NUCLEAR REGULATORY COMMISSION

Changes Planned to Budget Structure and Justification
NRC is an independent agency that regulates civilian uses of nuclear materials in the United States. From fiscal years 2005 to 2010, NRC’s budget and workforce increased by about 59 percent and about 27 percent, respectively, in anticipation of growth in the commercial nuclear industry. When this growth did not occur, NRC made plans to reduce its budget and workforce. However, Congress and licensees—the companies regulated by NRC—have expressed confusion about the annual budget request for NRC, and they say they cannot determine specifically how NRC plans to spend its appropriations.

The explanatory statement accompanying the Consolidated Appropriations Act, 2016, included a provision for GAO to review NRC’s budget formulation process. This report examines (1) how NRC formulates its budget and how its budget structure changed for fiscal years 2010 through 2017, (2) the extent to which NRC’s budget justification aligns with its budget execution and reflects the agency’s use of funds for prior years. NRC reviewed NRC documentation, interviewed NRC and Office of Management and Budget staff, and interviewed a nongeneralizable sample of 13 industry stakeholders and 1 non-industry stakeholder. GAO also analyzed NRC budget and obligation data to assess trends from fiscal years 2010 through 2015.

What GAO Recommends

GAO is not making recommendations. NRC generally agreed with GAO’s findings.
Abbreviations

BFS  Budget Formulation System
FAIMIS Financial Accounting and Integrated Management Information System
FTE  Full-time equivalent
NRC  Nuclear Regulatory Commission
OMB  Office of Management and Budget

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March 8, 2017

The Honorable Lamar Alexander  
Chairman  
The Honorable Dianne Feinstein  
Ranking Member  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States Senate

The Honorable Mike Simpson  
Chairman  
The Honorable Marcy Kaptur  
Ranking Member  
Subcommittee on Energy and Water Development, and Related Agencies  
Committee on Appropriations  
House of Representatives

The U.S. Nuclear Regulatory Commission (NRC) is an independent agency established to regulate civilian uses of nuclear materials for commercial, industrial, medical, and academic purposes in the United States. From fiscal years 2005 to 2010, NRC’s budget and workforce increased by about 59 percent and about 27 percent, respectively.\(^1\) The increase in budget and workforce that NRC experienced occurred largely in response to the anticipated growth of the commercial nuclear industry, referred to as the “nuclear renaissance;” and was aided by the passage of the Energy Policy Act of 2005, which included tax incentives to promote additional nuclear energy development. As a result, NRC expected a substantial increase in workload due to a projected large number of applications for new nuclear power plants, among other things. In preparation for this anticipated increase, NRC’s budget authority grew from $669 million in fiscal year 2005 to more than $1 billion in fiscal year 2010. Similarly, its workforce grew from about 3,100 full-time equivalent (FTE) employees to almost 4,000 FTEs over the same period.\(^2\) By 2011,

\(^1\)The increases in NRC’s budget and workforce are calculated based on data from NRC’s Congressional budget justifications for fiscal years 2006 and 2011.

\(^2\)FTEs reflect the total number of regular straight-time hours (i.e., not including overtime or holiday hours) worked by employees divided by the number of compensable hours applicable to each fiscal year. For a glossary of federal budgeting terms and definitions, see GAO, A Glossary of Terms Used in the Federal Budget Process, GAO-05-734SP (Washington, D.C.: September 2005).
however, it became clear that the nuclear renaissance had not materialized for a variety of reasons, including low prices of natural gas and concerns about the safety of nuclear power plants. Additionally, concerns have been raised about nuclear waste generated by nuclear power plants.

After the growth in the commercial nuclear industry did not materialize, NRC established Project Aim in June 2014 to develop plans to establish clearer agency-wide priorities, align the agency’s budget and workforce with its new workload, streamline agency processes, and better position the agency to respond to changes in external conditions in an agile and flexible manner. Specifically, NRC projected that it could meet industry demand for licensing and other regulatory services in 2020 by reducing its workforce and budget by 10 percent and by adjusting its workforce composition to resemble its composition in 2005. Nevertheless, NRC’s budget authority has declined little since fiscal year 2010 from about $1.07 billion in fiscal year 2010 to about $1.00 billion in fiscal year 2016—a decrease of about 6 percent. NRC is required by law to collect approximately 90 percent of its budget authority through regulatory user fees assessed to companies that hold an NRC license—referred to as licensees—and to license applicants. Congress and licensees have expressed confusion about the annual budget request for NRC and have said they cannot determine specifically how NRC plans to spend its appropriations. For example, the explanatory statement accompanying the Consolidated Appropriations Act, 2016 stated that NRC’s budget presentation lacks transparency and that improvements in NRC’s budget allocation and presentation process are needed and could lead to better justifications to Congress.

