health, safety, and security inspections; reciprocity and reactive inspections; and inspections for certain general licensees.
- Oversee and support the Agreement States’ regulation of approximately 17,000 specific and 150,000 general licenses, conduct nine IMPEP reviews, and review Agreement State incidents and events as reported.
- 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 contact databases and mapping tools.
- 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.
- 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.
- 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.

NUCLEAR MATERIALS USERS



*Values provided for FY 2019–FY 2020 are projections.

Figure 8: Nuclear Materials Users Workload

SIGNIFICANT ACCOMPLISHMENTS IN FY 2018

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

- Finalized the agreement authorizing the State of Wyoming to become an Agreement State as of September 30, 2018, and to assume regulatory authority over uranium and thorium milling, the possession and use of source materials involved in the extraction and concentration of uranium and thorium in source material and ores at milling facilities, and the management and disposal of byproduct materials as defined in AEA Section 11e.(2).
- Completed a comprehensive evaluation of patient release regulations, which resulted in a decision to conduct a comprehensive revision to Regulatory Guide 8.39, "Release of Patients Administered Radioactive Materials," issued April 1997.
- Facilitated the development and subsequent issuance of the 2018 Radiation Source Protection and Security Task Force Report with 14 Federal agencies and one State organization.
- Issued Interim Guidance for dispositioning violations for failure to control and maintain constant surveillance for portable gauges in May 2018, that modifies the approach to assigning severity levels for violations involving portable gauge security requirements by providing a graded approach to evaluating the likelihood for an opportunity for the loss or theft of a portable gauge, or exposure to workers or the public.
- Published the revised 10 CFR Part 35, "Medical Use of Byproduct Material," to amend the medical event definition for reporting and notification requirements for permanent implant brachytherapy. The final rule also amends the requirements for training and experience and for measuring molybdenum contamination (breakthrough). The rule adds a new requirement for the reporting of failed technetium and rubidium generators and allows licensees to name associate radiation safety officers on a medical license. The new regulations and guidance became effective on January 14, 2019.
- Published nine revised volumes of NUREG-1556, "Consolidated Guidance about Materials Licenses," which provides guidance to applicants in preparing license applications for the possession and use of radioactive materials.
- Continued to build and maintain open communications and good working relationships with Tribal nations, including facilitating training for the Navajo, Seneca, and Catawba Nations.
- Engaged internationally and domestically to enhance nuclear safety and security through the regulatory oversight of radioactive sources. The NRC participated in numerous meetings of technical and legal experts on IAEA's Code of Conduct for the Safety and Security of Radioactive Sources. The NRC also worked with other U.S. Government agencies and IAEA to develop international security guidance documents for radioactive sources.
- Supported bilateral and regional (Africa, Latin America and the Caribbean, and the former Soviet Union) regulatory assistance efforts, including the continued development

NUCLEAR MATERIALS USERS

and completion of verified national registries of radioactive sources through the NRC's Radioactive Sources Regulatory Partnership.

- 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. Such agreements must be in place for the NRC to approve exports of reactor-related technology, major reactor equipment, and reactor fuel. The NRC provided assistance for new section 123 agreements with Mexico and the United Kingdom, which are awaiting the exchange of diplomatic notes.
- Managed the NRC's export/import licensing program to ensure all proposed exports met legal and regulatory requirements.
- Led a team of international experts to complete an IAEA IRRS mission to the Republic of Georgia and an IAEA International Physical Protection Advisory Service review of Lithuania's nuclear security program.

OTHER INDICATORS

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 2014 | 92 | 94 | |
| FY 2015 | 92 | 95 | |
| FY 2016 | 92 | 95 | |
| FY 2017 | 92 | 93 | |
| FY 2018 | 92 | 96 | |
| FY 2019* | 92 | | |
| FY 2020 | 92 | | |

*For 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. Hence, change of control amendments are now being 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 2014 | 100 | 100 | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019* | 100 | | |
| FY 2020 | 100 | | |

*For FY 2019, this indicator description excludes change of control amendments. Change of control amendments are now being 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 2014 | 92 | 93 | |
| FY 2015 | 92 | 94 | |
| FY 2016 | 92 | 94 | |
| FY 2017 | 92 | 96 | |
| FY 2018 | 92 | 100 | |
| FY 2019* | 92 | | |
| FY 2020 | 92 | | |

*As previously noted, change of control amendments were added to this indicator description for FY 2019. Hence, change of control amendments that were being captured in NM-01 will be captured under NM-03 starting in FY 2019.

NUCLEAR MATERIALS USERS

| 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 2014 | 100 | 100 | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019* | 100 | | |
| FY 2020 | 100 | | |

*As previously noted, change of control amendments were added to this indicator description for FY 2019. Hence, change of control amendments that were being captured in NM-02 will be captured under NM-04 starting in FY 2019.

OVERSIGHT

| Percentage of Safety Inspections of Materials Licensees Completed on Time (NM-05) | | | |
|---|--------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 98 | 100 | |
| FY 2015 | 98 | 99 | |
| FY 2016 | 98 | 100 | |
| FY 2017 | 98 | 100 | |
| FY 2018 | 98 | 99 | |
| FY 2019 | 98 | | |
| FY 2020 | 98 | | |

| Percentage of Technical Allegation Reviews Completed in 180 Days or Less (NM-07) | | | |
|--|--------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 95 | 97 | |
| FY 2015 | 95 | 100 | |
| FY 2016 | 95 | 95 | |
| FY 2017 | 95 | 100 | |
| FY 2018 | 95 | 100 | |
| FY 2019 | 95 | | |
| FY 2020 | 95 | | |

| Percentage of Technical Allegation Reviews Completed in 360 Days or Less* (NM-08) | | | |
|---|--------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| FY 2015* | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | 100 | | |

*This corrects the error in the FY 2015 Congressional Budget Justification that listed FY 2013 through FY 2015 targets as 330 days.

| Percentage of Enforcement Actions Where No Investigation Is Involved Completed in 160 Days or Less (NM-09) | | | |
|---|---------------|---------------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 96 | The staff will focus on the early identification of enforcement cases that are likely to involve complex technical, legal, or policy issues that need to be resolved across multiple program offices to ensure timely resolution. |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | 100 | | |

| Percentage of Enforcement Actions in which Investigation Is Involved Completed in 330 Days or Less (NM-10) | | | |
|---|---------------|---------------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| 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 | | |
| FY 2020 | 100 | | |

| Percentage of Investigations That Developed Sufficient Information to Reach a Conclusion Regarding Wrongdoing Completed within 12 Months or Less (NM-11) | | | |
|---|---------------|---------------|----------------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 85 | 90 | |
| FY 2015 | 85 | 95 | |
| FY 2016 | 85 | 88 | |
| FY 2017 | 85 | 89 | |
| FY 2018 | 85 | 87 | |
| FY 2019 | 85 | | |
| FY 2020 | 85 | | |

| Percentage of Investigations Completed in Time to Initiate Civil Enforcement and/or Criminal Prosecution Action (NM-12) | | | |
|--|---------------|---------------|----------------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | 100 | | |

NUCLEAR MATERIALS USERS

STATE, TRIBAL, AND FEDERAL PROGRAMS

| Number of Integrated Materials Performance Evaluation Program Review Reports Not Completed within 30 Days of the Management Review Board Meeting (NM-21) | | | |
|--|--------------------------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in FY 2018 | | |
| FY 2015 | | | |
| FY 2016 | | | |
| FY 2017 | | | |
| FY 2018 | <2 | 1 | |
| FY 2019 | <2 | | |
| FY 2020 | <2 | | |

DISCONTINUED INDICATORS

| Percentage of Technical Allegation Reviews Completed in 150 Days or Less (NM-06) | | | |
|--|--------------|--------|-------------------------------------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 90 | 97 | |
| FY 2015 | 90 | 96 | |
| FY 2016 | 90 | 94 | |
| FY 2017 | 90 | 100 | |
| FY 2018 | Discontinued | | Indicator to be 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 2014 | 90 | 100 | |
| FY 2015 | 90 | N/A | There were no critical milestones associated with the research activities conducted in this business line in FY 2015. |
| FY 2016 | 90 | N/A | There were no critical milestones associated with the research activities conducted in this business line in FY 2016. |
| FY 2017 | 90 | N/A | There were no critical milestones 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 FY.

| 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 2014 | 3.75 | 5.0 | |
| 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 to be 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 value-added of the products. As appropriate, other mechanisms will be developed and added 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 |
| FY 2014 | New indicator in | | |
| FY 2015 | FY 2016 | | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | Discontinue | | Indicator to be tracked internally. |

| Percentage of Information Assessment Team Advisories Issued within 24 Hours of Notification (NM-18) | | | |
|--|------------------|---------------|--|
| 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 | 90 | | |
| FY 2020 | Discontinue | | This indicator is no longer useful as the NRC has issued no Information Assessment Team Advisories since 2014. |

| Percentage of Integrated Materials Performance Evaluation Program Review Reports Completed within 30 Days of the Management Review Board Meeting (NM-20) | | | |
|---|------------------|---------------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in | | |
| FY 2015 | 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 | | |
| FY 2020 | N/A | | |

DECOMMISSIONING AND LOW-LEVEL WASTE

| Decommissioning and Low-Level Waste by Product Line | | | | | | | | |
|---|-----------------|--------------|------------------|--------------|-----------------|-------------|----------------------|---------------|
| (Dollars in Millions) | | | | | | | | |
| Product Line | FY 2018 Actuals | | FY 2019 Enacted* | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| International Activities | 0.6 | 3.2 | 1.2 | 6.0 | 0.8 | 4.0 | (0.4) | (2.0) |
| Licensing | 14.4 | 56.1 | 11.6 | 49.0 | 11.1 | 43.0 | (0.5) | (6.0) |
| Oversight | 5.4 | 25.0 | 5.4 | 25.0 | 5.1 | 24.0 | (0.3) | (1.0) |
| Research | 1.3 | 2.0 | 0.5 | 1.0 | 0.5 | 1.0 | (0.0) | 0.0 |
| Rulemaking | 0.9 | 4.2 | 1.8 | 9.0 | 1.6 | 8.0 | (0.2) | (1.0) |
| Mission Support and Supervisors | 3.3 | 17.0 | 2.6 | 14.0 | 2.4 | 13.0 | (0.2) | (1.0) |
| Training | 0.7 | 0.0 | 0.8 | 0.0 | 0.6 | 0.0 | (0.2) | 0.0 |
| Travel | 0.6 | 0.0 | 0.9 | 0.0 | 0.7 | 0.0 | (0.2) | 0.0 |
| Total | \$27.1 | 107.5 | \$24.8 | 104.0 | \$22.9 | 93.0 | \$(1.9) | (11.0) |

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

*In FY 2019, licensing activities within the Decommissioning and LLW Business Line were funded \$0.6 million through the use of authorized prior-year carryover which is not reflected in the FY 2019 Enacted Budget. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," for details.

Decommissioning and Low-Level Waste (LLW) Business Line activities support the licensing and oversight of uranium recovery facilities and sites undergoing decommissioning. They also include the oversight of the national LLW program and monitoring of the U.S. Department of Energy's (DOE's) Waste Incidental to Reprocessing (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, Native American Tribal governments, and the public on regulatory matters.

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 rules for decommissioning establish site release criteria and provide 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 ultimate goal of license termination.

DECOMMISSIONING AND LOW-LEVEL WASTE

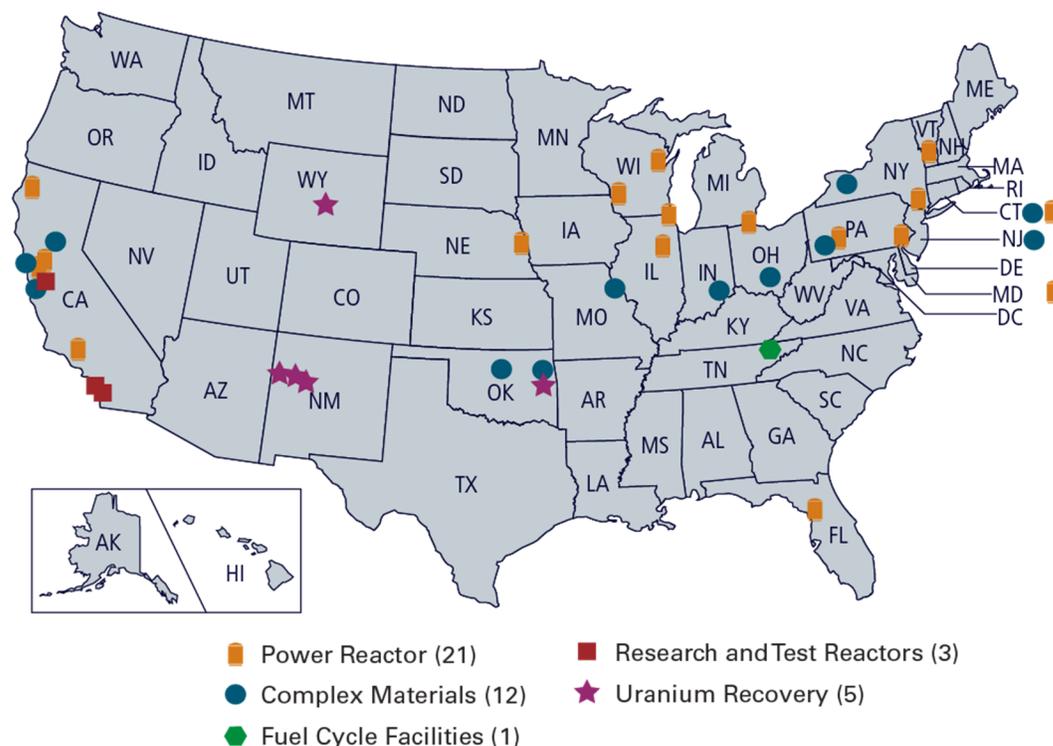


Figure 9: Locations of NRC-Regulated Sites Undergoing Decommissioning

CHANGES FROM FY 2019 ENACTED BUDGET

Resources decrease as a result of (1) the reduction in the number of operating uranium recovery facilities and major licensing actions, (2) the completion of specific support to the State of Wyoming for the Agreement State transition, (3) the expected license terminations for Humboldt Bay Power Plant and Zion Nuclear Power Station, Units 1 and 2 when decommissioning is completed and reduced decommissioning efforts at La Crosse Boiling Water Reactor as it approaches license termination in FY 2020, (4) the disposition of numerous sites under the nonmilitary radium program, (5) anticipated workload reductions for the military radium program, and (6) the completion of activities for the Centrus Lead Cascade fuel facility and the Westinghouse Electric Company, LLC (WEC), complex materials Hematite facility.

These resource decreases are partially offset by increases to support (1) the anticipated license amendment requests and technical reviews for decommissioning of the Homestake Mining Company and United Nuclear Corporation Church Rock uranium recovery facilities, (2) the complex materials decommissioning at the West Valley Demonstration Project, (3) the anticipated review of the Rare Elements Resources materials license application, (4) the transition of Pilgrim Nuclear Power Station (Pilgrim), Oyster Creek Nuclear Generating Station (Oyster Creek), and Three Mile Island Nuclear Station, Unit 1 (TMI 1) to the power reactor decommissioning program, (5) decommissioning activities for Rensselaer Polytechnic Institute's research and test reactor, and (6) rulemaking activities, including rule development, associated guidance development, and environmental reviews. Specific rulemakings include the Greater-Than-Class-C Rulemaking, the Integrated Radioactive Source Security and Accountability Rulemaking, and the Transuranic Waste Rulemaking.

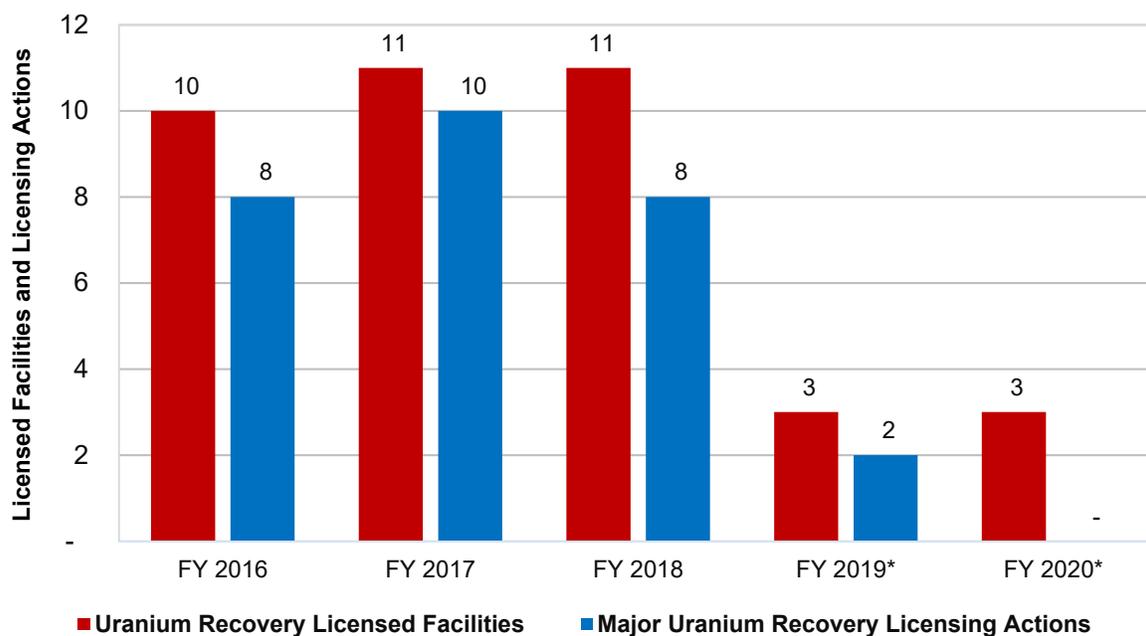
Generally, resources budgeted in the Licensing and Oversight Product Lines impact fees for service. All other resources impact annual fees.

