NRC: AN INDEPENDENT REGULATORY AGENCY

About the NRC

The U.S. Nuclear Regulatory Commission (NRC) is an independent agency created by Congress. The NRC regulates the Nation's civilian commercial, industrial, academic, and medical uses of nuclear materials.

The NRC's scope of responsibility includes regulating commercial nuclear power plants; research and test reactors (RTRs); nuclear fuel cycle facilities; medical, academic, and industrial uses of radioactive materials; the decommissioning of licensed facilities and sites; and the transport, storage, and disposal of radioactive materials and wastes. The agency issues licenses for and oversees the use of radioactive materials and certifies nuclear reactor designs, spent fuel storage casks, and transportation packages. The agency also licenses the import and export of radioactive materials and works closely with its international counterparts to enhance nuclear safety and security worldwide. To fulfill its responsibilities, the NRC performs five principal regulatory functions, as seen in Figure 1. How the NRC Regulates.

Mission Statement

The NRC licenses and regulates 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.

Vision

Demonstrate the Principles of Good Regulation in performing the agency's mission.

To be successful, the NRC must not only excel in carrying out its mission but must do so in a manner that engenders the trust of the public and stakeholders. The Principles of Good Regulation—independence, openness, efficiency, clarity, and reliability—guide the agency. They affect how the NRC reaches decisions on safety, security, and the environment; how the NRC performs administrative tasks; and how its employees interact with each other as well as with external stakeholders. By adhering to these principles, the NRC maintains its regulatory competence, conveys that competence to stakeholders, and promotes trust in the agency. The agency puts these principles into practice with effective, realistic, and timely actions.

Strategic Goals

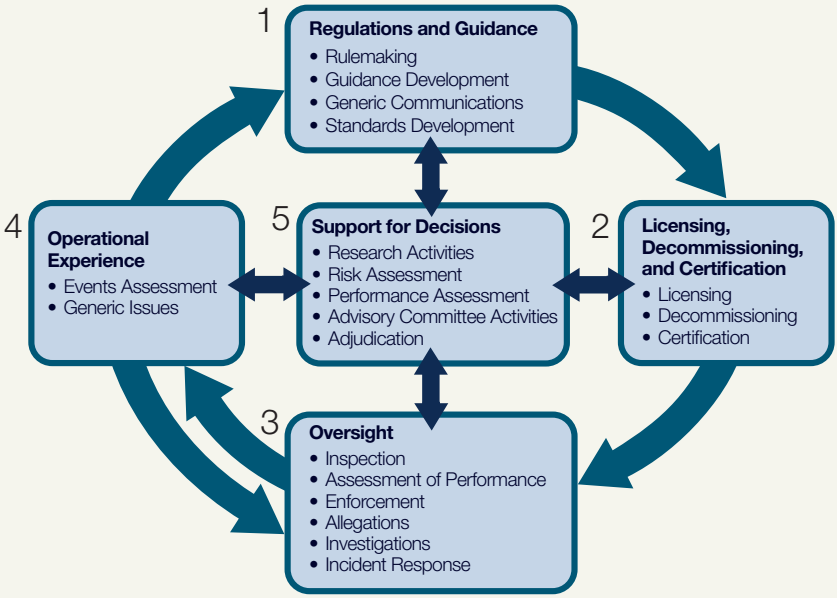
Safety: Ensure the safe use of radioactive materials.

Security: Ensure the secure use of radioactive materials.

Principles of Good Regulation

Independence:	*Nothing but the highest possible standards of ethical performance and professionalism should influence regulation.*
Openness:	*Nuclear regulation is the public's business, and it must be transacted publicly and candidly.*
Efficiency:	*The highest technical and managerial competence is required and must be a constant agency goal.*
Clarity:	*Regulations should be coherent, logical, and practical. Agency positions should be readily understood and easily applied.*
Reliability:	*Regulations should be based on the best available knowledge from research and operational experience.*

Figure 1. How the NRC Regulates



1. Developing regulations and guidance for applicants and licensees.
2. Licensing or certifying applicants to use nuclear materials, operate nuclear facilities, and decommission facilities.
3. Inspecting and assessing licensee operations and facilities to ensure licensees comply with NRC requirements, responding to incidents, investigating allegations of wrongdoing, and taking appropriate followup or enforcement actions when necessary.
4. Evaluating operational experience of licensed facilities and activities.
5. Conducting research, holding hearings, and obtaining independent reviews to support regulatory decisions.