To formulate its annual budget, NRC prepares a Congressional Budget Justification (budget justification) that provides Congress with estimates and other information that support the policies and proposed spending decisions represented in the President’s budget request, including

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4Section 4 of the Consolidated Appropriations Act, 2016, Pub. L. No. 114-113 (2015), provides that the explanatory statement accompanying the act and printed in the Congressional Record shall have the same effect as if it were a joint explanatory statement of a committee of conference.
information on what NRC plans to achieve with the resources requested.\(^5\)

After Congress enacts appropriations providing NRC’s budget authority for the fiscal year, NRC enters the budget execution phase during which the budget authority is available for obligation. During the budget execution process, OMB provides apportionments of funds, usually on a quarterly basis, to federal agencies to make money available for use. NRC allocates these appropriated funds to its offices, which obligate them to carry out the agency’s mission.

The explanatory statement accompanying the Consolidated Appropriations Act, 2016, included a provision for GAO to review NRC’s budget formulation process. This report examines (1) how NRC formulates its budget and how its budget structure changed for fiscal years 2010 through 2017 and (2) the extent to which NRC’s budget justification aligns with its budget execution and reflects the agency’s use of funds for prior years.

To examine how NRC formulates its budget and how its budget structure changed for fiscal years 2010 through 2017, we reviewed NRC documentation, such as the agency’s budget justifications from fiscal years 2010 through 2017, as well as guidance, policy documents, and reports from NRC’s Inspector General. In addition, we reviewed federal laws, regulations, and guidelines relevant to agency budgeting, such as OMB Circular A-11. We also interviewed NRC and OMB staff to determine NRC’s budget formulation process and gather information about OMB’s review of the budget request for NRC. In addition, we conducted interviews with a nongeneralizable sample of 13 industry stakeholders, including 8 large licensees, 2 small licensees, and 3 industry trade organizations, and 1 non-industry stakeholder.\(^6\) We selected the licensees from each of NRC’s nine fee classes that were assessed the highest total amount of fees from fiscal years 2011 to 2015, based on data provided by NRC’s Financial Accounting and Integrated Management Information System (FAIMIS). We also randomly selected small licensees based on data provided by NRC staff on small entity fee adjustments. We assessed the reliability of these data by reviewing documentation about the system and interviewing NRC staff who were

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\(^5\)Agencies are generally required to prepare a budget justification under Office of Management and Budget (OMB), *Circular No. A-11, Preparation, Submission, and Execution of the Budget* (Washington, D.C.: June 2015).

\(^6\)Data collected are anecdotal and are not generalizable to all of NRC’s licensees or other stakeholders.
knowledgeable about the system. We sent these NRC staff written questions on the reliability of the system and reviewed their written responses. We found the data to be sufficiently reliable for the purpose of selecting licensees to interview. We made a nongeneralizable selection of industry trade organizations to interview that represented a variety of interests. We attempted to identify potential non-industry stakeholders, but were only able to identify and interview one group representing scientists.

To examine how NRC’s budget justification aligns with its budget execution and how it reflects the agency’s use of funds for prior years, we reviewed NRC’s budget justification and budget execution information. We combined and analyzed budget request and enacted budget data from NRC’s budget justifications from fiscal years 2010 through 2017. We then analyzed two sets of data on budget execution and obligation that we obtained from NRC. Specifically, we analyzed budget execution data from FAIMIS, and actual obligation data that NRC provided us from fiscal years 2010 through 2015, the last completed fiscal year at the time of our request. In addition to the previously discussed assessment of the reliability of NRC’s FAIMIS, we assessed the reliability of these calculations by conducting interviews with the NRC officials who performed the calculations, as well as by reviewing NRC staff’s written responses to additional questions on data reliability. Based on the answers provided, we determined these data to be sufficiently reliable for the purposes of determining trends in NRC’s budget authority and actual obligations from fiscal years 2010 through 2015. We also analyzed budget justifications of 60 agencies for fiscal year 2015 to determine the extent to which federal agencies provided data on actual obligations. We chose these agencies based on the requirement that they comply with the Chief Financial Officers Act of 1990, which reformed federal financial management for 23 (now 24) statutorily designated departments and agencies, including NRC.7 The Departments of Commerce, Health and Human Services, and the Interior do not submit an overall department-wide justification. Instead, each of the agencies under these departments submit individual budget justifications. For the purposes of this analysis, we reviewed these agency-level budget justifications.

We conducted this performance audit from March 2016 to March 2017 in accordance with generally accepted government auditing standards.

Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

This section discusses NRC’s organizational structure, NRC’s budget structure, the federal budget formulation process, and NRC’s budget control process.

NRC’s Organizational Structure

NRC was established by the Energy Reorganization Act of 1974 and is headed by five commissioners, who are collectively referred to as the Commission, with members appointed by the President and confirmed by the Senate. The President designates one commissioner to serve as the Chair and official spokesperson of the Commission and NRC.8 The Commission as a whole formulates policies and regulations governing nuclear reactor and materials safety, issues orders to licensees, and adjudicates matters brought before it. The Commission is also responsible for, among other things, (1) approving proposals for the reorganization of the major offices within the Commission, (2) revising budget estimates and determining the distribution of appropriated funds according to major programs and purposes, and (3) approving changes to management directives directly related to policy formulation or the functions of the commissioners.