MAJOR ACTIVITIES

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

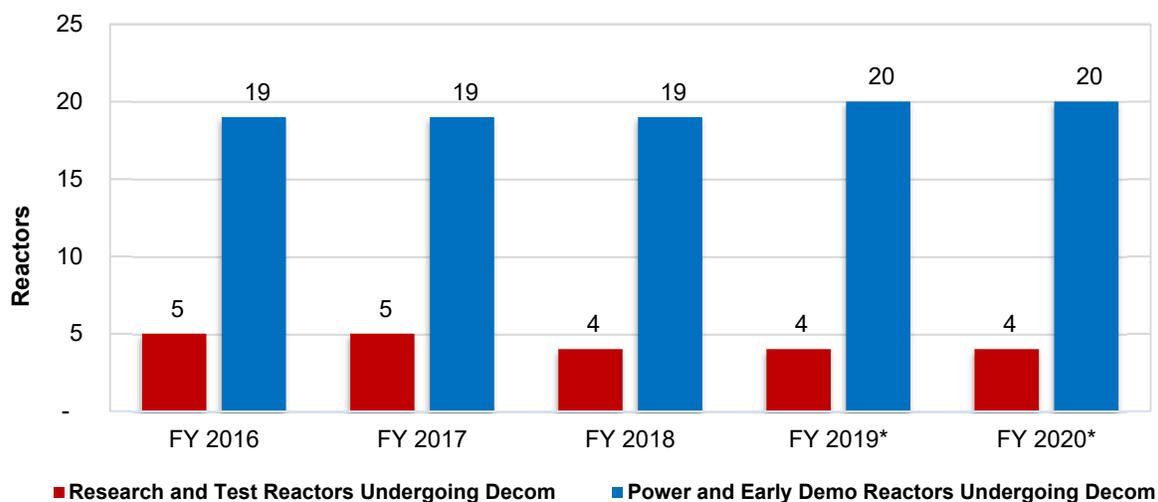
- Perform licensing and oversight activities for the decommissioning of four research and test reactors.
- Perform licensing and oversight activities for 20 power reactors within the power reactor decommissioning program, including the addition of Pilgrim, Oyster Creek, and TMI 1.
- Conduct oversight activities associated with the non-military radium program.
- Perform licensing and oversight associated with ground water restoration activities at one licensed uranium recovery facility and for one licensed operating uranium recovery facility in non-Agreement States.
- Perform licensing and oversight of 11 complex materials sites undergoing decommissioning and depleted uranium sites, and the execution of 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.
- Perform licensing and oversight of five private uranium mill sites undergoing decommissioning.
- 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.
- Coordinate the National LLW Program, including developing guidance, supporting IMPEP evaluations in the LLW area, and responding to inquiries from Agreement States.
- Provide oversight of the activities related to WIR, including monitoring activities at the DOE Savannah River Site and Idaho National Laboratory.
- Conduct research activities to support the application of new technologies at complex sites and analytical tools used in decommissioning reviews.
- 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.
- 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.

DECOMMISSIONING AND LOW-LEVEL WASTE



*Values provided for FY 2019–FY 2020 are projections and reflect a decrease in NRC-regulated uranium recovery facilities as a result of the State of Wyoming's transition to an Agreement State.

Figure 10: Uranium Recovery Licensed Facilities and Major Licensing Actions



*Values provided for FY 2019–FY 2020 are projections.

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

SIGNIFICANT ACCOMPLISHMENTS IN FY 2018

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

- Completed major uranium recovery licensing actions, including the safety evaluation reports and the environmental assessments for the Uranium One Ludeman in situ recovery (ISR) major expansion, the Kennecott Sweetwater conventional mill license renewal, the Crow Butte Marsland uranium ISR major expansion, and the Cameco Smith Ranch Highland uranium ISR facility license renewal.
- Partnered with the U.S. National Park Service to coordinate response actions involving radioactive material at the Great Kills Park site in Staten Island, NY, and the Spring Creek Park in Queens, NY. This ongoing coordination minimizes dual regulation and duplicative regulatory requirements while ensuring adequate standards for health, safety, and the environment.
- Terminated the licenses for the WEC Hematite fuel fabrication facility located in Festus, MO, and the State University of New York at Buffalo research reactor in Buffalo, NY, and released the sites for unrestricted use.
- Amended the license for the U.S. Department of Agriculture's Beltsville Agricultural Research Center site in Beltsville, MD, to approve unrestricted release of a portion of the site that was used for onsite burial.
- Completed one non-military radium scoping survey and six initial site visits, issued nine final reports, and performed oversight activities during the cleanup performed at the Benrus Clock Company and the ongoing cleanup for the New Haven Clock Company. The staff also coordinated with the U.S. Environmental Protection Agency about the ongoing removal action at the Bristol Instrument Gears site. The NRC also supported information requests from the Agreement States by providing updated information to New York, Texas, and North Dakota on the list of potential radium sites identified in Agreement States. The NRC staff has dispositioned 45 out of 47 original unique site owner properties and is working to disposition the remaining two original unique site owner properties where site visits have not been performed.

DECOMMISSIONING AND LOW-LEVEL WASTE

OTHER INDICATORS

LICENSING

| Percentage of Licensing Actions Including Interim Milestones Completed as Scheduled (DL-05) | | | |
|---|--------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | Yes | Yes | |
| 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 | | |
| FY 2020 | 90 | | |

DISCONTINUED INDICATORS

| Percentage of Environmental Reviews and Environmental Review Documents Completed as Scheduled (DL-01) | | | |
|---|-------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 100 | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | Discontinue | | Completion of environmental reviews associated with licensing actions will be 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. |

| Percentage of Time Saved in Completing Safety Evaluation Reports through Use of Presubmission Audits (DL-03) | | | |
|--|--------------------------|---------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in FY 2015 | | |
| 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 | | |

DECOMMISSIONING AND LOW-LEVEL WASTE

| Percentage of Review or Monitoring Plan Activities for Waste to Incidental Reprocessing (WIR) That Are Completed as Scheduled (DL-07) | | | |
|--|------------------|---------------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in | | |
| FY 2015 | 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 | | |

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

| 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 2014 | 3.75 | N/A | No research products were produced for this business line during FY 2014. |
| FY 2015 | 3.75 | 5.0 | |
| FY 2016 | 3.75 | 4.75 | |
| FY 2017 | 3.75 | N/A | There were no critical milestones associated with the research activities. |
| FY 2018 | Discontinued | | Indicator to be 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 value-added of the products. As appropriate, other mechanisms will be developed and added to this process to measure the quality of research products.

HIGH-LEVEL WASTE

| High-Level Waste by Product Line (Dollars in Millions) | | | | | | | | |
|---|--------------------|------------|--------------------|------------|--------------------|-------------|-------------------------|-------------|
| Product Line | FY 2018 Actuals | | FY 2019 Enacted | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Licensing | 0.1 | 0.4 | 0.0 | 0.0 | 30.6 | 45.0 | 30.6 | 45.0 |
| Oversight | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.0 | 0.2 | 1.0 |
| Rulemaking | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 7.0 | 1.3 | 7.0 |
| Mission Support and Supervisors | 0.0 | 0.0 | 0.0 | 0.0 | 5.4 | 22.0 | 5.4 | 22.0 |
| Training | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 2.0 | 0.4 | 2.0 |
| Travel | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.7 | 0.0 |
| Total | \$0.1 | 0.4 | \$0.0 | 0.0 | \$38.5 | 77.0 | \$38.5 | 77.0 |

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

The High-Level Waste Business Line supports the NRC's activities involving the proposed Yucca Mountain deep geologic repository for the disposal of SNF and other high-level radioactive waste using appropriations from the Nuclear Waste Fund.

FY 2020 resources will support the resumption of the licensing proceeding for the potential issuance of a construction authorization for a repository. Principal activities would include support for, and restart of, the adjudicatory proceeding; infrastructure activities for hearing facilities and IT capabilities; support for rulemakings associated with the geologic repository operations area; and related support activities such as acquisitions, recruitment, staffing, and training.

CHANGES FROM FY 2019 ENACTED BUDGET

In FY 2020, resources support the activities associated with adjudication, which includes the hearing facility space and associated IT and audiovisual infrastructure installations. Resources will also support the prehearing conferences, associated travel, and subject matter experts needed to inform these efforts. Limited appellate and federal litigation activities are expected. Resources also support necessary nonadjudicatory activities, particularly allegation and investigation activities, as well as the resumption of rulemakings associated with the geologic repository operations area.

HIGH-LEVEL WASTE

MAJOR ACTIVITIES

The major activities within the High-Level Waste Business Line include the following:

- Conduct of infrastructure activities for hearing facility and IT/audiovisual support, including testing, verification, and training for IT systems (Licensing Support Network, Electronic Information Exchange, and Electronic Hearing Docket).
- Resume the adjudication, including conduct of prehearing activities, such as discovery depositions, case management conferences, and summary disposition motions.
- Preparation for and participation in ongoing federal litigation.
- Support of allegation and investigation activities, as well as the continuation of rulemakings associated with a geologic repository operations area.

FUEL FACILITIES

| Fuel Facilities by Product Line (Dollars in Millions) | | | | | | | | |
|--|--------------------|--------------|--------------------|-------------|--------------------|-------------|-------------------------|--------------|
| Product Line | FY 2018 Actuals | | FY 2019 Enacted | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Event Response | 0.3 | 1.5 | 0.4 | 2.0 | 0.4 | 2.0 | 0.0 | 0.0 |
| Generic Homeland Security | 2.7 | 3.5 | 2.3 | 3.0 | 2.4 | 3.0 | 0.0 | 0.0 |
| International Activities | 1.3 | 6.8 | 1.3 | 7.0 | 1.3 | 7.0 | 0.0 | 0.0 |
| Licensing | 5.2 | 27.1 | 5.9 | 27.0 | 5.0 | 23.0 | (0.9) | (4.0) |
| Oversight | 8.0 | 39.2 | 6.8 | 33.0 | 6.1 | 30.0 | (0.7) | (3.0) |
| Rulemaking | 1.1 | 4.5 | 0.7 | 4.0 | 0.6 | 3.0 | (0.2) | (1.0) |
| Mission Support and Supervisors | 4.8 | 24.5 | 4.0 | 20.0 | 3.7 | 20.0 | (0.3) | 0.0 |
| Training | 0.3 | 0.0 | 0.6 | 0.0 | 0.5 | 0.0 | (0.1) | 0.0 |
| Travel | 1.0 | 0.0 | 1.1 | 0.0 | 1.1 | 0.0 | (0.0) | 0.0 |
| Total | \$24.6 | 107.0 | \$23.2 | 96.0 | \$21.0 | 88.0 | \$(2.2) | (8.0) |

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

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

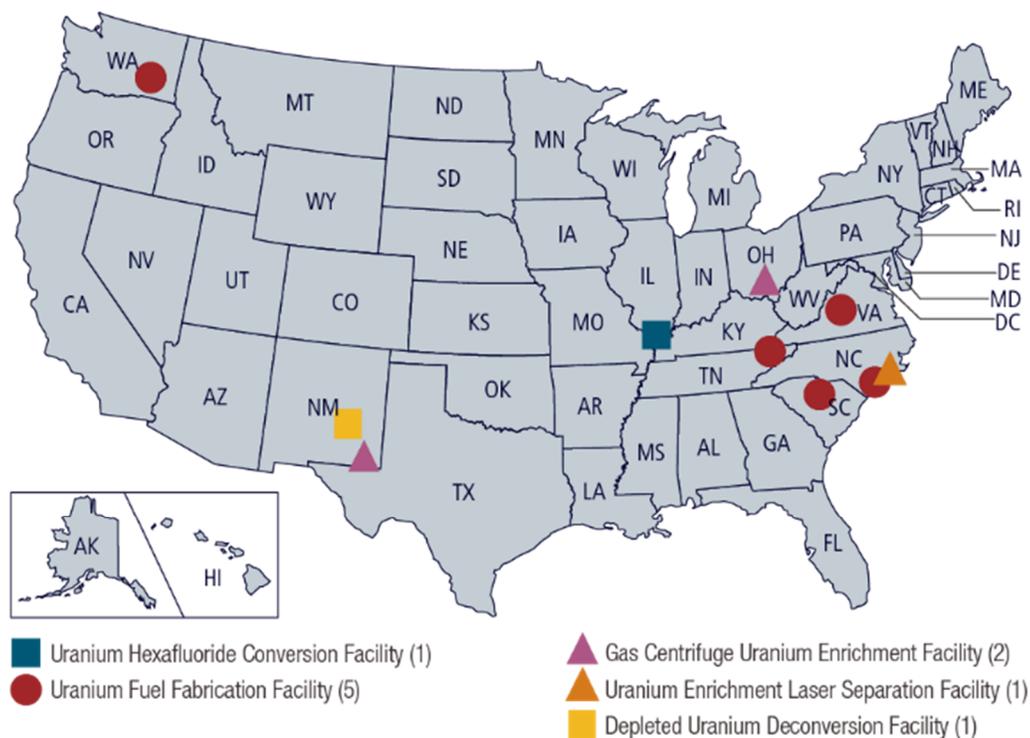


Figure 12: Locations of Licensed Fuel Cycle Facilities

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 Material Management and Safeguards System database. Fuel Facilities Business Line activities also include 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 export and import licensing.

CHANGES FROM FY 2019 ENACTED BUDGET

Resources decrease primarily as a result of (1) an expected decline in work associated with submission of license renewal applications, (2) a decrease in the anticipated number of license amendments, (3) efficiencies gained as a result of changes to the Fuel Facilities Inspection Program and workload projections, (4) a reduction in rulemaking activities involving enhanced security for SNM, and (5) elimination of workload associated with the Mixed-Oxide Fuel Fabrication Facility (MFFF).² In addition, resources decrease under the Mission Support and Supervisors Product Line to reflect the reallocation of contract support resources to the Nuclear Materials Users Business Line to make budget execution more efficient.

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:

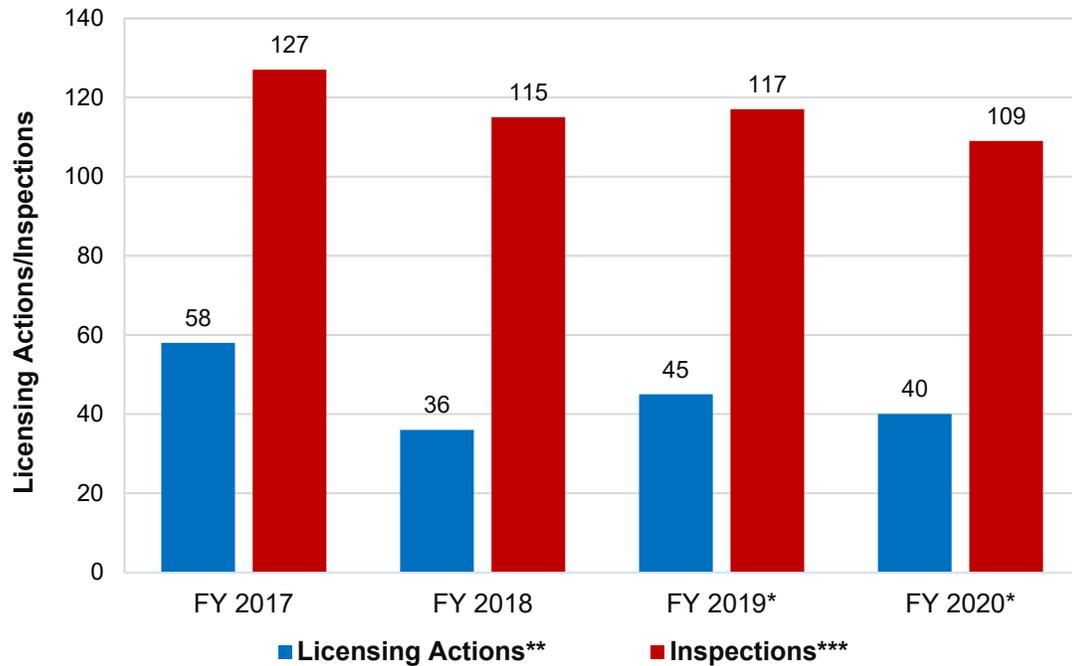
- Ensure that licensed fuel facilities operate in accordance with the NRC's rules, regulations, and license requirements for safety and security.
- Perform licensing and oversight activities for 10 fuel facilities, including conversion, enrichment, fuel fabrication, and uranium deconversion facilities. Licensing actions include reviews of license amendments, decommissioning funding plans, emergency plans, and security plans. Seven facilities are currently operating, and three licensed facilities have not started construction.
- Support the regulation of 12 university and test research licensees under 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material."
- Conduct inspections, force-on-force exercises, and readiness reviews.
- Conduct rulemaking for fuel cycle facilities in security-related areas.
- Support U.S. nonproliferation activities by implementing international safeguards and licensing the import and export of nuclear materials and equipment.
- 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

² By letter dated November 1, 2018, MOX Services, LLC (MOX Services), formally notified the NRC that as of October 12, 2018, MOX Services ceased NRC-regulated construction activities on the MFFF at the Savannah River Site, near Aiken, SC. MOX Services ceased NRC-regulated construction following receipt of a Notice of Termination from the DOE/National Nuclear Security Administration (NNSA) of the contract between DOE/NNSA and MOX Services to design, build, and operate the MFFF. Because of the cessation of NRC-regulated construction activities at the MFFF and the Notice of Termination, MOX Services requested that the NRC terminate Construction Authorization No. CAMOX-001.

FUEL FACILITIES

control and accounting. Provide technical assistance to IAEA and support U.S. initiatives to enhance international safeguards and verification programs.

- Support the tracking of source material and SNM inventories, material balances, and transactions for more than 400 commercial manufacturers and users in the United States, in cooperation with DOE, through the Nuclear Material Management and Safeguards System.



*Values provided for FY 2019–FY 2020 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 2018

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

- Issued two 10-year license renewals for the possession of a greater than critical mass of SNM for the Massachusetts Institute of Technology and Pennsylvania State University.
- Issued a memorandum documenting the closure of Generic Letter (GL) 2015-01, “Treatment of Natural Phenomena Hazards in Fuel Cycle Facilities,” dated June 22, 2015. Based on the technical review of the licensee responses to GL 2015-01 and the results of associated inspection activities, the NRC staff concluded that licensees performed appropriate evaluations of natural phenomena hazards for their facilities.
- Issued an extensive update to Regulatory Guide 3.71, “Nuclear Criticality Safety Standards for Nuclear Materials Outside Reactor Cores,” in October 2018, (Revision 3).
- Issued two information notices (INs)—IN 2018-05, “Long-Term Fissile Material Accumulation Due to Unanalyzed or Improperly Analyzed Conditions at Fuel Cycle Facilities,” dated March 26, 2018, and IN 2018-06, “Determination of Management Measures for Process Isolation Controls Designated as Items Relied on for Safety and Implementation of Adequate Quality Assurance Measures for Plant Features and Procedures,” dated April 10, 2018.
- Published final revisions of 10 CFR Part 75, “Safeguards on Nuclear Material—Implementation of Safeguards Agreements Between the United States and the International Atomic Energy Agency,” to implement the modified Small Quantities Protocol (mSQP) for U.S. Caribbean Territories and completed entry-into-force of the mSQP, including supporting licensees in completing initial inventories and submitting the inventories to IAEA.