Statutory Authority

The Energy Reorganization Act of 1974 created the NRC from a portion of the former Atomic Energy Commission. The new agency was to independently oversee—but not promote—the commercial nuclear industry so the United States could benefit from the use of radioactive materials while also protecting people and the environment. The agency began operations on January 18, 1975. The NRC's regulations can be found in Title 10, "Energy," of the *Code of Federal Regulations* (10 CFR). The principal statutory authorities that govern the NRC's work can be found on its Web site (see the Web Link Index for more information).

See the complete list of the NRC's authorizing legislation in Appendix W.

The NRC, its licensees (those licensed by the NRC to use radioactive materials), and the Agreement States (States that assume regulatory authority over certain nuclear materials) share responsibility for protecting public health and safety and the environment. Federal regulations and the NRC's regulatory program play a key role. Ultimately, however, the licensees bear the primary responsibility for safely handling and using radioactive materials.

On September 28, 2018, President Trump signed into law the Nuclear Energy Innovation Capabilities Act of 2017. The Act requires the U.S. Department of Energy (DOE) and the NRC to enter into a memorandum of understanding (MOU) on certain topics related to advanced reactors and authorizes them to enter into an MOU on additional topics in this area. The NRC and DOE signed an MOU to implement provisions of the Act in October 2019.

On January 14, 2019, President Trump signed into law the Nuclear Energy Innovation and Modernization Act (NEIMA). NEIMA's provisions are varied and have impacts across the agency.

NEIMA has three stated objectives:

1. To provide a revised framework for fee recovery by the NRC "to ensure the availability of resources to meet industry needs without burdening existing licensees unfairly for inaccurate workload projections or premature existing reactor closures."
2. To support the development of expertise and regulatory infrastructure necessary to allow innovation and the commercialization of advanced nuclear reactors.
3. To foster "more efficient regulation of uranium recovery."

The NRC is in the process of implementing the various provisions of NEIMA. The agency has already submitted multiple reports to Congress establishing performance metrics and milestone schedules for "requested activities of the Commission." The NRC is also taking actions related to the licensing process for commercial advanced reactors and RTRs. The NRC is committed to meeting the requirements of NEIMA and is working diligently to do so.

Major Activities

The NRC fulfills its responsibilities by doing the following:

- licensing the design, construction, operation, and decommissioning of commercial nuclear power plants and other nuclear facilities
- licensing the possession, use, processing, handling, exporting, and importing of nuclear materials
- establishing national policy and standards for the safe disposal of low-level radioactive waste
- certifying the design, construction, and operation of commercial transportation casks for radioactive materials and waste
- licensing the design, construction, and operation of spent fuel storage casks and interim storage facilities for spent fuel and high-level radioactive waste
- licensing nuclear reactor operators
- licensing uranium enrichment facilities
- conducting research to develop regulations and to anticipate potential reactor and other nuclear facility safety issues
- collecting, analyzing, and disseminating information about the safe operation of commercial nuclear power reactors and certain nonreactor activities
- issuing safety and security regulations, policies, goals, and orders that govern nuclear activities
- interacting with other Federal agencies, foreign governments, and international organizations on safety, security and nonproliferation issues
- conducting criminal, civil, and administrative investigations of alleged violations by NRC licensees
- inspecting NRC licensees to ensure adequate performance of safety and security programs
- enforcing NRC regulations and the conditions of NRC licenses and imposing, when necessary, civil sanctions and penalties
- conducting public hearings on nuclear and radiological safety and security and on environmental concerns
- implementing international legal commitments made by the U.S. Government in treaties and conventions
- developing working relationships with State and Tribal governments
- maintaining an incident response program and overseeing required emergency response activities at NRC-licensed facilities