The Executive Director for Operations carries out the policies and decisions of the Commission and directs the activities of 15 offices to ensure that the commercial use of nuclear materials in the United States is conducted in a safe manner. These offices include those based in headquarters, such as the Office of New Reactors, as well as four regional offices; all these offices together conduct the agency’s regulatory development, licensing, inspection, enforcement, and emergency response programs, among other things. In addition, the Chief Financial Officer leads the agency’s budget formulation and execution processes. Furthermore, some of NRC’s offices are designated as “lead offices” and play a key role in developing the agency’s budget requests.

NRC’s Budget Structure

NRC’s budget structure, which differs from its office-based organizational structure described above, is currently grouped by program, business line, product line, and product (see fig. 1). For fiscal year 2017, NRC’s two overarching programs are Nuclear Reactor Safety and Nuclear Materials and Waste Safety. Under these programs, six business lines relate to key regulatory groups of licensees. In addition, the Corporate Support business line is responsible for agencywide support activities, which include acquisitions, administrative services, financial management, human resource management, information management, information technology, outreach, policy support, and associated training and travel. The Corporate Support business line supports all of the programmatic business lines, and Corporate Support costs are allocated across the other business lines in NRC’s budget. Under NRC’s business lines, product lines are categories of agency work functions that contain products—which are key tasks that have notable resources assigned and which represent the outputs of activities. The product line and product structures are similar across the business lines. For example, as shown in figure 1, each of the business lines other than Corporate Support have product lines for Licensing, Oversight, Rulemaking, and International Activities.

9As discussed later in this report, for fiscal year 2016, the explanatory statement included budgetary classifications referred to as control points that limit NRC’s obligations and provide additional transparency to NRC’s budget execution process. These control points include, but are not limited to, its two programs.
The fiscal year 2017 budget request for NRC was $970 million (see fig. 2). The largest business line was Operating Reactors; with associated Corporate Support costs included, this business line accounted for 61 percent of the budget request. Figure 2 shows the fiscal year 2017 budget request for NRC by business line—associated Corporate Support costs are included in each of the other business lines. Collectively, these
Corporate Support portions accounted for 33 percent of the budget request.

Figure 2: Fiscal Year 2017 Budget Request for the Nuclear Regulatory Commission by Business Line

![Bar chart showing the budget request for different business lines](chart)

Source: Nuclear Regulatory Commission's fiscal year 2017 budget justification. | GAO-17-294

Note: Corporate Support is a business line within NRC's budget structure. However, in NRC's budget justifications, Corporate Support costs are allocated across the programmatic business lines they support.

The Federal Budget Formulation Process

The federal budget formulation process is set by law, according to which the President is to submit a budget request to Congress by the first Monday in February for the fiscal year starting the following October 1. For example, in February 2016, the President submitted the budget request for fiscal year 2017, which runs from October 1, 2016, through September 30, 2017. Figure 3 shows the federal budgeting process that most agencies, including NRC, follow. Detailed guidance for preparing
budget submissions is included in OMB Circular A-11, which OMB typically revises each year.

Figure 3: Federal Budget Formulation Process

The term “agency” refers to either the department, agency, or lower component levels, depending on the level of decision being made. The budget submitted to OMB represents the budget decisions made at the department level or the highest organizational level.

Source: GAO-05-734SP, Appx. 2. | GAO-17-294
Although federal funding may be available for an agency to obligate for one year, multiple years, or until expended (referred to as “no-year”), only unobligated multi-year or no-year funds may be carried over from one fiscal year to the next. Generally, NRC’s appropriations are available until expended. In any given year, the total budgetary resources available to an agency consist of unobligated funds—amounts that have not yet been obligated—carried forward from previous years, if applicable, plus new budget authority for that fiscal year.

### NRC’s Budget Control Process

In order to comply with fiscal statutes, federal agencies must establish an effective budget control process to ensure that obligations or expenditures do not exceed amounts available for obligation. In addition, the explanatory statement accompanying the Consolidated Appropriations Act, 2016, directs NRC to limit its obligation levels in four areas, referred to as control points, in order to provide additional transparency to NRC’s budget execution process. The four control points apply to NRC’s two programs, one business line that is treated separately, and an additional program that is not part of NRC’s budget structure. For the control points that apply to NRC’s programs and business lines, the explanatory statement includes limits on how much funding can be used for Corporate Support costs associated with these programs and business lines. Specifically, the four control points are:

- **Nuclear Reactor Safety**—just more than $760 million; no more than about $258 million of this amount may be used for Corporate Support. This control point includes the Operating Reactors and New Reactors business lines, which are within the Nuclear Reactor Safety program.

- **Nuclear Materials and Waste Safety**—just more than $172 million; no more than about $58 million of this amount may be used for Corporate Support. This control point includes the Fuel Facilities, Nuclear Materials Users, and Spent Fuel Storage and Transportation business lines.