FUEL FACILITIES

OTHER INDICATORS

LICENSING

| Percentage of Fuel Cycle Licensing Reviews Completed in 150 Days or Less (FF-04) | | | |
|--|--------------------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in FY 2015 | | |
| 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 | | |
| FY 2020 | 80 | | |

| Percentage of Fuel Cycle Licensing Reviews Completed in 1.5 Years or Less (FF-05) | | | |
|---|--------------------------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | New indicator in FY 2015 | | |
| 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 | | |
| FY 2020 | 100 | | |

OVERSIGHT

| Percentage of Technical Allegation Reviews Completed in 180 Days or Less (FF-07) | | | |
|--|--------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 95 | 97 | |
| FY 2015 | 95 | 100 | |
| FY 2016 | 95 | 100 | |
| FY 2017 | 95 | 100 | |
| FY 2018 | 95 | 100 | |
| FY 2019 | 95 | | |
| FY 2020 | 95 | | |

| Percentage of Technical Allegation Reviews Completed in 360 Days or Less (FF-08) | | | |
|--|--------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 97 | One allegation was open for 395 days; therefore, the business line did not meet the allegation timeliness metric of closing 100 percent of all allegations in 360 days. |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | 100 | | |

| 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 2014 | 100 | 100 | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | 100 | | |

DISCONTINUED INDICATORS

| Percentage of Technical Allegation Reviews Completed in 150 Days or Less (FF-06) | | | |
|--|--------------|--------|-------------------------------------|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 90 | 95 | |
| FY 2015 | 90 | 100 | |
| FY 2016 | 90 | 100 | |
| FY 2017 | 90 | 100 | |
| FY 2018 | Discontinued | | Indicator to be 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 2014 | New indicator in FY 2015 | | |
| FY 2015 | 100 | 100 | |
| FY 2016 | 100 | 100 | |
| FY 2017 | 100 | 100 | |
| FY 2018 | 100 | 100 | |
| FY 2019 | 100 | | |
| FY 2020 | Discontinue | | Indicator to be 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 |
| FY 2014 | New indicator in FY 2016 | | |
| FY 2015 | FY 2016 | | |
| FY 2016 | 90 | 100 | |
| FY 2017 | 90 | 100 | |
| FY 2018 | 90 | 100 | |
| FY 2019 | 90 | | |
| FY 2020 | Discontinue | | This indicator is no longer useful because the NRC has issued no Information Assessment Team Advisories since 2014. |

CORPORATE SUPPORT

| Corporate Support by Product Line (Dollars in Millions) | | | | | | | | |
|--|--------------------|--------------|---------------------|--------------|--------------------|--------------|-------------------------|------------|
| Product Line | FY 2018 Actuals | | FY 2019 Enacted* | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Acquisitions | 14.6 | 51.2 | 15.6 | 54.0 | 15.2 | 51.0 | (0.5) | (3.0) |
| Administrative Services | 89.8 | 73.6 | 85.5 | 76.0 | 89.3 | 78.0 | 3.8 | 2.0 |
| Financial Management | 34.0 | 99.9 | 32.2 | 99.0 | 29.7 | 96.0 | (2.5) | (3.0) |
| Human Resource Management | 19.2 | 48.0 | 17.7 | 44.0 | 22.9 | 44.0 | 5.2 | 0.0 |
| IT/IM Resources | 107.4 | 179.1 | 104.9 | 174.0 | 97.9 | 179.0 | (7.1) | 5.0 |
| Outreach | 3.5 | 13.0 | 3.3 | 13.0 | 3.2 | 13.0 | (0.1) | 0.0 |
| Policy Support | 22.8 | 115.6 | 29.3 | 136.0 | 30.3 | 137.0 | 0.9 | 1.0 |
| Training | 5.2 | 13.6 | 4.3 | 13.0 | 4.2 | 13.0 | (0.2) | 0.0 |
| Total | \$296.4 | 594.0 | \$292.9 | 609.0 | \$292.6 | 611.0 | \$(0.4) | 2.0 |

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

*In FY 2019, administrative services and IT/IM activities within the Corporate Support Business Line were funded \$4 million and \$2.6 million, respectively, through the use of authorized prior-year carryover which is not reflected in the FY 2019 Enacted Budget. Please refer to Appendix I, "FY 2019 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 and achieve goals. These activities include acquisitions, administrative services, financial management, human resource management, IT/information management (IM), outreach, policy support, and training.

The FY 2020 resources requested for the Corporate Support Business Line constitute approximately 32 percent of the agency's total budget and remain relatively flat with a \$0.4 million decrease, including an increase of two FTE, when compared with the FY 2019 Enacted Budget. The FY 2020 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, improve the management of major acquisitions, improve the efficiency and effectiveness of administrative services, develop agency workforce, focus on the highest value work, and improve the customer experience with Federal services.

Appendix E, "Federal Information Technology Acquisition Reform Act Requirements," to this report contains a complete list of the NRC's IT investments, including those budgeted in the Corporate Support Business Line and in the other business lines.

CHANGES FROM FY 2019 ENACTED BUDGET

Resources remain relatively flat in FY 2020 as a result of modernizing agency IT by moving to a more secure and cost-effective infrastructure. As such, the decrease in the Corporate Support Business Line is primarily attributable to reductions in the IT/IM Resources Product Line, which are largely associated with the transition to the NRC's Global Infrastructure and Development Acquisition and the General Services Administration's Enterprise Infrastructure Solutions contract. Additional reductions are the result of planned and completed innovations, including implementation of a cloud-based e-mail service, consolidation of nontiered data centers, and implementation of unified communications and IT asset management services. Resources also decrease in the IT/IM Resources Product Line as a result of resource shifts to the Operating Reactors Business Line to properly align electronic journal subscriptions and specific controlled document networks with the mission area they support. Resources also decrease in the IT/IM Resources Product Line as a result of a redistribution across programmatic business lines to properly align costs for seat management and workstation support, e-mail/messaging, file/print, and network infrastructure services based on FTE distribution.

In addition, mission IT resources decrease in multiple corporate support product lines as a result of cost reductions for operations and maintenance and fewer system enhancements. Mission IT resources in the Financial Management Product Line decrease as a result of reduced hosting, software, and support costs for the Financial Accounting and Integrated Management Information System, Human Resources Management System, and Budget Formulation System as a result of migration to the cloud.

In accordance with Executive Order 13834, "Executive Order Regarding Efficient Federal Operations," dated May 17, 2018, decreases also include reductions in utility costs at NRC Headquarters as a result of energy efficiencies gained from building improvements. In addition, by leveraging common contracts and best practices to drive savings and efficiencies, the budget request for Corporate Support reflects reduced costs for various administrative support services (e.g., *Federal Register* notices, U.S. Government Publishing Office services, agency central printing, paper, mail services, transcription services).

The budget request also includes reductions in both the Acquisitions and Financial Management Product Lines, based on efficiencies and current and projected declines in workload.

Reductions are partially offset by an increase in the Acquisitions Product Line to support a nondiscretionary biennial upgrade for the Strategic Acquisition System, and in the Training Product Line to support operations and maintenance of the Talent Management System and its associated help desk to support the agency's efforts to develop NRC's workforce. The IT/IM Product Line resources increase to digitize paper-based Atomic Energy Commission documents from years before 1979, in accordance with the U.S. Office of Management and Budget (OMB) direction to accelerate the transition to the electronic management, transfer, and preservation of permanent Government records and to support compliance with the direction provided by OMB and the Federal Chief Information Officer Council on Identity, Credential, and Access Management.

The FY 2020 budget request includes an increase for rent, following the period of reduced rent from the limited-time 7-month rent abatement for the Two White Flint North building in FY 2019, which was part of the negotiation for renewal of the building lease. This increase is partially offset by the release of office and related space. The budget request includes an increase for renovation for the One White Flint North building to configure the space to accommodate more

employees in less square footage as the agency releases other leased space at Headquarters. The budget includes an increase in FTE to support implementation of the Office of the Director of National Intelligence (ODNI) requirements in Security Executive Agent Directive 3, "Reporting Requirements for Personnel with Access to Classified Information or Who Hold a Sensitive Position," dated December 14, 2016, as well as timeliness metrics for adjudications, stipulated by ODNI within the Intelligence Reform and Terrorism Prevention Act of 2004.

When compared with the FY 2019 Enacted Budget, the resources for the Administrative Services Product Line increase. This variance is due to \$4 million funded in FY 2019 through the application of authorized prior-year carryover. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," which provides a comparison of the FY 2020 request to the FY 2019 Budget Authority.

The Human Resource Management Product Line increases as a result of the permanent-change-of-station costs, and the Policy Support Product Line increases to support a Commission at its full complement of five members.

MAJOR ACTIVITIES

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

- Perform contract operations and oversight necessary to ensure that the agency obtains goods and services to support mission needs.
- Provide rent and utilities for NRC Headquarters, regional offices, and the Technical Training Center; 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; vehicle fleet management; transit subsidies; print and publication services; transcription and adjudicatory hearing support; technical editing; graphic design; audiovisual services; postage and mail services; and office supplies.
- 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.
- 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.
- Manage the IT/IM portfolio, including the following:
 - 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.

CORPORATE SUPPORT

- Provide public meeting support to ensure transparency and promote public involvement in the agency’s regulatory activities.
 - Support the Public Document Room and Technical Library.
 - 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.
 - 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 yield future cost savings or avoidance, such as modernizing IT to increase productivity and security; supporting disaster recovery and continuity of operations planning, testing, and management; and moving 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; conduct business development assistance and provide the maximum practicable prime and subcontract opportunities for small businesses; and continue efforts to implement the NRC’s Outreach and Compliance Coordination Program, in accordance with applicable Federal civil rights statutes and NRC regulations.
 - Provide agencywide policy formulation and guidance, strategic planning, performance management, legal advice and appellate adjudicatory support to the Commission, independent evaluations of agency programs and implementation of Commission policy directives, advice and assistance to the Commission on congressional and protocol issues and public affairs activities, management and oversight of agency programs, interactions on matters of international nuclear safety and security issues and developments, and operation of the Commissioners’ offices.
 - Maintain the agency’s corporate support training infrastructure, including operation of the Professional Development Center, agency leadership programs such as the Senior Executive Service Career Development Program, organizational development, training systems, and corporate-related external training.

SIGNIFICANT ACCOMPLISHMENTS IN FY 2018

The significant accomplishments within the Corporate Support Business Line include the following:

- Fully transitioned the NRC’s mobility services from the legacy IT Infrastructure Services and Support contract to a Global Infrastructure and Development Acquisition Blanket Purchase Agreement and began similarly transitioning Security Operations Center work.
- Achieved the goal of having 100 percent of agency systems under an active Authority to Operate.
- Completed the remaining four FY 2018 fee transformation items, including redesigning invoices, to further improve transparency of costs.
- Fully transitioned to a Federal Shared Service Provider for support of financial services in accounts payable, accounts receivable, and travel.
- Received an “A+” Small Business grade. This marked the sixth consecutive year that the Small Business Administration has recognized the NRC for meeting its goal, and the agency’s second consecutive “A+.”
- Completed the enhanced strategic workforce planning process pilot. Results showed the process can be used to better integrate the agency’s workload projection, skills identification, human capital management, individual development, and workforce management activities. The Executive Director for Operations approved broader agency implementation, which is currently underway.
- Executed the release of approximately 25,000 square feet of office and related space in Three White Flint North, anticipated to yield savings of \$1.2 million in annual rent and security costs in FY 2019 and beyond.

CORPORATE SUPPORT

OTHER INDICATORS

ACQUISITIONS

| Percentage of Spend Under Management* (CS-03) | | | |
|--|--------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2019 | 38 | | |
| FY 2020 | 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 2020. |
| *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. | | | |

ADMINISTRATIVE SERVICES

| NRC-Leased Space Compared to the Agency's FY 2015 Freeze the Footprint Baseline (1,033,171 Usable Square Feet (USF)—White Flint Campus) (CS-18) | | | |
|---|----------------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| | New in FY 2020 | | |
| FY 2020 | 619,000 USF | | This is a new indicator for FY 2020 and replaces CS-05. |

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 | | |
| FY 2020 | ≥75 | | |
| *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 information 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. | | | |

FINANCIAL MANAGEMENT

| Percentage of Collections Achieved When Compared with Projected Collections (CS-06) | | | |
|---|--------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 100 | 93.6 | Contributing factors to missing the target include a fee policy written to collect 98 percent of the 90-percent target and a final fee rule that did not become effective until the end of August, leaving no time to recover from licensee delays in the payment of fees. |
| 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 | | |
| FY 2020 | ≥98 | | |

| Percentage of Fee Transformation Items Planned That Are Successfully Implemented (CS-19) | | | |
|--|----------------|--------|---------|
| Fiscal Year | Target | Actual | Comment |
| | New in FY 2020 | | |
| FY 2020 | ≥80 | | |

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 2014 | 73 | 76 | |
| FY 2015 | 73 | 79 | |
| FY 2016 | 73 | 81 | |
| FY 2017 | 73 | 78 | |
| FY 2018 | 73 | 78 | |
| FY 2019 | 73 | | |
| FY 2020 | 73 | | |

| 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 | | |
| 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 out to provide better transparency for the information from the OMB IT Dashboard. In addition, the target for projects within schedule is being increased to continue the focus on improving agency performance. |

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 2014 | 65 | 64 | |
| 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 does not provide useful information on the effectiveness of the NRC's acquisition organization, and it is being 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 2014 | 100 | 100 | |
| 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 does not provide useful information on the effectiveness of the NRC's acquisition organization, it is being 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 will now be 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 Usable Square Feet) (CS-05) | | | |
|--|-------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | N/A | | |
| FY 2015 | N/A | | |
| FY 2016 | N/A | | |
| FY 2017 | N/A | | |
| FY 2018 | N/A | | |
| FY 2019 | 96 | | New indicator for FY 2019. |
| FY 2020 | Discontinue | | 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 2014 | 1 | 1 | |
| 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 | | |
| FY 2020 | Discontinue | | Indicator will be 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 2014 | 98 | 98 | |
| FY 2015 | 98 | 98 | |
| FY 2016 | 98 | 98 | |
| FY 2017 | 98 | 99.6 | |
| FY 2018 | 98 | 99 | |
| FY 2019 | 98 | | |
| FY 2020 | Discontinue | | Indicator will be 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 2014 | 3 | 4 | |
| 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 ADAMS main library (90 percent).

CORPORATE SUPPORT

| Percentage of Agency Investments That Are Green per OMB's IT Dashboard (CS-11) | | | |
|--|--------------|------------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | 7.5 | 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 2015 | 80 | Target met | |
| 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 | | |

| 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) | | | |
|--|--------------|--------|---|
| Fiscal Year | Target | Actual | Comment |
| FY 2014 | Yes | Yes | OIG did not report any material weaknesses in its evaluation report (OIG-15-A-02). |
| 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 | | |

| The NRC's Annual Average Rank among Top Agencies across the U.S. Office of Personnel Management (OPM) Human Capital Indices on the Federal Employee Viewpoint Survey (FEVS) (CS-14) | | | |
|---|--------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| FY 2015 | ≤5 | 4 | |
| FY 2016 | ≤5 | 7 | Based on the 2016 FEVS results from OPM, the NRC was ranked seventh overall. To ensure an engaged workforce, the NRC is implementing 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 2017 | ≤5 | 9 | |
| FY 2018 | Discontinued | | Replaced with indicator CS-15. |
| FY 2019 | N/A | | |
| FY 2020 | N/A | | |

| The NRC's Averaged Index Scores for Employee Engagement, Global Satisfaction, and New IQ (Diversity and Inclusion) Remain at Least 7.5% Above the Federal Employee Viewpoint Survey (FEVS) Governmentwide Average Score (CS-15) | | | |
|---|-------------|--------|--|
| Fiscal Year | Target | Actual | Comment |
| 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 | | |
| FY 2020 | Discontinue | | This indicator will be tracked internally to support streamlining corporate support indicator reporting. |

INTEGRATED UNIVERSITY PROGRAM

| Integrated University Program (Dollars in Millions) | | | | | | | | |
|---|------------------------|------------|------------------------|------------|------------------------|------------|-----------------------------|------------|
| Business Line | FY 2018 Actuals | | FY 2019 Enacted | | FY 2020 Request | | Changes from FY 2019 | |
| | \$ M | FTE | \$ M | FTE | \$ M | FTE | \$ M | FTE |
| Integrated University Program | \$15.5 | 0.0 | \$15.0 | 0.0 | \$0.0 | 0.0 | \$(15.0) | 0.0 |
| Total | \$15.5 | 0.0 | \$15.0 | 0.0 | \$0.0 | 0.0 | \$(15.0) | 0.0 |

\$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 2019 ENACTED BUDGET

Resources for the Integrated University Program are not included in the FY 2020 budget request.

SIGNIFICANT ACCOMPLISHMENTS IN FY 2018

The NRC awarded 51 grants totaling more than \$15.5 million to 40 academic institutions in 25 States.

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.³

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 2020 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.

³ 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.

| Alignment of Resources to NRC Goals (Dollars in Millions) (Excludes Office of the Inspector General) | | | | | | |
|--|--------------------|----------------|----------------|--------------------|---------------|----------------|
| Major Programs | FY 2019 Enacted | | | FY 2020 Request | | |
| | Safety | Security | Total | Safety | Security | Total |
| Nuclear Reactor Safety | 640.4 | 65.0 | 705.4 | 634.1 | 38.9 | 673.0 |
| Nuclear Materials and Waste Safety | 157.0 | 36.0 | 193.0 | 199.4 | 35.4 | 234.8 |
| Total | \$797.3 | \$101.0 | \$898.4 | \$833.5 | \$74.3 | \$907.8 |

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

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.

| | |
|-----------------------------------|---|
| <u>Safety Objective 1:</u> | <i>Prevent, mitigate, and respond to accidents and ensure radiation safety.</i> |
| Performance Goal 1: | Prevent radiation exposures that significantly exceed regulatory limits. |
| Performance Indicator: | 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) ⁴ |
| Timeframe: | Annual |

⁴ 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 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
|---------------------------------------|--------|---------|---------|---------|---------|---------|---------|
| 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 | 1* | 2 | 0 | 1 | | |

*Reported in the FY 2017 Congressional Budget Justification as 2 because of one event previously labeled as an AO reclassified upon further investigation as not meeting the AO threshold.