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11As described earlier, NRC assesses regulatory user fees to licensees and license applicants and is required by law to collect approximately 90 percent of its budget authority through these fees. For example, the total amount of fees that NRC was required to collect in fiscal year 2005 was about $538 million, which increased to about $911 million in 2010, an increase of about 69 percent. The total amount NRC needed to collect in fees from licensees decreased to $833 million in 2016, a decrease of about 3 percent from 2010. These numbers are not adjusted for inflation. For more information, see GAO, *Nuclear Regulatory Commission: Regulatory Fee-Setting Calculations Need Greater Transparency*, GAO-17-292 (Washington, D.C.: Feb. 2, 2017).
Decommissioning and Low-Level Waste—almost $43 million; no more than about $15 million of this amount may be used for Corporate Support. This control point is for the Decommissioning and Low-Level Waste business line within the Nuclear Materials and Waste Safety program.

Integrated University Program—$15 million. The Integrated University Program, among other things, provides grants to support research projects that do not align with programmatic missions but that are critical to maintaining the discipline of nuclear science and engineering. This program is not included in the budget request for NRC, but receives appropriations from Congress.

NRC Formulates Its Budget Based on Estimates from Its Offices, and Its Budget Structure Changed Twice from Fiscal Years 2010 through 2017

NRC formulates its agencywide budget based on estimates developed by its nine lead offices. NRC’s budget formulation process covers 2 fiscal years—the budget year and the following fiscal year—and is divided into internal and external budget processes. NRC’s internal budget process, as shown in steps 1 through 3 of figure 4, consists of all milestones and activities internal to the agency for developing the budget and submitting it to OMB. During this process, NRC’s lead offices follow planning guidance issued by NRC’s management, and they use historical data and workload estimates, among other things, to develop budget requests for each of NRC’s business lines. Next, the offices work with the Chief Financial Officer, the Executive Director for Operations, and Deputy Executive Directors for Operations to aggregate this information into an agencywide budget, which is reviewed by the Chairman and the Commission and submitted to OMB. The external budget process, as shown in step 4 of figure 4, consists of all milestones and activities outside of NRC that are associated with the review of NRC’s budget by OMB and the subsequent review of the President’s budget request for NRC by Congress.

12As discussed above, lead offices play a key role in the development of budget requests for the agency. NRC’s lead offices are the Office of Nuclear Reactor Regulation, Office of New Reactors, Office of Nuclear Material Safety and Safeguards, Office of Administration, Office of the Chief Financial Officer, Office of the Chief Human Capital Officer, Office of the Chief Information Officer, Office of International Programs, and Office of Small Business and Civil Rights.
The first major step in NRC’s budget formulation is the development of guidance (see fig. 4). The Chief Financial Officer and the Executive Director for Operations propose high-level planning guidance and submit it to NRC’s Chairman. This guidance is informed by NRC’s Strategic Plan and is intended to provide NRC staff direction on workload priorities. The Chairman reviews the proposed guidance and sends it to the Commission for approval. The Chief Financial Officer and Executive Director for
Operations also issue annual budget instructions on how the lead offices should formulate their budget estimates. According to NRC, these instructions provide financial analyses and communicate any major changes in the budget formulation process from prior years.

The second major step in NRC’s budget formulation process is the development of business line estimates and budget requests by NRC’s lead offices (see fig. 4). For the purposes of budget formulation, NRC treats Corporate Support product lines as similar to its other business lines, meaning lead offices develop estimates and budget requests for all business lines and Corporate Support product lines. To develop their business line budget requests, NRC’s lead offices use prior-year execution data and workload estimates based on anticipated changes and projections for new or changing work. According to NRC staff we interviewed, lead offices base workload estimates on many different factors, including their assessment of the industry’s stability; the effect of regulatory activities and industry events, such as the nuclear disaster in Fukushima, Japan, in 2011; and information obtained from industry outreach, such as when applicants plan to submit license applications to the agency. NRC also makes use of agencywide and office-specific planning tools to develop budget requests. For example, NRC staff told us that they use a common reporting template every year to develop their budget request, and that some of the charts and narrative language in this template can be populated directly from NRC’s budget formulation system. NRC also has an internal site for budget development that maintains much of its budget information from previous years. In addition, the Office of New Reactors uses a table to track spending by project and conducts monthly resource planning.

Following the development of business line budget requests, the third major step in NRC’s budget formulation involves the development of an agencywide budget and review by NRC’s management (see fig. 4). Specifically, once the lead offices have developed their budget requests, they submit the requests to the Office of the Chief Financial Officer, which coordinates the assembly of an agencywide draft budget and provides the draft to the Chief Financial Officer, Executive Director for Operations, and the Deputy Executive Directors for Operations. The budget decisions and recommendations are forwarded to NRC’s Chairman. The Chairman then

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13 Although this event took place outside the United States, it affected how NRC decided to respond to mandated safety upgrades in the U.S. operating reactor fleet.
reviews the staff’s budget, modifies it as needed, and submits the proposed Chairman’s budget to the full Commission for review, analysis, and approval. After the Commission’s review, the Chief Financial Officer works with the Executive Director for Operations and the nine lead offices to finalize the budget information and complete other documentation required for the Chairman to submit the budget to OMB. The form and content of the document are specified in OMB Circular A-11 and other supplementary guidance provided by OMB.