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 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
|---------------------------------------|--------|---------|---------|---------|---------|---------|---------|
| 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

ANNUAL PERFORMANCE PLAN

| Business Line | | FY 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
|-------------------------------------|--------|---------|---------|---------|---------|---------|---------|
| 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 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
|--------------------|--------|---------|---------|---------|---------|---------|---------|
| 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 | | |

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 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
|---------------------------------------|--------|---------|---------|---------|---------|---------|---------|
| Fuel Facilities | Target | 0 | 0 | 0 | 0 | 0 | 0 |
| Fuel Facilities | Actual | 0 | 1* | 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 (ADAMS 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 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
|--------------------|--------|---------|---------|---------|---------|---------|---------|
| All Business Lines | Target | 0 | 0 | 0 | 0 | 0 | 0 |
| All Business Lines | Actual | 0 | 0 | 0 | 0 | | |

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 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
|--------------------|--------|---------|---------|---------|---------|---------|---------|
| 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 2015 | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
|--------------------|--------|---------|---------|---------|---------|---------|---------|
| All Business Lines | Target | 0 | 0 | 0 | 0 | 0 | 0 |
| All Business Lines | Actual | 0 | 0 | 0 | 0 | | |

ANNUAL PERFORMANCE PLAN

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:

| | |
|-------------------------------|---|
| FY 2015–2020: | Performance Goal 1: 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) |
| Reactor Safety Target: | Zero |
| Verification: | 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. |
| Validation: | 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. |

| | |
|-------------------------------|--|
| FY 2015–2020: | Performance Goal 2: 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) |
| Reactor Safety Target: | Zero |
| Verification: | 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. |
| Validation: | 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." |

| | |
|-------------------------------|--|
| FY 2015–2020: | Performance Goal 3: Number of instances of unintended nuclear chain reactions involving NRC-licensed radioactive materials |
| Reactor Safety Target: | Zero |
| Verification: | <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> |
| Validation: | 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 |

ANNUAL PERFORMANCE PLAN

| | |
|--|--|
| | <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> |
|--|--|

| | |
|-------------------------------|---|
| FY 2015–2020: | Performance Goal 4: 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) |
| Reactor Safety Target: | Zero |
| Verification: | 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 site and incorporates feedback received from all stakeholders, as appropriate.</p> |
| Validation: | <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 plants that are identified as having performance issues, and the results are reported to the Commission.</p> |

Nuclear Materials and Waste Safety

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

Performance Indicators:

| | |
|---|---|
| FY 2015–2020: | Performance Goal 1: 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) |
| Materials Safety Target (Fuel Facilities, Nuclear Materials Users, and Spent Fuel Storage and Transportation): | Less than or equal to three |
| Waste Safety Target (Decommissioning and Low-Level Waste): | Zero |
| Verification: | 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 therapy patient, as determined by a physician, as a criterion for |

ANNUAL PERFORMANCE PLAN

| | |
|---------------------------|---|
| | <p>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>Validation:</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 protecting 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</p> |

| | |
|--|---|
| | <p>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> |
|--|---|

| | |
|--|--|
| <p>FY 2015–2020:</p> | <p>Performance Goal 2: 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>Materials and Waste Safety Target:</p> | <p>Zero</p> |
| <p>Verification:</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> |
| <p>Validation:</p> | <p>The NRC provides regulatory controls to limit radiation releases to ensure protection of the environment. The regulations in</p> |

ANNUAL PERFORMANCE PLAN

| | |
|--|---|
| | <p>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, Agreement State technical specialists, or agency consultants 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> |
|--|---|

| | |
|---|--|
| FY 2015–2020: | Performance Goal 3: Number of instances of unintended nuclear chain reactions involving NRC-licensed radioactive materials |
| Materials and Waste Safety Target: | Zero |
| Verification: | 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>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>Validation:</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 the NRC's performance in ensuring the safe and secure use of radioactive material has been adequate.</p> |

ANNUAL PERFORMANCE PLAN

| | |
|---|--|
| FY 2015–2020: | Performance Goal 5: 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) |
| Materials and Waste Safety Target: | Zero |
| Verification: | <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> |
| Validation: | <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 indicators at the threshold levels described by the AO criteria is appropriate and consistent with the principle that the NRC’s</p> |

| | |
|--|---|
| | <p>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> |
|--|---|

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:

| | |
|-------------------------|--|
| FY 2015–2020: | <p>Performance Goal 1: 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).</p> |
| Security Target: | Zero |
| Verification: | <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 be reported (in accordance with 10 CFR 20.2201(a)) by telephone to the NRC Headquarters Operations Center or</p> |

| | |
|--|--|
| | <p>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 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 risk-significant sources, including a requirement for licensees to report within 30 days the recovery of a risk-significant source.</p> |
|--|--|

| | |
|---------------------------|---|
| <p>Validation:</p> | <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> |
|---------------------------|---|

| | |
|-----------------------------|--|
| <p>Verification:</p> | <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> |
|-----------------------------|--|

| | |
|---------------------------|--|
| <p>Validation:</p> | <p>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 against the nuclear facilities that the agency licenses. Events of this type are extremely rare. If such an event occurs, it would</p> |
|---------------------------|--|

ANNUAL PERFORMANCE PLAN

| | |
|--|---|
| | 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. |
|--|---|

| | |
|----------------------|---|
| Verification: | 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. |
|----------------------|---|

| | |
|--------------------|--|
| Validation: | <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> |
|--------------------|--|

| | |
|-------------------------|--|
| FY 2015–2020: | Performance Goal 2: 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) |
| Security Target: | Less than or equal to one |
| Verification: | AO Criterion I.C.4 defines a “substantial breakdown” as a red finding under the ROP in the physical security inspection |

| | |
|---------------------------|--|
| | <p>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>Validation:</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> |

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

ANNUAL PERFORMANCE PLAN

Performance Indicators:

| | |
|-------------------------|---|
| FY 2015–2020: | Performance Goal 3: 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 |
| Security Target: | Zero |
| Verification: | <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, and (3) physical access control in the form of guards and badged access.</p> |

| | |
|--------------------|--|
| Validation: | 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.

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:

- Take actions to better integrate risk-informed approaches into NRC regulatory processes to improve safety decisionmaking and regulatory efficiency.
- Use a “Common Prioritizing 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 strategic goals and supporting governmental and public priorities.
- Perform a retrospective review of NRC regulations to identify administrative regulations that are outdated or duplicative that can be eliminated.
- Establish a more consistent approach to identify and disposition existing or planned work to accommodate emerging needs and resource changes.
- Launch the “InnovateNRC” effort to enable the agency to be a more innovative regulator.

ANNUAL PERFORMANCE PLAN

- Implement process efficiencies to reduce costs and improve the delivery of services, including a greater use of shared services.
- Develop an enhanced strategic workforce planning process to facilitate the agency's ability to anticipate and address future workforce needs.

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 |
|---|---|
| Safety Strategy 1: 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 |
| Safety Strategy 2: 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 |
| Safety Strategy 3: 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 |
| Safety Strategy 4: 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 |
| Safety Strategy 5: Maintain material safety through the National Materials Program in partnership with Agreement States. | Nuclear Materials Users, Decommissioning and LLW |
| Safety Strategy 6: Identify, assess, and resolve safety issues. | Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation |
| Safety Strategy 7: 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 |

| Strategy | Business Line |
|---|--|
| <p>Safety Strategy 8: 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.</p> | <p>Fuel Facilities, New Reactors, Operating Reactors, Spent Fuel Storage and Transportation</p> |
| <p>Security Strategy 1: 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.</p> | <p>Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation</p> |
| <p>Security Strategy 2: Maintain effective, consistent, and risk-informed oversight of licensee performance with respect to meeting NRC security requirements.</p> | <p>Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation</p> |
| <p>Security Strategy 3: Maintain material security through the National Materials Program in partnership with the safety programs administered by the Agreement States.</p> | <p>Nuclear Materials Users</p> |
| <p>Security Strategy 4: Proactively identify, assess, and address threats, vulnerabilities, and security risks.</p> | <p>Decommissioning and LLW, Fuel Facilities, New Reactors, Nuclear Materials Users, Operating Reactors, Spent Fuel Storage and Transportation</p> |
| <p>Security Strategy 5: 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>Security Strategy 6: Ensure material control and accounting for special nuclear materials.</p> | <p>Fuel Facilities, Operating Reactors, Spent Fuel Storage and Transportation</p> |
| <p>Security Strategy 7: 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 Office of the Inspector General (OIG) was established as a statutory entity on April 15, 1989, in accordance with the 1988 amendments to the Inspector General Act. The OIG mission is to independently and objectively audit and investigate programs and operations to promote effectiveness and efficiency, and to prevent and detect fraud, waste, and abuse. Starting in fiscal year (FY) 2014, the NRC’s OIG has exercised the same authorities with respect to the Defense Nuclear Facilities Safety Board (DNFSB) per the Consolidated Appropriations Act, 2014.

| NRC OIG Budget Authority and Full-Time Equivalents | | | | | | |
|---|----------------------------|-------------|----------------------------|-------------|---------------------------------|------------|
| (Dollars in Millions) | | | | | | |
| | FY 2019 Enacted | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE |
| Program Support | 1.647 | 0.0 | 1.974 | 0.0 | 0.327 | 0.0 |
| Program Salaries and Benefits | 10.962 | 63.0 | 11.340 | 63.0 | 0.378 | 0.0 |
| Total | \$12.609 | 63.0 | \$13.314 | 63.0 | \$0.705 | 0.0 |

Numbers may not add due to rounding.

The FY 2020 budget request for the NRC OIG is \$13.314 million, which includes \$11.340 million in salaries and benefits to support 63 full-time equivalent (FTE), and \$1.974 million in program support. These resources will support Inspector General auditing and investigation functions for both the NRC, \$12.143 million, and the DNFSB, \$1.171 million, respectively.

OIG is showing the full cost associated with its programs for the FY 2020 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

| Audits Budget Authority | | | | | | |
|--------------------------------|----------------------------|-------------|----------------------------|-------------|---------------------------------|------------|
| (Dollars in Millions) | | | | | | |
| | FY 2019 Enacted | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE |
| Program Support | 8.495 | 41.0 | 8.903 | 41.0 | 0.408 | 0.0 |
| Total | \$8.495 | 41.0 | \$8.903 | 41.0 | \$0.408 | 0.0 |

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.

For FY 2020, OIG requests \$8.903 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 2019 ENACTED BUDGET

OIG's FY 2020 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 2019–FY 2020 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 and DNFSB agreement on at least 92 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 2018 AUDITS PROGRAM ACCOMPLISHMENTS

In FY 2018, OIG issued 28 reports, with 22 pertaining to NRC programs and operations and 6 pertaining to DNFSB programs and operations. These reports either evaluated high-risk agency programs or comply 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 <http://www.nrc.gov/insp-gen/pubs.html#Semi-Annual>.

INVESTIGATIONS PROGRAM

| Investigations Budget Authority (Dollars in Millions) | | | | | | |
|---|----------------------------|-------------|----------------------------|-------------|---------------------------------|------------|
| | FY 2019 Enacted | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE |
| Program Support | 4.114 | 22.0 | 4.411 | 22.0 | 0.297 | 0.0 |
| Total | \$4.114 | 22.0 | \$4.411 | 22.0 | \$0.297 | 0.0 |

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 U.S. Department of Justice (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 2020, OIG requests \$4.411 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 2019 ENACTED BUDGET

OIG’s FY 2020 budget request reflects the funding level needed to sustain the authorized staffing level.

FY 2019–FY 2020 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 2018 AUDITS PROGRAM ACCOMPLISHMENTS

In FY 2018, OIG completed 40 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 <http://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: <http://www.nrc.gov/insp-gen/plandocs/strategic-plan.pdf>.

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.*

NRC performs critical functions to ensure the safe and secure 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 99 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, which 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 both the safe and secure use of nuclear material and technology and nuclear non-proliferation. 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 2020 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.

| NRC OIG Budget Resources Linked to OIG's Strategic Goals (Dollars in Millions) | | | |
|---|--|---|---|
| Program Links to Strategic Goals | Strengthen NRC's Public Health & Safety Efforts | Enhance NRC's Security Efforts | Improve NRC's Resource Stewardship Efforts |
| \$M | \$M | \$M | \$M |
| FY 2020 Programs (\$12.143) ¹ | | | |
| Audits \$7.93 | 3.412 | 1.349 | 3.173 |
| Investigations \$4.21 | 1.642 | 0.421 | 2.146 |

Numbers may not add due to rounding.

¹The budget resources linked to the NRC OIG strategic goals does not include the \$1.171M for the DNFSB.

NRC OIG PROGRAM PERFORMANCE MEASURES

| NRC OIG Strategic Goal 1: Strengthen the NRC's Efforts To Protect Public Health and Safety and the Environment | | | | | | |
|--|-------------------|-------------------|------------------|-------------------|------|------|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Measure 1. Percentage of OIG products and activities that have a high impact¹ on improving the NRC's safety program.² | | | | | | |
| Target | 85% | 85% | 85% | 85% | | |
| Actual | 100% | 100% | 100% | 91% | | |
| 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).³ | | | | | | |
| Target | | | | | 85% | 85% |
| Actual | | | | | TBD | TBD |
| Measure 3. Percentage of audit recommendations agreed to by agency. | | | | | | |
| Target | 92% | 92% | 92% | 92% | 92% | 92% |
| Actual | 86% ⁴ | 100% | 95% | 100% | TBD | TBD |
| Measure 4. Percentage of final agency actions taken within 2 years on audit recommendations. | | | | | | |
| Target | 70% | 70% | 70% | 70% | 70% | 70% |
| Actual | 47% ⁵ | 76% | 75% | 67% ⁶ | TBD | TBD |
| 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).⁷ | | | | | | |
| Target | | | | | 85% | 85% |
| Actual | | | | | TBD | TBD |
| Measure 6. Percentage of agency actions taken in response to investigative reports. | | | | | | |
| Target | 90% | 90% | 90% | 90% | 90% | 90% |
| Actual | 100% | 100% | 0% ⁸ | N/A | TBD | TBD |
| Measure 7. Percentage of active cases completed in less than 18 months. | | | | | | |
| Target | 90% | 90% | 90% | 90% | 90% | 90% |
| Actual | 50% ⁹ | 60% ¹⁰ | 0% ¹¹ | 83% ¹² | TBD | TBD |
| Measure 8. Percentage of closed investigations referred to DOJ or other relevant authorities. | | | | | | |
| Target | 20% ¹³ | 20% | 20% | 20% | 20% | 20% |
| Actual | N/A | N/A | N/A | 0% ¹⁴ | TBD | TBD |
| Measure 9. Percentage of closed investigations resulting in indictments, convictions, civil suits or settlements, judgments, administrative actions, monetary results, or IG clearance letters.¹⁵ | | | | | | |
| Target | 60% | 60% | 60% | 60% | 60% | 60% |
| Actual | 50% | 100% | 0% ¹⁶ | 0% ¹⁷ | TBD | TBD |

¹High 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.

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

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

⁴The agency required more than 90 days to resolve the two recommendations in the audit of NRC's oversight of active component aging. Subsequently both recommendations have been resolved.

⁵The agency required more than 2 years for final action on one of four recommendations on the audit of the NRC's issuance of general licenses. Final action was completed in October 2014.

NRC OIG Strategic Goal 1: Strengthen the NRC's Efforts To Protect Public Health and Safety and the Environment

⁶Several audit reports included recommendations that required more than 2 years for the agency to finalize action on. These recommendations are now closed.

⁷This high-impact measure for investigations was added beginning in FY 2019.

⁸Only one case was applicable to this measure and the agency did not take action in response to the report.

⁹Of two active investigative cases measured in the safety arena for the year, one case was closed in less than 18 months, which resulted in an achievement rate of 50 percent.

¹⁰The complexity of two investigations in the safety arena required additional time to close these investigations.

¹¹There was only one case applicable to this measure; the case was not closed within 18 months, resulting in a measure of 0 percent.

¹²Five 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.

¹³In FY 2014, OIG began to measure closed investigations that resulted in a referral to the Department of Justice, State or local law enforcement officials, or relevant administrative authority.

¹⁴Neither of the safety related investigations warranted referral because neither identified a criminal violation of law.

¹⁵Starting 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.

¹⁶Only one case was applicable to this measure and it did not result in any of the listed outcomes.

¹⁷Four 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

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|------|------------------|------------------|------|------|------|
| Measure 1. Percentage of OIG products and activities that have a high impact on improving the NRC's security program.¹ | | | | | | |
| Target | 85% | 85% | 85% | 85% | | |
| Actual | 100% | 91% | 100% | 100% | | |
| 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).² | | | | | | |
| Target | | | | | 85% | 85% |
| Actual | | | | | TBD | TBD |
| Measure 3. Percentage of audit recommendations agreed to by the agency. | | | | | | |
| Target | 92% | 92% | 92% | 92% | 92% | 92% |
| Actual | 100% | 100% | 100% | 100% | TBD | TBD |
| Measure 4. Percentage of final agency actions taken within 2 years on audit recommendations. | | | | | | |
| Target | 70% | 70% | 70% | 70% | 70% | 70% |
| Actual | 82% | 64% ³ | 55% ⁴ | 88% | TBD | TBD |
| 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).⁵ | | | | | | |
| Target | | | | | 85% | 85% |
| Actual | | | | | TBD | TBD |
| Measure 6. Percentage of agency actions taken in response to investigative reports. | | | | | | |
| Target | 90% | 90% | 90% | 90% | 90% | 90% |
| Actual | 100% | 100% | N/A | N/A | TBD | TBD |
| Measure 7. Percentage of active cases completed in less than 18 months. | | | | | | |
| Target | 90% | 90% | 90% | 90% | 90% | 90% |
| Actual | 100% | 80% ⁶ | 100% | N/A | TBD | TBD |
| Measure 8. Percentage of closed investigations referred to DOJ or other relevant authorities. | | | | | | |

OFFICE OF THE INSPECTOR GENERAL

| NRC OIG Strategic Goal 2: Enhance the NRC's Efforts To Increase Security in Response to an Evolving Threat Environment | | | | | | |
|---|------|------|------------------|-----|-----|-----|
| Target | 20% | 20% | 20% | 20% | 20% | 20% |
| Actual | N/A | 100% | 50% | N/A | TBD | TBD |
| Measure 9. Percentage of closed investigations resulting in indictments, convictions, civil suits or settlements, judgments, administrative actions, monetary results or IG clearance letters. | | | | | | |
| Target | 60% | 60% | 60% | 60% | 60% | 60% |
| Actual | 100% | 100% | 33% ⁷ | N/A | TBD | TBD |

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

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

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

⁴Four of eight recommendations on the Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act (FISMA) for Fiscal Year 2012 required additional time to close. These four recommendations have since been closed.

⁵This high-impact measure for investigations was added beginning in FY 2019.

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

⁷Only 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.

| NRC OIG Strategic Goal 3: Improve the Economy, Efficiency, and Effectiveness with Which the NRC Manages and Exercises Stewardship over Its Resources | | | | | | |
|--|------------------|------------------|------------------|-------------------|------|------|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Measure 1. Percentage of OIG completed products and activities that have a high impact on improving corporate management Programs.¹ | | | | | | |
| Target | 85% | 85% | 85% | 85% | | |
| Actual | 87% | 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).² | | | | | | |
| Target | | | | | 85% | 85% |
| Actual | | | | | TBD | TBD |
| Measure 3. Percentage of audit recommendations agreed to by the agency. | | | | | | |
| Target | 92% | 92% | 92% | 92% | 92% | 92% |
| Actual | 100% | 100% | 100% | 100% | TBD | TBD |
| Measure 4. Percentage of final agency actions taken within 2 years on audit recommendations. | | | | | | |
| Target | 70% | 70% | 70% | 70% | 70% | 70% |
| Actual | 90% | 80% | 81% | 62% ³ | TBD | TBD |
| 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).⁴ | | | | | | |
| Target | | | | | 85% | 85% |
| Actual | | | | | TBD | TBD |
| Measure 6. Percentage of agency actions taken in response to investigative reports. | | | | | | |
| Target | 90% | 90% | 90% | 90% | 90% | 90% |
| Actual | 100% | 100% | 89% ⁵ | 100% | TBD | TBD |
| Measure 7. Percentage of active cases completed in less than 18 months. | | | | | | |
| Target | 90% | 90% | 90% | 90% | 90% | 90% |
| Actual | 58% ⁶ | 78% ⁷ | 85% ⁸ | 72% ⁹ | TBD | TBD |
| Measure 8. Percentage of closed investigations referred to DOJ or other relevant authorities. | | | | | | |
| Target | 20% | 20% | 20% | 20% | 20% | 20% |
| Actual | 28% | 45% | 44% | 12% ¹⁰ | TBD | TBD |

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

Measure 9. Percentage of closed investigations resulting in indictments, convictions, civil suits or settlements, judgments, administrative actions, monetary results, or IG clearance letters.

| | | | | | | |
|---------------|-----|-----|-----|-------------------|-----|-----|
| Target | 60% | 60% | 60% | 60% | 60% | 60% |
| Actual | 73% | 71% | 70% | 46% ¹¹ | TBD | TBD |

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

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

³Several 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.

⁴This high-impact measure for investigations was added beginning in FY 2019.

⁵One of nine investigative cases resulted in no action taken in response to an investigative report which resulted in an 89 percent achievement rate.

⁶In the corporate management arena, OIG needed more than 18 months to complete action on average for 18 of 31 cases.

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

⁸The complexity of several investigations required additional time to close these investigations.

⁹The complexity of several investigations required additional time to close.

¹⁰Although we initially identified 17 cases with potential criminal violations, only 2 developed sufficient evidence to warrant referral.

¹¹Two investigations were inconclusive; therefore, a clearance letter could not be issued. In another case, misconduct was identified; however, the agency did not take action.

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 | | | | | | |
|---|------|------|------|------|------|------|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Measure 1. Percentage of OIG audits undertaken and issued within a year.¹ | | | | | | |
| Target | 60% | 60% | 60% | 60% | | |
| Actual | 83% | 100% | 100% | 100% | N/A | N/A |
| 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).² | | | | | | |
| Target | | | | | 85% | 85% |
| Actual | | | | | TBD | TBD |
| Measure 3. Percentage of audit recommendations agreed to by the agency.³ | | | | | | |
| Target | | | | | 50% | 50% |
| Actual | | | | | TBD | TBD |
| Measure 4. Percentage of final Board actions taken within 2 years on audit recommendations.⁴ | | | | | | |
| Target | | 50% | 50% | 50% | 50% | 50% |
| Actual | | 100% | 100% | 100% | TBD | TBD |
| 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).⁵ | | | | | | |
| Target | | | | | 85% | 85% |
| Actual | | | | | TBD | TBD |
| Measure 6. Percentage of Board actions taken in response to investigative reports.⁶ | | | | | | |
| Target | | 90% | 90% | 90% | 90% | 90% |
| Actual | | 100% | 100% | N/A | TBD | TBD |
| Measure 7. Percentage of active cases completed in less than 18 months.⁷ | | | | | | |
| Target | | 85% | 85% | 85% | 85% | 85% |
| Actual | | 100% | 100% | 100% | TBD | TBD |

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

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

³This measure was added, beginning in FY 2019.

⁴This measure has been tracked since FY 2015.

⁵This high-impact measure for investigations was added beginning in FY 2019.

⁶This measure has been tracked since FY 2015.

⁷This measure has been tracked since FY 2015.

INSPECTOR GENERAL REFORM ACT CERTIFICATION FOR FY 2020

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 2020 and was subsequently approved. In addition, the OIG DNFSB budget request was submitted to the DNFSB Chairman for FY 2020 who provided no comments.

Furthermore, OIG’s total budget request includes \$135,000 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 includes the allocated corporate support costs for all business lines, except for the High-Level Waste Business Line and the Office of the Inspector General, in addition to the business line costs presented in each chapter of this report.

| Full Cost Budget Authority and Full-Time Equivalents | | | | | | | | |
|--|----------------------------|----------------|-----------------------------|----------------|----------------------------|----------------|---------------------------------|---------------|
| (Dollars in Millions) | | | | | | | | |
| Business Line/ Major Program | FY 2018 Actuals | | FY 2019 Enacted* | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Operating Reactors | 552.2 | 1,875.5 | 549.7 | 1,916.6 | 549.6 | 1,877.6 | (0.1) | (38.9) |
| New Reactors | 142.6 | 475.1 | 140.6 | 482.6 | 130.8 | 428.6 | (9.8) | (54.0) |
| Nuclear Reactor Safety | \$694.7 | 2,350.7 | \$690.3 | 2,399.1 | \$680.4 | 2,306.2 | \$(9.9) | (92.9) |
| Spent Fuel Storage and Transportation | 37.9 | 120.5 | 34.5 | 125.0 | 37.0 | 127.7 | 2.5 | 2.7 |
| Nuclear Materials Users | 88.4 | 263.6 | 86.4 | 268.8 | 84.9 | 259.2 | (1.5) | (9.6) |
| Decommissioning and Low-Level Waste | 40.4 | 134.0 | 37.3 | 130.0 | 34.9 | 117.6 | (2.5) | (12.4) |
| High-Level Waste | 0.1 | 0.4 | 0.0 | 0.0 | 38.5 | 77.0 | 38.5 | 77.0 |
| Fuel Facilities | 37.8 | 133.4 | 34.7 | 120.0 | 32.1 | 111.3 | (2.6) | (8.8) |
| Nuclear Materials and Waste Safety Major Program Subtotal | \$204.5 | 651.9 | \$193.0 | 643.9 | \$227.4 | 692.8 | \$34.3 | 48.9 |
| Subtotal | \$899.2 | 3,002.6 | \$883.4 | 3,043.0 | \$907.8 | 2,999.0 | \$24.4 | (44.0) |
| Integrated University Program | 15.5 | 0.0 | 15.0 | 0.0 | 0.0 | 0.0 | (15.0) | 0.0 |
| Subtotal | \$914.7 | 3,002.6 | \$898.4 | 3,043.0 | \$907.8 | 2,999.0 | \$9.4 | (44.0) |
| Inspector General | 13.3 | 60.8 | 12.6 | 63.0 | 13.3 | 63.0 | 0.7 | 0.0 |
| Total | \$928.1 | 3,063.4 | \$911.0 | 3,106.0 | \$921.1 | 3,062.0 | \$10.1 | (44.0) |

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

*In FY 2019, research and licensing activities within the Operating Reactors, Spent Fuel Storage and Transportation, Decommissioning and Low-Level Waste, and Corporate Support Business Lines were funded \$20 million through the use of authorized prior-year carryover which is not reflected in the FY 2019 Enacted Budget. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," for details.

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

The fiscal year (FY) 2020 Congressional Budget Justification identifies the infrastructure and support costs for the NRC. The allocation methodology is consistent with the methodology 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.

| Corporate Support by Business Line (Dollars in Millions) | | | | | | | | |
|--|----------------------------|--------------|----------------------------|--------------|----------------------------|--------------|---------------------------------|--------------|
| Business Line/ Major Programs | FY 2018 Actuals | | FY 2019 Enacted | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Operating Reactors | 185.2 | 371.0 | 184.5 | 383.6 | 188.0 | 392.6 | 3.5 | 9.1 |
| New Reactors | 46.9 | 94.0 | 46.5 | 96.6 | 42.9 | 89.6 | (3.5) | (7.0) |
| Nuclear Reactor Safety | \$232.1 | 465.0 | \$231.0 | 480.1 | \$230.9 | 482.2 | \$(0.0) | 2.1 |
| Spent Fuel Storage and Transportation | 11.9 | 23.8 | 12.0 | 25.0 | 12.8 | 26.7 | 0.8 | 1.7 |
| Nuclear Materials Users | 26.1 | 52.2 | 25.9 | 53.8 | 26.0 | 54.2 | 0.1 | 0.4 |
| Decommissioning and Low-Level Waste | 13.2 | 26.5 | 12.5 | 26.0 | 11.8 | 24.6 | (0.7) | (1.4) |
| High-Level Waste | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Fuel Facilities | 13.2 | 26.4 | 11.6 | 24.0 | 11.1 | 23.3 | (0.4) | (0.8) |
| Nuclear Materials and Waste Safety | \$64.4 | 129.0 | \$62.0 | 128.9 | \$61.7 | 128.8 | \$(0.3) | (0.1) |
| Total | \$296.4 | 594.0 | \$292.9 | 609.0 | \$292.6 | 611.0 | \$(0.4) | 2.0 |

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

APPENDIX B: BUDGET AUTHORITY BY FUNCTION

The U.S. Nuclear Regulatory Commission’s (NRC’s) 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, 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.

| Budget Authority by Function (Dollars in Millions) | | | |
|--|----------------------------|----------------------------|---------------------------------|
| | FY 2019 Enacted | FY 2020 Request | Changes from FY 2019 |
| Salaries & Expenses (S&E) | \$M | \$M | \$M |
| Salaries and Benefits | 559.5 | 553.1 | (6.4) |
| Contract Support | 316.7 | 333.3 | 16.6 |
| Travel | 22.1 | 21.4 | (0.7) |
| Total (S&E) | \$898.4 | \$907.8 | \$9.4 |
| Office of the Inspector General (OIG) | | | |
| Salaries and Benefits | 10.9 | 11.3 | 0.4 |
| Contract Support | 1.4 | 1.7 | 0.3 |
| Travel | 0.3 | 0.3 | 0.0 |
| Total (OIG) | \$12.6 | \$13.3 | \$0.7 |
| Total NRC Appropriations | | | |
| Salaries and Benefits | 570.4 | 564.4 | (6.0) |
| Contract Support | 318.1 | 335.0 | 16.9 |
| Travel | 22.4 | 21.7 | (0.7) |
| Total (NRC) | \$911.0 | \$921.1 | \$10.1 |

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

APPENDIX C: AGENCY FEE RECOVERY

The U.S. Nuclear Regulatory Commission's (NRC's) fee regulations are governed by the Independent Offices Appropriation Act of 1952 (IOAA) and the Omnibus Budget Reconciliation Act of 1990, as amended (OBRA-90). OBRA-90 requires the NRC to recover approximately 90 percent of its annual budget authority through fees, but this fee recovery requirement excludes specific amounts (i.e., nonfee items) identified in OBRA-90 or by other legislation. OBRA-90 requires the NRC to use its IOAA authority to collect user fees for NRC work that provides specific benefits to identifiable applicants and licensees as defined in 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."

The NRC also assesses fees 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." These annual fees recover regulatory costs that are not otherwise collected through 10 CFR Part 170 fees, such as the costs of research and rulemaking activities.

The remaining portion of the NRC's annual budget authority that is not recovered through fees is used to offset certain budgeted activities, which the NRC refers to as "fee-relief" activities.

The 10 CFR Part 170 fee amount is estimated by license fee class using invoice data and adjustments to estimate workload projections. The agency develops the hourly rate used to collect 10 CFR Part 170 fees based on full-cost fee recovery guidance in accordance with Office of Management and Budget Circular No. A-25, "User Charges," dated July 8, 1993. The rate is calculated by taking the sum of (1) recoverable budgeted resources for mission-direct and mission-indirect program salaries and benefits and (2) agency support costs (which include corporate support and Office of the Inspector General costs), then dividing it by mission-direct full-time equivalents (FTE) converted to hours. Mission-direct resources are budgeted to perform core work activities to fulfill the agency mission under the direct business lines. Mission-indirect resources support the core mission-direct activities. These include, for example, supervisory support, nonsupervisory support, mission travel, and training.

The NRC allocates direct budgetary resources, based on supporting activities, to nine license fee classes: (1) power reactors, (2) spent fuel storage/reactor decommissioning, (3) research and test reactors and nonpower reactors, (4) fuel facilities, (5) materials users, (6) transportation, (7) uranium recovery, (8) import and export, and (9) rare earth. The 10 CFR Part 171 fee amount is calculated by license fee class by subtracting the estimated 10 CFR Part 170 fee amount from the allocated direct budgetary resources.

The following table delineates where the major portion of a business line's direct budgetary resources are allocated when calculating 10 CFR Part 171 fees for a license fee class. The indirect portion of a business line's resources (e.g., training, travel, mission support, and supervisors), as well as corporate support budgetary resources, is distributed among all license fee classes as part of the hourly rate.

APPENDIX C: AGENCY FEE RECOVERY

CROSSWALK OF BUSINESS LINE ALLOCATION TO FEE CLASSES*

| Business Line | License Fee Class |
|---------------------------------------|---|
| Operating Reactors | Power Reactors, Research and Test Reactors and Nonpower Reactors, Import/Export |
| New Reactors | Power Reactors |
| Fuel Facilities | Fuel Facilities |
| Nuclear Materials Users | Materials Users, Import/Export |
| Spent Fuel Storage and Transportation | Spent Fuel Storage/Reactor Decommissioning, Transportation |
| Decommissioning and Low-Level Waste | Spent Fuel Storage/Reactor Decommissioning, Uranium Recovery, Rare Earth |

**Delineates where the major portion of a business line's direct budgetary resources are allocated for a license fee class. Does not include fee-relief activities. The NRC does not have licensees under the rare earth fee class at this time.*

More information about 10 CFR Part 170 and 10 CFR Part 171 is posted on the NRC's public Web [site](#).

If the NRC receives the full amount requested for fiscal year (FY) 2020, the estimated fee recovery amount for FY 2020 is \$759.6 million, as shown on the following page.

Agency Fee Recovery
(Dollars in Millions)

| | FY 2019 Proposed* | FY 2020 Projection |
|--|------------------------------|-------------------------------|
| | \$M | \$M |
| Total Appropriation¹ | \$911.0 | \$921.1 |
| Less Nonfee-Recoverable Items | \$43.4 | \$77.1 |
| <i>Generic Homeland Security</i> | 14.6 | 14.2 |
| <i>Waste Incidental to Reprocessing</i> | 1.3 | 1.3 |
| <i>Advanced Reactors Regulatory Readiness</i> | 10.3 | 15.5 |
| <i>International Activities</i> | 16.1 | 6.5 |
| <i>Nuclear Waste Fund</i> | 0.0 | 38.5 |
| <i>Defense Nuclear Facilities Safety Board</i> | 1.1 | 1.2 |
| Balance | \$867.6 | \$844.0 |
| Fee Recovery Percent | 90.0 | 90.0 |
| Fees To Be Recovered | \$780.8 | \$759.6 |
| Billing & Carryover Adjustments ² | 1.1 | 1.1 |
| Adjusted Fee Recovery Amount | \$781.9 | \$760.7 |
| Estimated Part 170 Fees Percent ³ | 31.6 | 31.6 |
| Estimated Part 170 Fees Amount | \$246.7 | \$240.0 |
| Estimated Part 171 Fees Percent ³ | 68.4 | 68.4 |
| Estimated Part 171 Fees Amount | \$535.2 | \$520.6 |

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

*In FY 2019, research and licensing activities within the Operating Reactors, Spent Fuel Storage and Transportation, Decommissioning and Low-Level Waste, and Corporate Support Business Lines were funded \$20 million through the use of authorized prior-year carryover which is not reflected in the FY 2019 Enacted Budget. Please refer to Appendix I, "FY 2019 Total Budget Authority Comparison," for details.

¹Includes both salaries and expenses and Office of the Inspector General appropriations.

²The 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.

³Assumes same percentage from prior-year final fee rule.

APPENDIX D: 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, which represent additional funding in excess of the NRC's directly appropriated funds. The table below lists anticipated reimbursable funding by category per fiscal year (FY).

| Summary of Reimbursable Work (Dollars in Millions) | | | | | | | | |
|---|------------------------|------------|----------------|------------|------------------------|------------|-----------------------------|------------|
| Description of Work | FY 2018 Actuals | | FY 2019 | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| COOPERATIVE RESEARCH | | | | | | | | |
| Foreign Cooperative Research Agreements | 2.200 | 0.0 | 2.000 | 0.0 | 2.100 | 0.0 | 0.100 | 0.0 |
| FACILITIES REVENUE | | | | | | | | |
| Parking Receipts | 0.000 | 0.0 | 0.015 | 0.0 | 0.015 | 0.0 | 0.000 | 0.0 |
| Recycling Reimbursements (GSA) | 0.000 | 0.0 | 0.008 | 0.0 | 0.008 | 0.0 | 0.000 | 0.0 |
| INTERNATIONAL ASSISTANCE | | | | | | | | |
| Cooperative Activities Travel (Nuclear Regulation Authority of Japan) | 0.194 | 0.0 | 0.142 | 0.0 | 0.000 | 0.0 | (0.142) | 0.0 |
| International Invitational Travel (IAEA) | 0.182 | 0.0 | 0.400 | 0.0 | 0.350 | 0.0 | (0.050) | 0.0 |
| International Travel (AIT) | 0.010 | 0.0 | 0.015 | 0.0 | 0.015 | 0.0 | 0.000 | 0.0 |
| SECURITY RELATED ACTIVITIES | | | | | | | | |
| Criminal History Program | 1.899 | 3.4 | 1.700 | 2.0 | 1.700 | 2.0 | 0.000 | 0.0 |
| Information Access Authorization Program | 0.401 | 1.3 | 0.540 | 1.5 | 0.540 | 1.5 | 0.000 | 0.0 |
| Material Access Authorization Program | 0.013 | 0.1 | 0.000 | 0.5 | 0.000 | 0.5 | 0.000 | 0.0 |
| TECHNICAL ASSISTANCE TO OTHER FEDERAL AGENCIES | | | | | | | | |
| Employee Detail to Army Corps of Engineers (USACE) | 0.168 | 0.6 | 0.145 | 0.4 | 0.000 | 0.0 | (0.145) | (0.4) |
| Employee Detail to Domestic Nuclear Detection Office (DHS) | 0.091 | 0.4 | 0.165 | 0.8 | 0.221 | 1.0 | 0.056 | 0.2 |
| Employee Detail to Office of Management and Budget (OMB) | 0.005 | 0.1 | 0.000 | 0.0 | 0.000 | 0.0 | 0.000 | 0.0 |
| Fuel Cycle Research and Development (DOE) | 0.219 | 0.2 | 0.175 | 0.4 | 0.100 | 0.5 | (0.075) | 0.1 |
| Joint Funding of International Commission on Radiological Protection Activities (EPA) | 0.025 | 0.0 | 0.000 | 0.0 | 0.000 | 0.0 | 0.000 | 0.0 |
| Mars 2020 Mission Interagency Nuclear Safety Review Panel (NASA) | 0.100 | 0.4 | 0.105 | 0.3 | 0.044 | 0.2 | (0.061) | (0.1) |

APPENDIX D: SUMMARY OF REIMBURSABLE WORK

| Summary of Reimbursable Work (Dollars in Millions) | | | | | | | | |
|--|--------------------|------------|----------------|------------|--------------------|------------|-------------------------|--------------|
| Description of Work | FY 2018 Actuals | | FY 2019 | | FY 2020 Request | | Changes from FY 2019 | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Revalidation of Selected Foreign Certificates for Packages (Casks) (DOE) | 0.000 | 0.0 | 0.100 | 0.3 | 0.000 | 0.3 | (0.100) | 0.0 |
| Response to Hurricane Harvey (FEMA) | 0.042 | 0.0 | 0.000 | 0.0 | 0.000 | 0.0 | 0.000 | 0.0 |
| Response to Hurricane Irma (FEMA) | 0.098 | 0.0 | 0.000 | 0.0 | 0.000 | 0.0 | 0.000 | 0.0 |
| Response to Hurricane Maria (FEMA) | 0.068 | 0.0 | 0.000 | 0.0 | 0.000 | 0.0 | 0.000 | 0.0 |
| U.S. Navy Reviews (DOD) | 0.004 | 0.1 | 0.012 | 0.1 | 0.012 | 0.1 | 0.000 | 0.0 |
| Waste Actions for Hanford (DOE) | 0.228 | 0.9 | 0.600 | 2.0 | 0.600 | 2.0 | 0.000 | 0.0 |
| AGENCY TOTAL | 5.946 | 7.3 | \$6.122 | 8.3 | \$5.705 | 8.1 | (\$0.417) | (0.2) |

\$M includes full-time equivalent (FTE) costs as well as contract support and travel. Numbers may not add due to rounding. Does not include classified reimbursable work agreements. FY 2018 \$M represents actual amounts obligated. FY 2019 and FY 2020 \$M represent new reimbursable budget authority expected in the FY from Federal agencies or other outside sources.