The fourth major step in NRC’s budget formulation process involves NRC obtaining external review from OMB to finalize its budget and submitting this finalized budget to Congress (see fig. 4). After OMB’s initial review of the budget to ensure quality and consistency with the President’s national program policies and objectives, OMB returns the budget to NRC with adjustments, if needed. Upon receipt of the initial feedback, NRC’s Chief Financial Officer and Executive Director for Operations provide a memorandum to the Commission summarizing OMB’s decision. The Commission votes on whether to appeal OMB’s initial decision; however, after the resolution of any such appeal, NRC must use OMB’s final decision to prepare a budget justification that is submitted to Congress for review.

From fiscal years 2010 through 2017, NRC made two major changes to how it organized its budget structure; NRC staff told us these changes were intended to improve the transparency of the full costs of NRC’s activities. The first change, which NRC implemented in two phases in its fiscal years 2011 and 2012 budget requests, contributed to increased congressional scrutiny of NRC costs. NRC intended to address these concerns as part of its second budget structure change, which the agency implemented starting with the fiscal year 2016 budget request for NRC and completed in the fiscal year 2017 request. Figure 5 shows the three different budget structures NRC used to organize its budget from fiscal years 2010 through 2017. According to NRC staff and as described below, the changes reflected a top-to-bottom overhaul of the agency’s budget structure hierarchy, as well as reclassifications of the agency’s overhead costs.

14According to NRC, quality measures include adjustments made for inflation, accounting of FTE costs, and compliance with performance measures.
NRC’s budget structure in fiscal year 2010 consisted of programs, subprograms, major drivers, and planned activities, which was the same budget structure the agency used before it began implementing changes in fiscal year 2011. NRC staff told us that in fiscal year 2010, the agency budgeted for mission support activities, such as administrative support for programs and mission-related travel, within its Reactors and Materials programs and budgeted for agencywide support activities, such as human resources, within the Management and Support sub-program. However, resources budgeted for mission support activities were commingled with other program resources and were not specifically identified as overhead. According to NRC, this budget structure did not allow for sufficient tracking or understanding of mission support costs during the agency’s growth period in preparation for the anticipated nuclear renaissance.

In an attempt to streamline its budget structure and make it more transparent for users of the budget, NRC adopted a new budget structure for fiscal years 2011 and 2012. NRC staff described this change as organizing the budget into broad functional categories—programs,
business lines, product lines, and products—and reducing the number of sub-categories. In addition, NRC renamed Management and Support as Corporate Support, a business line that included agencywide support activities. NRC also created a new business line, Office Support, which included all mission support activities as well as top-level management, administrative assistants, and other office support staff who work in the program mission areas. According to NRC staff, no personnel changes were made as a result of this reorganization. Although NRC’s budget structure changes made it easier to track mission support activities because they were grouped together under Office Support, according to NRC staff, this change had the unintended consequence of appearing to significantly increase NRC’s overhead costs. Mission support costs, which were previously considered programmatic costs, were being treated as if they were overhead in the newly created Office Support business line. Furthermore, despite an NRC initiative to decrease overhead costs and duplication of work in fiscal year 2012, NRC told us that actual overhead costs increased each year from fiscal years 2011 to 2015 due to increases in rent, utilities, and information technology investments, among other things.

NRC’s budgets for fiscal years 2016 and 2017 reflect changes the agency made over these two years in response to congressional concerns about increased overhead costs. The explanatory statement that accompanied the Appropriations Act for fiscal year 2015 appropriations directed NRC to engage a third party to recommend ways it could reduce corporate support requirements and improve the efficiency of the Commission’s internal processes. To conduct this review, NRC hired a consultant, which issued a report in April 2015. The report concluded that, although there is no standard government-wide definition for mission support, other agencies do not separate out resources for mission support activities from program costs, nor do they make a budgetary distinction between mission

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15Although Office Support and Corporate Support included many of the same categories of activities—such as human resources, information technology, and travel—Office Support activities supported individual mission programs while Corporate Support activities were centrally managed and supported the entire agency.

16Section 4 of the Consolidated and Further Continuing Appropriations Act, 2015, Pub. L. No. 113-235 (2014), provided that the explanatory statement accompanying the act and printed in the Congressional Record shall have the same effect as if it were a joint explanatory statement of a committee of conference.

support and agencywide support activities. The report also found that by moving mission support activities back to mission programs, NRC would more accurately represent mission support and agencywide support costs, resulting in a 13.5 percent reduction in costs categorized as agency overhead. This reduction would not represent a decrease in total costs but instead a shift in how funding is budgeted from Office Support to the other business lines.

Based on the consultant’s findings, NRC changed its budget structure to present a budget more comparable with other federal agencies. NRC also eliminated the Office Support business line and returned these mission support costs activities to the mission programs. These changes preserved the general budget structure categories developed in fiscal years 2011 and 2012 but returned to the treatment of mission support activities seen in NRC’s fiscal year 2010 budget structure. For the fiscal year 2017 budget request, NRC staff told us that they budgeted for mission support costs in a dedicated product line within the program business lines so that NRC can track these costs by business line. Fiscal year 2017 was just beginning as we finished our audit work for this report, so it was too early to determine whether the budget structure changes made in the requests for fiscal year 2016 through 2017 improved transparency or lowered overhead costs.