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

February 1, 2019

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

Maureen E. Wylie */RA/*
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 Chief Financial Officer (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.
- 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.

APPENDIX E: FITARA REQUIREMENTS

INFORMATION TECHNOLOGY TABLE

In enacting the Federal Information Technology Acquisition Reform Act, Congress established Governmentwide information technology (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 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) 2018), current year (CY) (FY 2019), and budget year (BY) (FY 2020).

| NRC IT Spending ¹ (Dollars in Millions) | | | | | | | | | |
|---|--------------|--------|---------|-------------------|-------|---------|--------------|-------|---------|
| TAFS | FY 2018 (PY) | | | FY 2019 (CY) | | | FY 2020 (BY) | | |
| | CS&T | FTE | Total | CS&T ² | FTE | Total | CS&T | FTE | Total |
| 429-00-0200 | 129.179 | 162.23 | 156.917 | 126.744 | 175.5 | 157.933 | 130.886 | 182.0 | 163.417 |
| | | | | | 0 | | | | |

Note 1: Table represents FY 2018 (PY) Actual Expenditures, FY 2019 (CY) Enacted, and Agency Budget Request for FY 2020 (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, page 5

Note 2: Figures shown for FY 2019 exclude \$2.632M in authorized carryover included in the enacted budget.

APPENDIX E: FITARA REQUIREMENTS

| NRC IT Table ¹ (Dollars in Millions) | | | | | | | | | | | |
|--|---|--------------------------------------|--------------|-------|--------|---------------------------|-------|--------|--------------|-------|--------|
| Ull | IT Investment Title | Program Area | FY 2018 (PY) | | | FY 2019 (CY) ⁴ | | | FY 2020 (BY) | | |
| | | | CS&T | FTE | Total | CS&T | FTE | Total | CS&T | FTE | Total |
| 429-00000500 | Facilities, Space, and Property Management | 02: Corporate Support | 0.351 | 1.09 | 0.536 | 0.489 | 0.55 | 0.586 | 0.449 | 0.50 | 0.538 |
| 429-00000500 | Facilities, Space, and Property Management | 03: Nuclear Reactor Safety | 0.000 | 0.00 | 0.000 | 0.008 | 0.00 | 0.008 | 0.010 | 0.00 | 0.010 |
| 429-00000600 | Personnel Security Management | 02: Corporate Support | 0.445 | 1.49 | 0.698 | 0.844 | 0.50 | 0.932 | 0.583 | 1.50 | 0.849 |
| 429-00001300 | Document and Knowledge Management | 02: Corporate Support | 0.640 | 0.01 | 0.641 | 0.351 | 0.00 | 0.351 | 0.163 | 0.00 | 0.163 |
| 429-00001400 | Public Outreach | 02: Corporate Support | 0.462 | 0.10 | 0.479 | 0.567 | 0.00 | 0.567 | 0.392 | 0.00 | 0.392 |
| 429-00001500 | Web Services | 02: Corporate Support | 0.641 | 4.12 | 1.341 | 1.017 | 2.50 | 1.457 | 0.886 | 3.00 | 1.417 |
| 429-00002100 | Human Resource and Training Support | 02: Corporate Support | 0.580 | 0.00 | 0.580 | 0.271 | 0.00 | 0.271 | 0.376 | 3.00 | 0.907 |
| 429-00002100 | Human Resource and Training Support | 03: Nuclear Reactor Safety | 0.448 | 0.00 | 0.448 | 0.320 | 0.00 | 0.320 | 0.669 | 0.00 | 0.669 |
| 429-00002100 | Human Resource and Training Support | 04: Nuclear Materials & Waste Safety | 0.000 | 0.00 | 0.000 | 0.000 | 0.00 | 0.000 | 0.055 | 0.00 | 0.055 |
| 429-00002500 | Financial Services | 02: Corporate Support | 8.749 | 7.23 | 9.978 | 10.737 | 9.00 | 12.321 | 8.601 | 7.90 | 9.999 |
| 429-00002600 | Enterprise-wide Acquisition Services | 02: Corporate Support | 4.510 | 2.15 | 4.875 | 5.902 | 2.00 | 6.254 | 5.875 | 2.00 | 6.229 |
| 429-00003100 | Workflow, Tracking, and Decision-making Support | 02: Corporate Support | 0.040 | 0.04 | 0.047 | 0.118 | 0.00 | 0.118 | 0.088 | 0.00 | 0.088 |
| 429-00003400 | Secure Communications System | 03: Nuclear Reactor Safety | 3.297 | 6.12 | 4.367 | 2.658 | 7.00 | 3.946 | 2.745 | 8.00 | 4.217 |
| 429-00003600 | Incident Response | 03: Nuclear Reactor Safety | 2.785 | 2.39 | 3.203 | 4.297 | 5.00 | 5.217 | 3.637 | 3.00 | 4.189 |
| 429-00006200 | NRC IT Security and Compliance | 02: Corporate Support | 16.406 | 26.87 | 20.973 | 16.443 | 31.25 | 21.945 | 14.729 | 31.00 | 20.216 |
| 429-00006200 | NRC IT Security and Compliance | 03: Nuclear Reactor Safety | 0.000 | 0.00 | 0.000 | 0.859 | 0.00 | 0.859 | 0.859 | 0.00 | 0.859 |

APPENDIX E: FITARA REQUIREMENTS

| NRC IT Table ¹ (Dollars in Millions) | | | | | | | | | | | |
|--|---|--------------------------------------|--------------|-------|--------|---------------------------|-------|--------|--------------|-------|--------|
| Ull | IT Investment Title | Program Area | FY 2018 (PY) | | | FY 2019 (CY) ⁴ | | | FY 2020 (BY) | | |
| | | | CS&T | FTE | Total | CS&T | FTE | Total | CS&T | FTE | Total |
| 429-000006200 | NRC IT Security and Compliance | 04: Nuclear Materials & Waste Safety | 0.000 | 0.00 | 0.000 | 0.237 | 0.00 | 0.237 | 0.237 | 0.00 | 0.237 |
| 429-000007700 | NRC IT Management | 02: Corporate Support | 0.909 | 16.47 | 3.709 | 0.715 | 24.00 | 4.940 | 0.974 | 24.00 | 5.222 |
| 429-000008000 | Electronic Document Authentication and Transmission | 02: Corporate Support | 0.046 | 0.00 | 0.046 | 0.027 | 0.00 | 0.027 | 0.027 | 0.00 | 0.027 |
| 429-000008200 | Materials Licensing and Oversight | 04: Nuclear Materials & Waste Safety | 8.810 | 4.13 | 9.532 | 8.240 | 6.00 | 9.350 | 8.048 | 5.00 | 8.965 |
| 429-000008400 | Reactor Licensing and Oversight | 03: Nuclear Reactor Safety | 9.869 | 15.79 | 12.651 | 8.729 | 12.00 | 10.954 | 8.147 | 12.00 | 10.368 |
| 429-000008500 | High Performance Computing and Scientific Software - Materials and Waste Safety | 04: Nuclear Materials & Waste Safety | 0.283 | 0.00 | 0.283 | 0.480 | 0.00 | 0.480 | 0.557 | 0.00 | 0.557 |
| 429-000008600 | High Performance Computing and Scientific Software - Reactor Safety | 03: Nuclear Reactor Safety | 1.723 | 1.12 | 1.919 | 2.520 | 2.00 | 2.888 | 2.442 | 1.00 | 2.626 |
| 429-000008700 | High-Level Waste Licensing and Oversight ² | 04: Nuclear Materials & Waste Safety | 0.000 | 0.00 | 0.000 | 0.000 | 0.00 | 0.000 | 10.391 | 8.00 | 11.911 |
| 429-000009100 | NRC Data Center and Cloud | 02: Corporate Support | 10.270 | 7.20 | 11.493 | 14.902 | 4.20 | 15.641 | 12.450 | 6.00 | 13.512 |
| 429-000009100 | NRC Data Center and Cloud | 03: Nuclear Reactor Safety | 2.115 | 0.00 | 2.115 | 1.147 | 0.00 | 1.147 | 1.546 | 0.00 | 1.546 |
| 429-000009100 | NRC Data Center and Cloud | 04: Nuclear Materials & Waste Safety | 1.286 | 0.00 | 1.286 | 0.318 | 0.00 | 0.318 | 0.424 | 0.00 | 0.424 |
| 429-000009200 | NRC Network | 02: Corporate Support | 12.437 | 14.71 | 14.937 | 9.639 | 7.75 | 11.003 | 9.153 | 3.00 | 9.684 |
| 429-000009200 | NRC Network | 03: Nuclear Reactor Safety | 2.440 | 1.91 | 2.765 | 2.068 | 2.00 | 2.436 | 2.743 | 0.00 | 2.743 |
| 429-000009200 | NRC Network | 04: Nuclear Materials & Waste Safety | 0.875 | 0.00 | 0.875 | 0.442 | 0.00 | 0.442 | 0.667 | 0.00 | 0.667 |

| NRC IT Table ¹ (Dollars in Millions) | | | | | | | | | | | |
|--|-----------------------------------|--------------------------------------|--------------|-------|--------|---------------------------|-------|--------|--------------|-------|--------|
| Ull | IT Investment Title | Program Area | FY 2018 (PY) | | | FY 2019 (CY) ⁴ | | | FY 2020 (BY) | | |
| | | | CS&T | FTE | Total | CS&T | FTE | Total | CS&T | FTE | Total |
| 429-000009300 | NRC Delivery | 02: Corporate Support | 2.902 | 16.64 | 5.730 | 3.272 | 18.00 | 6.441 | 3.198 | 19.00 | 6.561 |
| 429-000009400 | NRC End User | 02: Corporate Support | 20.776 | 18.68 | 23.950 | 15.319 | 24.00 | 19.544 | 14.322 | 31.00 | 19.809 |
| 429-000009400 | NRC End User | 03: Nuclear Reactor Safety | 0.011 | 0.00 | 0.011 | 0.733 | 0.00 | 0.733 | 3.235 | 0.00 | 3.235 |
| 429-000009400 | NRC End User | 04: Nuclear Materials & Waste Safety | 0.019 | 0.00 | 0.019 | 0.176 | 0.00 | 0.176 | 0.809 | 0.00 | 0.809 |
| 429-000009500 | NRC Failover Site | 03: Nuclear Reactor Safety | 0.194 | 0.02 | 0.197 | 0.050 | 0.00 | 0.050 | 0.138 | 0.00 | 0.138 |
| 429-000009600 | NRC Application | 02: Corporate Support | 2.619 | 2.12 | 2.979 | 1.643 | 4.25 | 2.391 | 2.523 | 4.25 | 3.275 |
| 429-000009600 | NRC Application | 03: Nuclear Reactor Safety | 0.106 | 0.00 | 0.106 | 0.200 | 0.00 | 0.200 | 0.100 | 0.00 | 0.100 |
| 429-000009700 | NRC Platform ³ | 02: Corporate Support | 9.238 | 6.61 | 10.361 | 8.401 | 7.50 | 9.721 | 6.555 | 5.75 | 7.573 |
| 429-000009700 | NRC Platform ³ | 03: Nuclear Reactor Safety | 0.379 | 0.00 | 0.379 | 0.142 | 0.00 | 0.142 | 0.142 | 0.00 | 0.142 |
| 429-000009700 | NRC Platform ³ | 04: Nuclear Materials & Waste Safety | 0.039 | 0.00 | 0.039 | 0.041 | 0.00 | 0.041 | 0.041 | 0.00 | 0.041 |
| 429-999990060 | E-Rulemaking | 04: Nuclear Materials & Waste Safety | 0.113 | 0.00 | 0.113 | 0.118 | 0.00 | 0.118 | 0.113 | 0.00 | 0.113 |
| 429-999990220 | E-Travel | 02: Corporate Support | 0.552 | 0.99 | 0.720 | 0.600 | 1.00 | 0.776 | 0.458 | 1.10 | 0.653 |
| 429-999990230 | Integrated Award Environment | 02: Corporate Support | 0.058 | 0.00 | 0.058 | 0.063 | 0.00 | 0.063 | 0.042 | 0.00 | 0.042 |
| 429-999991100 | Financial Management LOB | 02: Corporate Support | 0.041 | 0.00 | 0.041 | 0.042 | 0.00 | 0.042 | 0.029 | 0.00 | 0.029 |
| 429-999991204 | IBC Shared Service Center (HRLob) | 02: Corporate Support | 1.200 | 2.27 | 1.586 | 1.223 | 3.00 | 1.751 | 1.090 | 2.00 | 1.444 |
| 429-999991217 | E-Training | 02: Corporate Support | 0.451 | 1.96 | 0.784 | 0.209 | 2.00 | 0.561 | 0.000 | 0.00 | 0.000 |
| 429-999991218 | USAJobs | 02: Corporate Support | 0.000 | 0.00 | 0.000 | 0.027 | 0.00 | 0.027 | 0.028 | 0.00 | 0.028 |

APPENDIX E: FITARA REQUIREMENTS

| NRC IT Table ¹ (Dollars in Millions) | | | | | | | | | | | |
|--|---|--|----------------|---------------|----------------|---------------------------|---------------|----------------|----------------|--------------|----------------|
| Ull 429- 999991219 | IT Investment Title Enterprise Human Resource Integration | Program Area 02: Corporate Support | FY 2018 (PY) | | | FY 2019 (CY) ⁴ | | | FY 2020 (BY) | | |
| | | | CS&T | FTE | Total | CS&T | FTE | Total | CS&T | FTE | Total |
| | | | 0.064 | 0.00 | 0.064 | 0.140 | 0.00 | 0.140 | 0.140 | 0.00 | 0.140 |
| | | Total | 129.179 | 162.23 | 156.917 | 126.744 | 175.50 | 157.933 | 130.886 | 182.0 | 163.417 |

Note 1: Table represents FY 2018 (PY) Actual Expenditures, FY 2019 (CY) Enacted, and Agency Budget Request for FY 2020 (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/is55.pdf

Note 2: This investment includes IT components that support efficient licensing activities concerning the nuclear waste repository at Yucca Mountain.

Note 3: New Investment introduced for FY 2020 budget submission, consistent with OMB's FY 2020 IT Budget - Capital Planning Guidance (not a Cybersecurity investment or High Value Asset System). This is a Standard Investment for the provisioning of an enterprise-wide platform capability as defined by the Platform tower to include sub-towers; database, middleware, mainframe database, and mainframe middleware.

Note 4: Figures shown for FY 2019 exclude \$2.632M in authorized carryover included in the enacted budget (\$1.072M for NRC Application, \$0.632M for NRC IT Security and Compliance, and \$0.928M for NRC Platform).

APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

**APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES
(AS OF DECEMBER 5, 2018)**

The table below lists of all of the U.S. Nuclear Regulatory Commission’s (NRC’s) rulemaking activities, including their priority and schedule, as of December 5, 2018. Of the 81 rulemaking activities listed, 58 are planned rulemaking activities and 23 are petitions for rulemaking that are currently under NRC review. The total rulemaking budget for fiscal year (FY) 2020 includes \$16.6 million and 86 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 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 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 applied to rulemakings appropriately and consistently.

| Item # | Category | Title | CPR Priority | RIN | 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 | 2018 Edition of the American Society of Mechanical Engineers Operations and Maintenance Code | High | 3150-AJ97 | NRC-2017-0028 | N/A | 12/6/2016 | N/A | 4/30/2020 | 5/29/2020 | 2/26/2021 | 6/30/2021 |
| 2 | 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 | 4/30/2020 | 5/29/2020 | 2/26/2021 | 6/30/2021 |
| 3 | Rulemaking Actions | Advanced Boiling-Water Reactor (ABWR) Design Certification Renewal | High | 3150-AK04 | NRC-2017-0090 | N/A | 3/30/2017 | N/A | N/A | N/A | N/A | N/A |
| 4 | Rulemaking Actions | Advanced Power Reactor-1400 (APR14100) Design Certification ⁵ | High | 3150-AJ67 | NRC-2015-0224 | N/A | 3/4/2015 | N/A | 1/8/2019 | 3/8/2019 | 1/8/2019 | 3/8/2019 |

⁵ The NRC will conduct this action using a rulemaking process that allows the NRC to publish a direct final rule and a companion proposed rule in the same issue of the *Federal Register*.

APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

| Item # | Category | Title | CPR Priority | RIN | 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 |
|--------|--------------------|---|--------------|-----------|---------------|------------------------------|----------------------------|-----------------------------------|--------------------------------------|--------------------------------|-----------------------------------|-----------------------------|
| 5 | Rulemaking Actions | American Society of Mechanical Engineers 2015–2017 Code Editions Incorporation by Reference | High | 3150-AJ74 | NRC-2016-0082 | N/A | 7/1/2015 | N/A | 10/5/2018 | 11/9/2018 | 8/30/2019 | 12/20/2019 |
| 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 | 6/3/2019 | 9/2/2019 |
| 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 | 10/1/2019 | 11/1/2019 | 9/1/2020 | 10/1/2020 |
| 8 | Rulemaking Actions | Cyber Security for Fuel Facilities | High | 3150-AJ64 | NRC-2015-0179 | N/A | 3/24/2015 | 4/12/2016 | 10/4/2017 | 3/29/19 | 11/29/2019 | 2/28/2020 |
| 9 | 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 | 9/1/2019 | 9/1/2020 | 2/1/2021 | 12/1/2021 | 5/1/2022 |
| 10 | Rulemaking Actions | Enhanced Security for Special Nuclear Material | High | 3150-AJ41 | NRC-2014-0118 | N/A | 2/8/2006 | 4/22/2015 | 10/31/2018 | 1/15/2019 | 1/15/2020 | 4/29/2020 |
| 11 | 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 | 3/29/2019 | 3/26/2020 | 7/23/2020 | 3/25/2021 | 7/22/2021 |
| 12 | 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 | 1/31/2019 |
| 13 | 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 | 2/28/2019 | 11/29/2019 | 2/28/2020 |
| 14 | Rulemaking Actions | Greater-Than-Class-C and Transuranic Waste | High | 3150-AK00 | NRC-2017-0081 | N/A | 12/22/2015 | 11/5/2019 | N/A | N/A | N/A | N/A |

APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

| Item # | Category | Title | CPR Priority | RIN | 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 |
|--------|--------------------|--|--------------|-----------|---------------|------------------------|----------------------------|-----------------------------------|--------------------------------------|--------------------------------|-----------------------------------|-----------------------------|
| 15 | Rulemaking Actions | Independent Spent Fuel Storage Installation Security Requirements | High | 3150-AI78 | NRC-2009-0558 | PRM-72-6 | N/A | 1/18/2021 | 7/28/2022 | 10/27/2022 | 1/18/2024 | 3/28/2024 |
| 16 | Rulemaking Actions | Industrial Radiographic Operations and Training | High | N/A | NRC-2017-0022 | PRM-34-6 | N/A | N/A | N/A | N/A | N/A | N/A |
| 17 | Rulemaking Actions | Integrated Radioactive Source Security and Accountability | High | N/A | NRC-2015-0094 | PRM-37-1 | N/A | N/A | N/A | N/A | N/A | N/A |
| 18 | Rulemaking Actions | List of Approved Spent Fuel Storage Cask: HI-STORM 100 Multipurpose Canister (MPC) Storage System Certificate of Compliance No. 1014, Amendments No. 11 and No. 12 | High | 3150-AK18 | NRC-2018-0221 | N/A | 9/25/2018 | N/A | 11/20/2018 | 1/17/2019 | 11/20/2018 | 1/17/2019 |
| 19 | 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 |
| 20 | Rulemaking Actions | List of Approved Spent Fuel Storage Casks: NAC International, Inc., NAC-MPC Storage System, CoC No. 1025, Amendment No. 7 & 8 | High | 3150-AK17 | NRC-2018-0220 | N/A | 9/24/2018 | N/A | 11/21/2018 | 1/17/2019 | 11/21/2018 | 1/17/2019 |
| 21 | Rulemaking Actions | List of Approved Spent Fuel Storage Casks: NAC International, Inc., NAC-UMS Storage System, CoC No. 1015, Amendment No. 6 | High | 3150-AK12 | NRC-2018-0075 | N/A | 3/29/2018 | N/A | 9/24/2018 | 10/22/2018 | 9/24/2018 | 10/22/2018 |

APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

| Item # | Category | Title | CPR Priority | RIN | 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 |
|--------|--------------------|---|--------------|-----------|---------------|---|----------------------------|-----------------------------------|--------------------------------------|--------------------------------|-----------------------------------|-----------------------------|
| 22 | Rulemaking Actions | List of Approved Spent Fuel Storage Casks: Transnuclear Inc., Standardized NUHOMS Cask System (Amendment No. 15) | High | 3150-AK16 | NRC-2018-0212 | N/A | N/A | N/A | 11/01/2018 | 11/7/2018 | 11/01/2018 | 11/7/2018 |
| 23 | Rulemaking Actions | List of Approved Spent Fuel Storage Casks: Transnuclear, Inc., Standardized Advanced NUHOMS Storage System, CoC No. 1029, Amendment No. 4 | High | 3150-AK20 | NRC-2018-0265 | N/A | 11/1/2018 | N/A | 12/17/2018 | 1/3/2019 | 12/17/2018 | 1/3/2019 |
| 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 | 6/30/2019 | 9/30/2019 |
| 25 | Rulemaking Actions | Mitigation of Beyond-Design-Basis-Events (MBDBE) | High | 3150-AJ49 | NRC-2014-0240 | PRM-50-96, PRM-50-97, PRM-50-98, PRM-50-100, PRM-50-101, PRM-50-102 | 10/18/2011 | 7/23/2013 | 4/30/2015 | 11/13/2015 | 12/15/2016 | 1/22/2019 |
| 26 | Rulemaking Actions | NuScale Small Modular Reactor Design Certification | High | 3150-AJ98 | NRC-2017-0029 | N/A | 3/23/2017 | 6/23/2020 | 7/18/2020 | 9/3/2020 | 11/6/2020 | 1/8/2021 |
| 27 | 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 | 1/22/2019 |
| 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 | 2/28/2019 | 10/7/2019 | 12/30/2019 |
| 29 | Rulemaking Actions | Revision of Fee Schedules: Fee Recovery for FY 2019 | High | 3150-AJ99 | NRC-2017-0032 | N/A | 10/19/2018 | N/A | 1/12/2019 | 1/30/2019 | 5/12/2019 | 5/30/2019 |
| 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 |

APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

| Item # | Category | Title | CPR Priority | RIN | 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 |
|--------|--------------------|--|--------------|-----------|---------------|------------------------|----------------------------|-----------------------------------|--------------------------------------|--------------------------------|-----------------------------------|-----------------------------|
| 31 | 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 | N/A | N/A | N/A | N/A |
| 32 | Rulemaking Actions | Access Authorization and Fitness-for-Duty Determinations | Medium | 3150-AJ79 | NRC-2016-0145 | N/A | 6/6/2016 | 3/31/19 | 9/18/2019 | 12/31/2019 | 10/30/2020 | 4/30/2021 |
| 33 | Rulemaking Actions | Adjustment of Civil Penalties for Inflation for FY 2019 | Medium | 3150-AK02 | NRC-2017-0088 | N/A | 11/15/2018 | N/A | N/A | N/A | 11/13/2018 | 1/15/2019 |
| 34 | 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 | 11/13/2019 | 1/15/2020 |
| 35 | Rulemaking Actions | Alternative Physical Security Requirements for Advanced Reactors | Medium | 3150-AK19 | NRC-2017-0227 | N/A | 11/19/2018 | 12/2/2019 | 1/29/2021 | 4/29/2021 | 2/28/2022 | 5/28/2022 |
| 36 | Rulemaking Actions | Amendments to Material Control and Accounting Regulations | Medium | 3150-AI61 | NRC-2009-0096 | N/A | 2/5/2009 | N/A | 9/30/2013 | 11/8/2013 | 10/15/2018 | 1/31/2019 |
| 37 | Rulemaking Actions | Decommissioning Financial Assurance for Germanium-68/Gallium-68 Generators Returned to Manufacturers or Distributors | Medium | N/A | NRC-2017-0031 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 38 | 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 | 12/28/2018 | 2/14/2020 | 4/30/2020 |
| 39 | Rulemaking Actions | Financial Qualifications for Reactor Licensing | Medium | 3150-AJ43 | NRC-2014-0161 | N/A | 4/24/2014 | N/A | 3/15/2018 | 1/31/2019 | 6/13/2019 | 9/13/2019 |
| 40 | Rulemaking Actions | Geologic Repository Operations Area (GROA) Fitness-For-Duty Requirements ⁶ | 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 |

⁶ This rulemaking activity is currently on hold. The dates listed are temporary placeholders pending the scheduling of an adjudicatory hearing on the U.S. Department of Energy (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.

APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

| Item # | Category | Title | CPR Priority | RIN | 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 |
|--------|--------------------|--|--------------|-----------|---------------|------------------------|----------------------------|-----------------------------------|--------------------------------------|--------------------------------|-----------------------------------|-----------------------------|
| 41 | Rulemaking Actions | Geologic Repository Operations Area Security and Material Control and Accounting Requirements ⁷ | 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 |
| 42 | Rulemaking Actions | Groundwater Protection In Situ Leach Uranium Recovery Facilities | Medium | 3150-AI40 | NRC-2008-0421 | N/A | 3/24/2006 | N/A | 11/19/2018 | 2/19/2019 | 3/20/2020 | 7/20/2020 |
| 43 | Rulemaking Actions | Incorporation of Lessons Learned From New Reactor Licensing Process (10 CFR Parts 50 and 52 Licensing Process Alignment) | Medium | 3150-AI66 | NRC-2009-0196 | N/A | 9/22/2015 | N/A | N/A | N/A | N/A | N/A |
| 44 | Rulemaking Actions | Institute of Electrical and Electronics Engineers Standard 603 Incorporation by Reference | Medium | N/A | NRC-2018-0046 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 45 | Rulemaking Actions | Items Containing Byproduct Material Incidental to Production | Medium | 3150-AJ54 | NRC-2015-0017 | PRM-30-65 | 8/13/2012 | 2/28/2019 | 2/28/2020 | 5/29/2020 | 5/31/2021 | 8/31/2021 |
| 46 | 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 | N/A |
| 47 | Rulemaking Actions | Modifications to Pressure-Temperature Limits ⁸ | Medium | 3150-AG98 | NRC-2008-0582 | PRM-50-69 | 8/8/2014 | 9/17/2018 | 9/16/2019 | 12/16/2019 | 9/16/2020 | 12/15/2020 |

⁷ 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.

⁸ This rulemaking has been identified for discontinuation based on Commission direction in SRM-SECY-16-0009, "Staff Requirements—SECY-16-0009—Recommendations Resulting from the Integrated Prioritization and Re-Baselining of Agency Activities," dated April 13, 2016.

APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

| Item # | Category | Title | CPR Priority | RIN | 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 |
|--------|--------------------|--|--------------|-----------|---------------|------------------------|----------------------------|-----------------------------------|--------------------------------------|--------------------------------|-----------------------------------|-----------------------------|
| 48 | 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 | 9/21/2018 | 3/18/2019 |
| 49 | Rulemaking Actions | Reactor Vessel Material Surveillance Program Requirements (Appendix H) | Medium | 3150-AK07 | NRC-2017-0151 | N/A | 8/8/2014 | N/A ⁹ | 9/16/2019 | 12/13/2019 | 9/16/2020 | 12/15/2020 |
| 50 | Rulemaking Actions | Receipts-Based Small Business Size Standards | Medium | 3150-AJ51 | NRC-2014-0264 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 51 | Rulemaking Actions | Revision to the NRC's Acquisition Regulation (NRCAR) | Medium | 3150-AJ36 | NRC-2014-0033 | N/A | 6/1/2014 | N/A | 6/1/2019 | 7/1/2019 | 10/1/2019 | 11/1/2019 |
| 52 | Rulemaking Actions | Revisions to Transportation Safety Requirements and Compatibility with International Atomic Energy Agency Transportation Standards | Medium | 3150-AJ85 | NRC-2016-0179 | N/A | 8/19/2016 | 1/29/2019 | 6/30/2019 | 9/30/2019 | 6/30/2020 | 9/30/2020 |
| 53 | Rulemaking Actions | Spent Fuel Cask Certificate of Compliance Format and Content | Medium | N/A | NRC-2014-0067 | PRM-72-7 | N/A | N/A | N/A | N/A | N/A | N/A |
| 54 | Rulemaking Actions | Spent Fuel Reprocessing | 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 |
| 55 | Rulemaking Actions | Updates and Clarifications on the Export of Nuclear Material | Medium | 3150-AJ45 | NRC-2014-0201 | N/A | 9/1/2014 | N/A | 5/31/2019 | 8/31/2019 | 12/3/2019 | 3/4/2019 |
| 56 | Rulemaking Actions | Alternatives to the Use of Credit Ratings | Low | 3150-AJ92 | NRC-2017-0021 | N/A | 9/1/2014 | N/A | N/A | N/A | 4/1/2020 | 8/1/2020 |
| 57 | Rulemaking Actions | Requirement to Submit Complete and Accurate Information | Low | N/A | NRC-2013-0077 | PRM-50-107 | N/A | N/A | N/A | N/A | N/A | N/A |
| 58 | Rulemaking Actions | Update to Fees for Search and Review of Agency Records by NRC Personnel ¹⁰ | Low | 3150-AK06 | NRC-2017-0144 | N/A | 6/12/2017 | N/A | 1/17/2019 | 3/29/2019 | 1/17/2019 | 3/29/2019 |

⁹ The Commission is currently reviewing a staff proposal to expedite this rulemaking, and the NRC will publish a regulatory basis thereafter.

¹⁰ The NRC will conduct this action using a rulemaking process that allows the NRC to publish a direct final rule and a companion proposed rule in the same issue of the *Federal Register*.

APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

| Item # | Category | Title | CPR Priority | RIN | 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 |
|--------|------------------|---|--------------|-----|---------------|------------------------|----------------------------|-----------------------------------|--------------------------------------|--------------------------------|-----------------------------------|-----------------------------|
| 59 | 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 |
| 60 | 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 |
| 61 | 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 |
| 62 | 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 |
| 63 | 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 |
| 64 | Petition Actions | Enhancing Reactor Safety | N/A | N/A | NRC-2011-0189 | PRM-50-99 | N/A | N/A | N/A | N/A | N/A | N/A |
| 65 | 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 |
| 66 | 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 |
| 67 | Petition Actions | Improved Identification Techniques Against Alkali-Silica Concrete Degradation at Nuclear Power Plants | N/A | N/A | NRC-2014-0257 | PRM-50-109 | N/A | N/A | N/A | N/A | N/A | N/A |
| 68 | Petition Actions | In-Core Temperature Monitoring at Nuclear Power Plants | N/A | N/A | NRC-2015-0124 | PRM-50-111 | N/A | N/A | N/A | N/A | N/A | N/A |
| 69 | Petition Actions | Individual Monitoring Devices for Industrial Radiographic Personnel | N/A | N/A | NRC-2016-0182 | PRM-34-7 | N/A | N/A | N/A | N/A | N/A | N/A |
| 70 | Petition Actions | Large Break Loss of Coolant Accident Redefinition | N/A | N/A | NRC-2002-0018 | PRM-50-75 | N/A | N/A | N/A | N/A | N/A | N/A |

APPENDIX F: SUMMARY OF PLANNED RULEMAKING ACTIVITIES

| Item # | Category | Title | CPR Priority | RIN | 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 |
|--------|------------------|--|--------------|-----|---------------|------------------------|----------------------------|-----------------------------------|--------------------------------------|--------------------------------|-----------------------------------|-----------------------------|
| 71 | 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 |
| 72 | 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 |
| 73 | 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 |
| 74 | 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 |
| 75 | 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 |
| 76 | 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 |
| 77 | 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 |
| 78 | 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 |
| 79 | 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 |
| 80 | 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 |
| 81 | 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 G: OBLIGATIONS BY CONTROL POINT

The table below provides the status of the U.S. Nuclear Regulatory Commission's (NRC's) budget allowance and execution data by control points as of the end of fiscal year (FY) 2018 and the available prior-year carryover for allocation.

APPENDIX G: OBLIGATIONS BY CONTROL POINT

**Nuclear Regulatory Commission
Monthly Congressional Status Report
As of September 30, 2018**
(Dollars in Thousands)

| Control Points | FY 2018 Explanatory Statement | | | | Current Year Funds | | | | | | | | |
|--|-------------------------------|------------------|-------------------|-------------|--------------------|-----------------|----------------------------------|-------------------|--------------------------|---------------------------|--------------------------|---------------------------|-------------------------|
| | Enacted | Carryover | Total | | Reprogramming | Current Plan | Carryover Allocated ³ | Total | Current Year Obligations | Current Year Expenditures | Current Year Unobligated | Current Year Unliquidated | Prior Year Unliquidated |
| | | | Carryover | Total | | | | | | | | | |
| Nuclear Reactor Safety (excludes Advanced Reactor Regulatory Infrastructure Activities) ^{1,2} | \$ 448,956 | \$ 7,699 | \$ 456,655 | \$ 0 | \$ 456,655 | \$ 0 | \$ 456,655 | \$ 452,176 | \$ 380,742 | \$ 4,479 | \$ 71,434 | \$ 21,756 | |
| Advanced Reactor Regulatory Infrastructure Activities | 10,000 | 0 | 10,000 | 0 | 10,000 | 0 | 10,000 | 10,460 | 3,191 | 540 | 7,269 | 1,128 | |
| Nuclear Materials and Waste Safety ² | 111,278 | 1,867 | 113,145 | 0 | 113,145 | 0 | 113,145 | 112,884 | 91,195 | 262 | 21,689 | 3,282 | |
| Decommissioning and Low-Level Waste ^{1,3} | 27,518 | 462 | 27,980 | 0 | 27,980 | 0 | 27,980 | 27,134 | 22,690 | 846 | 4,444 | 2,783 | |
| Corporate Support (excludes Office of the Commission) ¹ | 290,556 | 1,301 | 291,857 | 0 | 291,857 | 0 | 291,857 | 291,706 | 179,646 | 151 | 112,060 | 41,916 | |
| Office of the Commission | 5,829 | 3,671 | 9,500 | 0 | 9,500 | 0 | 9,500 | 4,737 | 4,715 | 4,763 | 22 | 0 | |
| Integrated University Program ¹ | \$ 15,000 | \$ 0 | \$ 15,000 | \$ 0 | \$ 15,000 | \$ 615 | \$ 15,615 | \$ 15,546 | \$ 95 | \$ 69 | \$ 15,452 | \$ 27,936 | |
| University Research and Development | 10,000 | 0 | 10,000 | 0 | 10,000 | 0 | 10,000 | 10,596 | 69 | 10 | 10,527 | 19,279 | |
| Nuclear Science & Engineering Grant Program | 5,000 | 0 | 5,000 | 0 | 5,000 | 0 | 5,000 | 4,950 | 25 | 59 | 4,925 | 8,658 | |
| Control Points Total | \$ 909,137 | \$ 15,000 | \$ 924,137 | \$ 0 | \$ 924,137 | \$ 1,615 | \$ 925,752 | \$ 914,643 | \$ 682,275 | \$ 11,109 | \$ 232,369 | \$ 98,801 | |
| Programs | | | | | | | | | | | | | |
| Nuclear Waste Fund | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 101 | 98 | 14 | 3 | 27 | |
| Office of Inspector General | 11,728 | 0 | 11,728 | 0 | 11,728 | 605 | 12,333 | 12,076 | 10,868 | 257 | 1,207 | 142 | |
| OIG DNFSB | 1,131 | 0 | 1,131 | 0 | 1,131 | 329 | 1,460 | 1,193 | 915 | 266 | 278 | 0 | |
| Total Agency | \$ 921,996 | \$ 15,000 | \$ 936,996 | \$ 0 | \$ 936,996 | \$ 2,664 | \$ 939,660 | \$ 928,014 | \$ 694,157 | \$ 11,646 | \$ 233,658 | \$ 98,970 | |

| Funds Source | Prior Year Unobligated Funds | | | |
|---|------------------------------|----------------------------|------------------|---------------------|
| | Beginning Balance | Year to Date Deobligations | Total Carryover | Available Carryover |
| Feebased | \$ 21,770 | \$ 9,408 | \$ 31,178 | \$ 11,329 |
| Special Purpose Funds | \$ 5,659 | \$ 735 | \$ 6,394 | \$ 5,286 |
| Advanced Reactor Regulatory Infrastructure Activities | 1,071 | (22) | 1,049 | 1,000 |
| Office of the Commission | 3,671 | 13 | 3,684 | 3,671 |
| General Fund | 751 | (4) | 747 | 0 |
| Integrated University Program | 156 | 748 | 904 | 675 |
| Official Representation Fund | 10 | 0 | 10 | 10 |
| USAID ⁴ | 0 | 0 | 0 | 0 |
| Feebased & Special Purpose Funds Subtotal | \$ 27,429 | \$ 10,143 | \$ 37,572 | \$ 16,615 |
| Nuclear Waste Fund | 532 | 0 | 532 | 115 |
| Office of Inspector General | 1,852 | 162 | 2,014 | 605 |
| OIG DNFSB | 329 | 1 | 329 | 329 |
| Total Agency | \$ 30,142 | \$ 10,305 | \$ 40,448 | \$ 17,664 |

Note: Numbers may not add due to rounding.

¹The five control points as identified in the FY 2018 Explanatory Statement.