During the budget structure changes from fiscal years 2010 through 2017, NRC’s primary budget formulation guidance was not up to date. Prior to updating Management Directive 4.7 in August 2016, NRC had not updated its budget formulation guidance for nearly 30 years. Several changes occurred in the period from 1989—when the original Management Directive 4.7 was issued—to 2016 that necessitated updates to the budget formulation management directive. For example, Congress passed multiple laws that changed how all federal agencies must formulate or report their budget or financial information, including the Chief Financial Officers Act of 1990 and the Government Performance and Results Act of 1993. In addition, according to NRC staff, NRC’s budget structure changes led to a shift in budget formulation by business line, rather than by offices. NRC also streamlined its budget formulation process, according to NRC staff, by creating high-level planning guidance and eliminating certain reports and review meetings.

the absence of an up-to-date management directive on budget formulation, NRC staff told us that the Chief Financial Officer and Executive Director for Operations communicated important changes in budget procedures to staff through annual budget instructions and used Commission internal procedures and guidance in OMB Circular A-11 to make structural changes. In 2016, NRC issued Management Directive 1.1 that requires all management directives to be reviewed every 5 years and to be either certified as still relevant or updated.\textsuperscript{19} This directive is being addressed by NRC’s Office of Administration, which, according to NRC staff, has developed a system to alert the responsible offices to update their guidance as guidance expiration dates approach.

NRC’s budget justification did not align with its budget execution structure for fiscal years 2010 through 2015 because NRC used two different systems—one to formulate its budget and another to obligate funds based on its appropriations from Congress. Because of the differences in these systems, NRC did not present information on its actual use of funds in its budget justifications from fiscal years 2010 through 2017. Without this data, it is difficult for users of the information—such as Congress and licensees—to understand how NRC used its appropriations. NRC plans to start presenting obligation data in its fiscal year 2018 budget justification.

Prior to fiscal year 2016, NRC’s systems for managing its budget formulation and budget execution processes did not align with each other in a way that made it easy to compare the agency’s budget justification with its actual use of funds. There are no specific requirements for an agency’s budget formulation process to align with its execution process, but without this information, it is difficult to track how NRC uses its funds in relation to its budget authority.

NRC’s budget formulation and execution are related processes that serve distinct purposes and that are governed by different requirements. At the agency level, budget formulation is the process by which an agency develops its proposed budget; this process is governed by the requirements of OMB Circular A-11, which requires agencies to include, where possible, the full cost of a program in their budget justifications. On the other hand, budget execution is the process through which an agency manages its finances based on the enacted budget and obligates these funds to its programs and activities throughout the fiscal year. Budget execution is governed by fiscal statutes that require agencies to develop systems to track their funds against their appropriations and ensure that they do not obligate more money than they have available to them.\(^20\) As previously stated, NRC’s funds are generally available to obligate until expended. This designation enables NRC to obligate money that was appropriated in the current year, as well as carry over funds from prior years to the current year or into future years.

NRC uses the Budget Formulation System (BFS) to manage budget formulation, and FAIMIS to manage NRC’s budget execution.\(^21\) The agency uses information from both of these systems—and from other systems NRC uses to manage other processes, such as the Human Resources Management System that captures time and labor data—for its budget formulation and execution processes. For example, NRC budget staff use execution data from FAIMIS to establish a baseline of actual spending on a given program. Similarly, BFS provides data to FAIMIS to establish how much money NRC can spend based on allocated budget levels. NRC business line managers have different levels of responsibility during budget formulation and execution. Specifically, NRC managers are responsible for formulating the budgets for their business lines that represent the full cost of the programs they manage. However, some aspects of their programs are managed centrally by NRC during budget execution. For example, business line managers develop the budgets for travel by headquarters-based employees, but these costs are managed through a central NRC travel budget. The largest of these centrally managed costs, according to NRC documents, are for salaries and benefits of NRC employees, which routinely comprise more than half of NRC’s resources. Although NRC’s


\(^{21}\)In addition to tracking funds that have been obligated, NRC uses FAIMIS to track obligated funds for which payment has not yet been made.
business line managers do not manage salaries and benefits costs directly, they are indirectly responsible for these costs through their management of the FTE allocation for their business lines. NRC business line managers are responsible for managing other types of costs directly, most notably the costs of contracts used by their business lines. BFS and FAIMIS use slightly different account structures, which reflect these differences in how NRC handles these costs, as discussed below:

- **Salaries and benefits:** In budget formulation, BFS includes the costs associated with salaries and benefits and office support in the requests for each business line, since agencies must include the full cost of a program in their budget justification. NRC allocates the costs of salaries and benefits to the various business lines and product lines using the total FTEs allocated to each, multiplied by the average cost of salaries and benefits per FTE for the entire agency. As discussed previously, NRC manages salaries and benefits through a central account for the entire agency in budget execution. Consequently, FAIMIS reports these obligations separately from the business lines and product lines during budget execution.