² International activities, \$16,200K as identified in the FY 2018 NRC Salaries and Expenses appropriation, are part of the Nuclear Reactor Safety, Nuclear Materials and Waste Safety, and Decommissioning and Low-Level Waste control points. The NRC has obligated \$15,520K and expended \$12,931K of these funds. The unobligated balance is \$680K and unliquidated obligations are \$2,588K.

³This does not include the \$15,000K of carryover that was authorized for use by the FY 2018 Explanatory Statement.

⁴The Consolidated Appropriations Act, 2018, P.L. 115-141, rescinded the \$68K unobligated balance of funds transferred to NRC from USAID.

APPENDIX H: 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's) 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) 2018, the NRC conducted approximately 2,386 tests of all types. This resulted in three positive drug test results (one for marijuana, one for opiates and codeine, and one for oxycodone) for three individuals. All occurrences were appropriately addressed by the agency.

The NRC also completed internal quality control reviews during FY 2018 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 I: FY 2019 TOTAL BUDGET AUTHORITY COMPARISON

This appendix provides the U.S. Nuclear Regulatory Commission's (NRC's) adjusted FY 2020 Congressional Budget Justification tables to include authorized prior-year carryover data. Consistent with NRC's FY 2019 Congressional Budget Execution Plan, research and licensing activities were funded with the use of authorized prior-year carryover within the Operating Reactors, Spent Fuel Storage and Transportation, Decommissioning and Low-Level Waste, and Corporate Support Business Lines.

Budget Authority and Full-Time Equivalents FY 2019 Total Budget Authority Comparison
(Dollars in Millions)

| Business Line/Major Program | (A) FY 2018 Actuals | | (B) Authorized Carryover | | (C) FY 2019 Enacted | | (D) = B + C FY 2019 Total Budget Authority | | (E) FY 2020 Request | | (F) = E - D Changes from FY 2019 Total Budget Authority | |
|---|---------------------------|----------------|--------------------------------|------------|---------------------------|----------------|---|----------------|---------------------------|----------------|--|---------------|
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Operating Reactors | 367.0 | 1,504.5 | 10.4 | 0.0 | 365.2 | 1,533.0 | 375.6 | 1,533.0 | 361.6 | 1,485.0 | (14.0) | (48.0) |
| New Reactors | 95.7 | 381.2 | 0.0 | 0.0 | 94.1 | 386.0 | 94.1 | 386.0 | 87.8 | 339.0 | (6.3) | (47.0) |
| Nuclear Reactor Safety | \$462.6 | 1,885.7 | \$10.4 | 0.0 | \$459.4 | 1,919.0 | \$469.8 | 1,919.0 | \$449.5 | 1,824.0 | \$(20.3) | (95.0) |
| Spent Fuel Storage and Transportation | 26.0 | 96.6 | 2.4 | 0.0 | 22.5 | 100.0 | 24.8 | 100.0 | 24.2 | 101.0 | (0.7) | 1.0 |
| Nuclear Materials Users | 62.3 | 211.4 | 0.0 | 0.0 | 60.6 | 215.0 | 60.6 | 215.0 | 59.1 | 205.0 | (1.4) | (10.0) |
| Decommissioning and Low-Level Waste | 27.1 | 107.5 | 0.6 | 0.0 | 24.8 | 104.0 | 25.4 | 104.0 | 22.9 | 93.0 | (2.5) | (11.0) |
| High-Level Waste | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 38.5 | 77.0 | 38.5 | 77.0 |
| Fuel Facilities | 24.6 | 107.0 | 0.0 | 0.0 | 23.2 | 96.0 | 23.2 | 96.0 | 21.0 | 88.0 | (2.2) | (8.0) |
| Nuclear Materials and Waste Safety | \$ 140.1 | 523.0 | \$2.9 | 0.0 | \$131.0 | 515.0 | \$134.0 | 515.0 | \$165.7 | 564.0 | \$31.7 | 49.0 |
| Major Program Subtotal | \$602.8 | 2,408.6 | 13.3 | 0.0 | \$590.4 | 2,434.0 | \$603.7 | 2,434.0 | \$615.2 | 2,388.0 | \$11.4 | (46.0) |
| Corporate Support | 296.4 | 594.0 | 6.6 | 0.0 | 292.9 | 609.0 | 299.6 | 609.0 | 292.6 | 611.0 | (7.0) | 2.0 |
| Integrated University Program | 15.5 | 0.0 | 0.0 | 0.0 | 15.0 | 0.0 | 15.0 | 0.0 | 0.0 | 0.0 | (15.0) | 0.0 |
| Subtotal | \$914.7 | 3,002.6 | 20.0 | 0.0 | \$898.4 | 3,043.0 | \$918.4 | 3,043.0 | \$907.8 | 2,999.0 | \$(10.7) | (44.0) |
| Inspector General | 13.3 | 60.8 | 0.0 | 0.0 | 12.6 | 63.0 | 12.6 | 63.0 | 13.3 | 63.0 | 0.7 | 0.0 |
| Total | \$928.1 | 3,063.4 | 20.0 | 0.0 | \$911.0 | 3,106.0 | \$931.0 | 3,106.0 | \$921.1 | 3,062.0 | \$(10.0) | (44.0) |

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

APPENDIX I: FY 2019 TOTAL BUDGET AUTHORITY COMPARISON

| Operating Reactors by Product Line FY 2019 Total Budget Authority Comparison (Dollars in Millions) | | | | | | | | | | | | |
|---|------------------------|----------------|-----------------------------|------------|------------------------|----------------|---|----------------|------------------------|----------------|--|---------------|
| Product Line | (A) FY 2018 Actuals | | (B) Authorized Carryover | | (C) FY 2019 Enacted | | (D) = B + C FY 2019 Total Budget Authority | | (E) FY 2020 Request | | (F) = E - D Changes from FY 2019 Total Budget Authority | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Event Response | 14.4 | 47.0 | 0.0 | 0.0 | 18.0 | 48.0 | 18.0 | 48.0 | 16.9 | 45.0 | (1.1) | (3.0) |
| Generic Homeland Security | 1.6 | 8.7 | 0.0 | 0.0 | 1.6 | 8.0 | 1.6 | 8.0 | 1.6 | 8.0 | (0.0) | 0.0 |
| International Activities | 3.4 | 19.0 | 0.0 | 0.0 | 3.6 | 19.0 | 3.6 | 19.0 | 3.4 | 18.0 | (0.2) | (1.0) |
| Licensing | 75.1 | 384.6 | 0.0 | 0.0 | 82.6 | 376.0 | 82.6 | 376.0 | 78.3 | 372.0 | (4.4) | (4.0) |
| Oversight | 112.6 | 498.2 | 0.0 | 0.0 | 114.2 | 536.0 | 114.2 | 536.0 | 115.5 | 520.0 | 1.3 | (16.0) |
| Research | 62.9 | 122.0 | 10.4 | 0.0 | 47.1 | 133.0 | 57.5 | 133.0 | 53.3 | 128.0 | (4.2) | (5.0) |
| Rulemaking | 8.9 | 40.0 | 0.0 | 0.0 | 9.6 | 47.0 | 9.6 | 47.0 | 7.5 | 38.0 | (2.1) | (9.0) |
| Mission Support and Supervisors | 67.2 | 362.4 | 0.0 | 0.0 | 65.2 | 340.0 | 65.2 | 340.0 | 63.4 | 330.0 | (1.8) | (10.0) |
| Training | 8.1 | 22.6 | 0.0 | 0.0 | 8.9 | 26.0 | 8.9 | 26.0 | 8.7 | 26.0 | (0.2) | 0.0 |
| Travel | 12.9 | 0.0 | 0.0 | 0.0 | 14.3 | 0.0 | 14.3 | 0.0 | 13.0 | 0.0 | (1.4) | 0.0 |
| Total | \$367.0 | 1,504.5 | 10.4 | 0.0 | \$365.2 | 1,533.0 | \$375.6 | 1,533.0 | \$361.6 | 1,485.0 | \$(14.0) | (48.0) |

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

APPENDIX I: FY 2019 TOTAL BUDGET AUTHORITY COMPARISON

Spent Fuel Storage and Transportation by Product Line FY 2019 Total Budget Authority Comparison
(Dollars in Millions)

| Product Line | (A) FY 2018 Actuals | | (B) Authorized Carryover | | (C) FY 2019 Enacted | | (D) = B + C FY 2019 Total Budget Authority | | (E) FY 2020 Request | | (F) = E - D Changes from FY 2019 Total Budget Authority | |
|---------------------------------|---------------------------|-------------|--------------------------------|------------|---------------------------|--------------|---|--------------|---------------------------|--------------|--|------------|
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| International Activities | 0.3 | 1.7 | 0.0 | 0.0 | 0.6 | 2.0 | 0.6 | 2.0 | 0.4 | 2.0 | (0.2) | 0.0 |
| Licensing | 15.5 | 56.9 | 2.4 | 0.0 | 13.7 | 62.0 | 16.1 | 62.0 | 15.5 | 62.0 | (0.6) | 0.0 |
| Oversight | 2.4 | 13.2 | 0.0 | 0.0 | 2.5 | 13.0 | 2.5 | 13.0 | 2.5 | 13.0 | 0.0 | 0.0 |
| Research | 1.7 | 1.9 | 0.0 | 0.0 | 1.0 | 2.0 | 1.0 | 2.0 | 1.1 | 3.0 | 0.1 | 1.0 |
| Rulemaking | 2.5 | 6.2 | 0.0 | 0.0 | 1.1 | 6.0 | 1.1 | 6.0 | 1.1 | 6.0 | 0.0 | 0.0 |
| Mission Support and Supervisors | 3.1 | 16.6 | 0.0 | 0.0 | 2.9 | 15.0 | 2.9 | 15.0 | 2.9 | 15.0 | (0.0) | 0.0 |
| Training | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Travel | 0.5 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.6 | 0.0 | 0.6 | 0.0 | (0.0) | 0.0 |
| Total | \$26.0 | 96.6 | \$2.4 | 0.0 | \$22.5 | 100.0 | \$24.8 | 100.0 | \$24.2 | 101.0 | \$(0.7) | 1.0 |

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

APPENDIX I: FY 2019 TOTAL BUDGET AUTHORITY COMPARISON

| Decommissioning and Low-Level Waste by Product Line FY 2019 Total Budget Authority Comparison (Dollars in Millions) | | | | | | | | | | | |
|--|--------------|----------------------|------------|-----------------|--------------|--------------------------------|--------------|-----------------|-------------|---|---------------|
| (A) | | (B) | | (C) | | (D) = B + C | | (E) | | (F) = E - D | |
| FY 2018 Actuals | | Authorized Carryover | | FY 2019 Enacted | | FY 2019 Total Budget Authority | | FY 2020 Request | | Changes from FY 2019 Total Budget Authority | |
| \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| 0.6 | 3.2 | 0.0 | 0.0 | 1.2 | 6.0 | 1.2 | 6.0 | 0.8 | 4.0 | (0.4) | (2.0) |
| 14.4 | 56.1 | 0.6 | 0.0 | 11.6 | 49.0 | 12.2 | 49.0 | 11.1 | 43.0 | (1.1) | (6.0) |
| 5.4 | 25.0 | 0.0 | 0.0 | 5.4 | 25.0 | 5.4 | 25.0 | 5.1 | 24.0 | (0.3) | (1.0) |
| 1.3 | 2.0 | 0.0 | 0.0 | 0.5 | 1.0 | 0.5 | 1.0 | 0.5 | 1.0 | (0.0) | 0.0 |
| 0.9 | 4.2 | 0.0 | 0.0 | 1.8 | 9.0 | 1.8 | 9.0 | 1.6 | 8.0 | (0.2) | (1.0) |
| 3.3 | 17.0 | 0.0 | 0.0 | 2.6 | 14.0 | 2.6 | 14.0 | 2.4 | 13.0 | (0.2) | (1.0) |
| 0.7 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.8 | 0.0 | 0.6 | 0.0 | (0.2) | 0.0 |
| 0.6 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 0.9 | 0.0 | 0.7 | 0.0 | (0.2) | 0.0 |
| \$27.1 | 107.5 | \$0.6 | 0.0 | \$24.8 | 104.0 | \$25.4 | 104.0 | \$22.9 | 93.0 | \$(2.5) | (11.0) |

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

APPENDIX I: FY 2019 TOTAL BUDGET AUTHORITY COMPARISON

Corporate Support by Product Line FY 2019 Total Budget Authority Comparison
(Dollars in Millions)

| Product Line | (A) | | (B) | | (C) | | (D) = B + C | | (E) | | (F) = E - D | |
|---------------------------|-----------------|----------------------|-----------------|--------------------------------|-----------------|---|-----------------|---|----------------|--------------|----------------|------------|
| | FY 2018 Actuals | Authorized Carryover | FY 2019 Enacted | FY 2019 Total Budget Authority | FY 2019 Request | Changes from FY 2019 Total Budget Authority | FY 2019 Request | Changes from FY 2019 Total Budget Authority | | | | |
| | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE | \$M | FTE |
| Acquisitions | 14.6 | 51.2 | 0.0 | 0.0 | 15.6 | 54.0 | 15.6 | 54.0 | 15.2 | 51.0 | (0.5) | (3.0) |
| Administrative Services | 89.8 | 73.6 | 4.0 | 0.0 | 85.5 | 76.0 | 89.5 | 76.0 | 89.3 | 78.0 | (0.2) | 2.0 |
| Financial Management | 34.0 | 99.9 | 0.0 | 0.0 | 32.2 | 99.0 | 32.2 | 99.0 | 29.7 | 96.0 | (2.5) | (3.0) |
| Human Resource Management | 19.2 | 48.0 | 0.0 | 0.0 | 17.7 | 44.0 | 17.7 | 44.0 | 22.9 | 44.0 | 5.2 | 0.0 |
| IT/IM Resources | 107.4 | 179.1 | 2.6 | 0.0 | 104.9 | 174.0 | 107.6 | 174.0 | 97.9 | 179.0 | (9.7) | 5.0 |
| Outreach | 3.5 | 13.0 | 0.0 | 0.0 | 3.3 | 13.0 | 3.3 | 13.0 | 3.2 | 13.0 | (0.1) | 0.0 |
| Policy Support | 22.8 | 115.6 | 0.0 | 0.0 | 29.3 | 136.0 | 29.3 | 136.0 | 30.3 | 137.0 | 0.9 | 1.0 |
| Training | 5.2 | 13.6 | 0.0 | 0.0 | 4.3 | 13.0 | 4.3 | 13.0 | 4.2 | 13.0 | (0.2) | 0.0 |
| Total | \$296.4 | 594.0 | \$6.6 | 0.0 | \$292.9 | 609.0 | \$299.6 | 609.0 | \$292.6 | 611.0 | \$(7.0) | 2.0 |

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

APPENDIX J: 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.

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 efficiently and effectively. 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.

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.

Salaries and Benefits

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

APPENDIX K: ACRONYM LIST

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

ABWR: Advanced Boiling-Water Reactor

AEC: Atomic Energy Commission

AEA: Atomic Energy Act

AIT: Augmented Inspection Team

AO: Abnormal Occurrence

AP: Advanced Passive

APWR: Advanced-Pressurized Water Reactor

APR: Advanced Power Reactor

ASP: Accident Sequence Precursor

CBJ: Congressional Budget Justification

CISF: Consolidated Interim Storage Facility

CoC: Certificate of Compliance

COL: Combined License

CRCPD: Conference of Radiation Control Program Directors

DC: Design Certification

DNFSB: Defense Nuclear Facilities Safety Board

DOE: U.S. Department of Energy

DOJ: U.S. Department of Justice

EA: Environmental Assessment

EDO: Executive Director for Operations

EPR: Evolutionary Power Reactor

ESP: Early Site Permit

FEVS: Federal Employee Viewpoint Survey

APPENDIX K: ACRONYM LIST

FISMA: Federal Information Security Management Act

FITARA: Federal Information Technology Acquisition Reform Act

FTE: Full-Time Equivalent

FY: Fiscal Year

GL: Generic Letter

GPRA: Government Performance and Results Act of 1993

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

HQ: Headquarters

IAEA: International Atomic Energy Agency

IM: Information Management

IMC: Inspection Manual Chapter

IMPEP: Integrated Materials Performance Evaluation Program

IOAA: Independent Offices Appropriation Act of 1952

IRRS: Integrated Regulatory Review Service

ISFSI: Interim Spent Fuel Storage Installation

ISG: Interim Staff Guidance

ISR: In situ recovery

IT: Information Technology

ITAAC: Inspections, Tests, Analyses, and Acceptance Criteria

ITISS: IT Infrastructure Services and Support

LER: Licensee Event Report

LLW: Low-Level Waste

LWR: Light-Water Reactor

LLWR: Large Light-Water Reactor

MBDBE: Mitigation of Beyond-Design-Basis Events

MFFF: Mixed-Oxide Fuel Fabrication Facility

mSQP: Modified Small Quantities Protocol

NMED: Nuclear Materials Event Database

NMIP: Nuclear Materials Information Program

NRC: 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

PL: Public Law

RIS: Regulatory Issue Summary

ROP: Reactor Oversight Process

S&E: Salaries and Expenses

SLR: Subsequent License Renewal

SMR: Small Modular Reactor

SNF: Spent Nuclear Fuel

SNM: Special Nuclear Material

UMTRCA: Uranium Mill Tailings Radiation Control Act

U.S.: United States

USC: United States Code

WBL: Web-Based Licensing

WIR: Waste Incidental to Reprocessing

BIBLIOGRAPHIC DATA SHEET

(See instructions on the reverse)

2. TITLE AND SUBTITLE
United States Nuclear Regulatory Commission
Congressional Budget Justification Fiscal Year 2020

3. DATE REPORT PUBLISHED

| MONTH | YEAR |
|-------|------|
| March | 2019 |

4. FIN OR GRANT NUMBER

5. AUTHOR(S)
Linda Yee, et. al.

6. TYPE OF REPORT

7. PERIOD COVERED (Inclusive Dates)

8. PERFORMING ORGANIZATION - NAME AND ADDRESS (if NRC, provide Division, Office or Region, U. S. Nuclear Regulatory Commission, and mailing address; if contractor, provide name and mailing address.)

Division of Planning and Budget
Office of the Chief Financial Officer
U.S. Nuclear Regulatory Commission
Washington, DC 20555

9. SPONSORING ORGANIZATION - NAME AND ADDRESS (If NRC, type "Same as above", if contractor, provide NRC Division, Office or Region, U. S. Nuclear Regulatory Commission, and mailing address.)

10. SUPPLEMENTARY NOTES

11. ABSTRACT (200 words or less)

The U.S. Nuclear Regulatory Commission's performance plan sets annual goals with measurable target levels of performance and is issued each year with the agency's Congressional Budget Justification.

12. KEY WORDS/DESCRIPTORS (List words or phrases that will assist researchers in locating the report.)

FY 2020 CBJ
FY 2020 Green Book
FY 2020 Congressional Budget Justification

13. AVAILABILITY STATEMENT
unlimited

14. SECURITY CLASSIFICATION
(This Page)
unclassified

(This Report)
unclassified

15. NUMBER OF PAGES

16. PRICE



**United States Nuclear Regulatory Commission
Office of the Chief Financial Officer**

NUREG-1100, Volume 35
March 2019