- **Mission support activities:** During budget formulation, certain activities that support NRC’s principal regulatory activities—such as training, travel, and supervisory costs—are allocated to the business lines to represent the full costs of those programs. As described earlier in this report, prior to fiscal year 2016, NRC reported agencywide supervisory costs in the Office Support business line for budget execution in an attempt to provide additional transparency on the costs of these activities. These costs were then allocated to each of the other business lines during budget formulation. In fiscal year 2016, NRC restructured its budget and eliminated the Office Support business line.

In 2013, NRC’s Inspector General found that NRC’s budgeting and operations did not align, since budgets are formulated by business-line managers but are executed by office-level managers, who are not
Inspector General staff noted that this creates a potential mismatch between the formulation and execution of the budget and may reduce transparency in NRC’s budget justifications. NRC staff we interviewed told us that they addressed many of these issues in fiscal year 2016 as monthly reports to Congress on funding changes within and between the control points since the submission of the budget. The staff told us that they did so due to the additional management controls instituted to comply with the control points included in the explanatory statement for the appropriations for that fiscal year. However, we did not evaluate these additional controls.

NRC did not present data on prior-year obligations in its budget justifications from fiscal years 2010 through 2017, which makes it difficult for users of the budget justifications—including Congress and licensees—to understand how NRC spent its appropriations. There are no specific requirements in OMB Circular A-11 for agencies to report actual obligations in their budget justifications. However, 51 of the 60 congressional budget justifications we reviewed present some data on actual obligations as part of their justifications. According to four of the stakeholders we interviewed, NRC’s budget materials are difficult to use to understand NRC’s activities. For example, one stakeholder group said that there seems to be a mismatch between the activities for which NRC budgets and the activities it actually conducts. Another stakeholder group said that NRC currently presents its budget at a level that does not give them enough detail to determine the activities for which NRC will spend funds.

Upon request, NRC was able to provide us obligation data for fiscal years 2010 through 2015 in the same account structure used in its budget justifications for those years. NRC staff told us that the actual obligations levels presented in this data are correct at the total agency level. However, as noted above, NRC reports many of the obligations that

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represent major portions of the full cost of their programs as separate items for budget execution, such as salaries and benefits, office support, training, and travel costs. NRC staff manually calculated and allocated obligations made to support these items to each business line and product line in order to present the full cost of their programs. NRC staff allocated salaries and benefits amounts to each business line and product line based on calculations using average FTE costs for the entire agency, multiplied by the number of FTEs used by each business line and product line. NRC staff also told us that they used actual FTE utilization by business line and product line in these calculations starting in 2013, when NRC added this reporting function to its systems. According to NRC staff, NRC’s systems could not report actual FTE utilization by business line prior to 2013, so they estimated the distribution of actual FTEs used by each business line and product line using the enacted FTE levels. NRC staff said that they manually allocated training, travel, and office support amounts to each of the business lines using a similar methodology. However, as noted above, the Office Support business line was eliminated during budget execution for fiscal year 2016, which eliminated the need to allocate certain mission-indirect costs in their future reporting.

Based on the data provided by NRC, we found that NRC’s total enacted budget authority and actual obligations decreased slightly from fiscal year 2010 to fiscal year 2015. As shown in table 1, NRC’s overall enacted budget authority decreased by about $51 million (4.8 percent), and its overall total actual obligations decreased by about $60 million (5.4 percent) from fiscal years 2010 to 2015. These decreases were largely reflected in the New Reactors business line. From fiscal year 2010 through 2015, NRC’s allocation for the New Reactors business line decreased by $62.4 million (33 percent). Moreover, actual obligations in this business line decreased by $88.6 million (47 percent), roughly $26 million more than its annual allocation. NRC began reducing obligations for this business line in fiscal year 2012. On average, in each year since 2012, the New Reactors business line obligated $17.2 million (12.6 percent) less than its allocation level. According to NRC documents, workload in the New Reactors business line decreased over the period as existing new reactor licensees either slowed or suspended their existing
construction projects and as potential new reactor licensees chose to delay submission of their license applications.  

Table 1: Nuclear Regulatory Commission (NRC) Budget Allocations and Reported Actual Obligations by Business Line (Dollars in Millions), Fiscal Year 2010 through 2015

<table>
<thead>
<tr>
<th></th>
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<td></td>
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<tr>
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<td>$1,019.6</td>
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Source: GAO analysis of Nuclear Regulatory Commission data | GAO-17-294.

Note: These numbers are not adjusted for inflation. Totals may not sum due to rounding.

In addition to the six business lines and Corporate Support listed above, NRC makes obligations toward the High-Level Waste Repository, which supports activities associated with the Department of Energy’s Yucca Mountain geologic repository application. NRC stopped making requests to support this activity in 2011 but spent remaining unobligated funds in later years. In addition, NRC’s budget requests include the agency’s Office of Inspector General, which is managed separately from NRC and which receives its own appropriation.
The High-Level Waste Repository business line supports the licensing, oversight, rulemaking, and research activities associated with the Department of Energy’s Yucca Mountain geologic repository application. NRC stopped making requests to support this activity in 2011 but spent remaining unobligated funds in later years.

The Office of Inspector General is an independent and objective unit to conduct and supervise audits and conduct investigations relating to NRC’s programs and operations. It is managed separately from NRC and receives its own appropriation.

While many of NRC’s business lines saw their allocation level and obligations reduced during this period, other areas—such as Operating Reactors and Corporate Support—saw increases. As shown in table 1, allocations for Operating Reactors increased by $9.4 million (2.6 percent) from fiscal year 2010 to fiscal year 2015, while actual obligations increased by $17.5 million (4.7 percent). For Corporate Support, allocations increased by $25.9 million (7.5 percent) from fiscal year 2010 to fiscal year 2015, while actual obligations increased by $61.4 million (17.5 percent). According to NRC documents, these increases reflect a shift in NRC’s resources from the New Reactors business line to the Operating Reactors business line in order to implement recommendations of an NRC task force convened in response to the Fukushima disaster of 2011. In addition, NRC staff we interviewed told us that the increased resources for Corporate Support reflect increases in rent, utilities, and information technology investments, among other things. Moreover, these two business lines spent an average of $15.1 million (4.3 percent) and $15.3 million (4.2 percent) more per year, respectively, than their allocation levels during fiscal years 2010 through 2015, reflecting the use of budget authority carried over from prior years.

NRC’s actual obligation data were incomplete for fiscal years 2016 and 2017 at the time of our review, however NRC’s fiscal year 2016 budget authority was about $1 billion, and the overall budget for fiscal year 2017 was $952 million. According to NRC’s budget justifications and agency officials, these reductions reflect the agency’s implementation of Project Aim and the recommendations of rebaselining, a one-time effort to examine NRC’s workload to determine which tasks could be done later, done with fewer resources, or not done at all.

According to NRC staff we interviewed, the agency plans to start presenting obligation data in its fiscal year 2018 budget justification. NRC had not submitted its budget justification to Congress before we completed our audit work; therefore, we were not able to assess the information provided as part of this review. However, we anticipate that providing obligation data aligned with the budget request for NRC could provide users of the data—including Congress and licensees—with
information that could help them better understand how NRC is executing its budget.

Agency Comments

We provided a draft of this report to NRC for review and comment. NRC provided written comments, which are reproduced in appendix I. In its written comments, NRC generally agreed with our findings. NRC also provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Chairman of NRC, and other interested parties. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff members have any questions about this report, please contact me at (202) 512-3841 or RuscoF@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix II.

Frank Rusco
Director, Natural Resources and Environment
Appendix I: Comments from the Nuclear Regulatory Commission

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 14, 2017

Mr. Frank Rusco
Director, Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20226

Dear Mr. Rusco:

I am responding to your letter of January 11, 2017, which provided the U.S. Nuclear Regulatory Commission (NRC) an opportunity to review and comment on the U.S. Government Accountability Office (GAO) draft report GAO-17-294, “Nuclear Regulatory Commission: Changes Planned to Budget Structure and Justification.”

The NRC staff appreciates the opportunity to review the draft, and we appreciate the GAO staff’s professionalism and many constructive interactions during this GAO engagement. Overall, the NRC agrees with the draft report and its findings. Below we offer comments on two of the report’s key findings, and in the enclosure to this letter, we have provided several technical comments and corrections for your consideration.

The NRC agrees with the GAO findings that some NRC budget structure changes have created confusion amongst users of NRC’s budget request. The NRC plans to continue its efforts that began in fiscal year 2016 to improve the transparency of budget information for external stakeholders. The NRC recognizes the need to continue to communicate these efforts to minimize any confusion associated with this change.

The NRC also agrees with the GAO finding that the NRC’s budget request did not align with its budget execution or reflect the agency’s use of funds in prior years. NRC’s annual formulation and execution of its budget is founded in the ability to accomplish the NRC’s mission and accommodate projected workloads. Consistent with the GAO finding, the NRC plans to begin to include the prior year obligation data in subsequent budgets. As stated in the report, there is no requirement for reporting prior year use of funds in an agency’s budget request.

Thank you again for the opportunity to provide comments on the GAO report. Please feel free to contact Mr. John Jolicoeur at (301) 415-1642 or John.Jolicoeur@nrc.gov if you have questions or need additional information.

Sincerely,

Victor M. McCree
Executive Director for Operations

Enclosure:
NRC comments on draft report
GAO-17-294
## Appendix II: GAO Contact and Staff

### Acknowledgments

<table>
<thead>
<tr>
<th>GAO Contact</th>
<th>Frank Rusco, (202) 512-3841, <a href="mailto:RuscoF@gao.gov">RuscoF@gao.gov</a></th>
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<tr>
<td>Staff</td>
<td>In addition to the individual named above, Hilary Benedict (Assistant Director); Keya Cain; Wyatt R. Hundrup; and Perry Lusk, Jr. made key contributions to this report. Also contributing to this report were Richard Burkard, John Delicath, Emily E. Eischen, Cindy Gilbert, Carol Henn, Douglas Hunker, Kathleen Padulchick, Brian Shaw, and Sara Sullivan.</td>
</tr>
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