- implementing lessons learned from the March 2011 nuclear accident in Japan to enhance safety at U.S. commercial nuclear facilities
- transforming the agency one decision at a time into a modern, risk-informed regulator that promotes and embraces innovative approaches to achieve the agency mission (see Figure 2. Transforming the NRC)
- involving the public in the regulatory process through meetings, conferences, and workshops; providing opportunities for commenting on proposed new regulations, petitions, guidance documents, and technical reports; providing ways to report safety concerns; and providing documents under the Freedom of Information Act and through the NRC's Web site (see Figure 3. A Typical Rulemaking Process)
- engaging and informing the public through social media platforms and by providing interactive, high-value data sets (data in a form that allows members of the public to search, filter, or repackage information)

Regional State Liaison Officer for Region III, Allan Barker, leads a panel discussion on government communications during the NRC National State Liaison Officers Conference in Rockville, MD.

Figure 2. Transforming the NRC

The NRC is transforming into a modern, risk-informed regulator by—

- *Be riskSMART—making sound decisions while accepting well-managed risks in decisionmaking.*
- *Focus on Our People—maintaining an engaged and highly skilled workforce now and in the future.*
- *Innovate—making timely decisions that take into account different viewpoints and fully explored options.*
- *Use Technology—working smarter, including using data analytics to highlight areas for regulatory attention and improvement.*

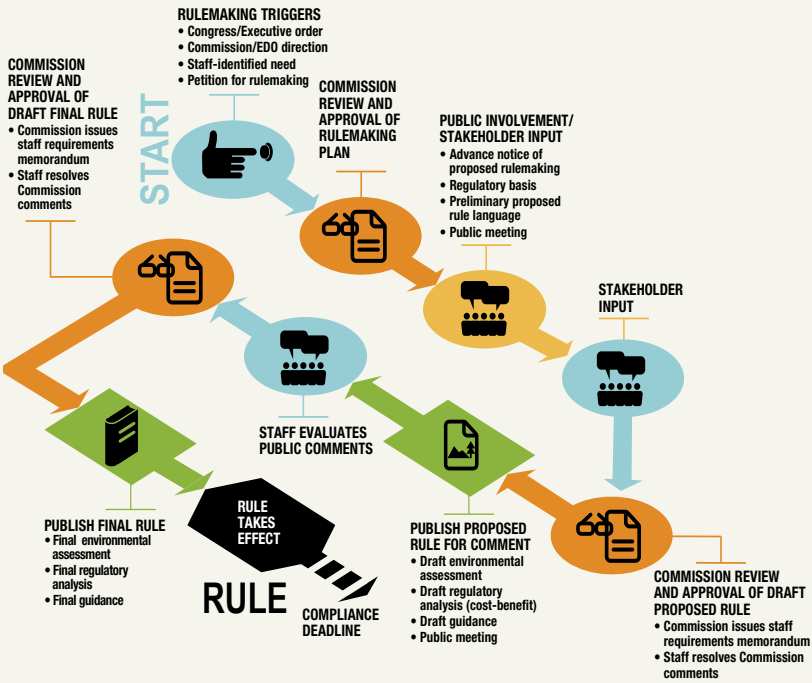
Transformation Initiatives

Over the past several years, the NRC has recognized the need to transform its operations in light of changes to economic, sociopolitical, and technological factors affecting licensees, governments, and other stakeholders. The NRC anticipates the need for adaptability and agility in responding to possible future scenarios that will drive the agency's workload.

The NRC is undertaking a number of initiatives to bring about improvements, including streamlining its work processes, advancing the use of new information technology, systematizing the appropriate consideration of risk in decision making and encouraging innovative solutions to agency challenges.

The NRC anticipates that the efficiencies gained by transformation will allow the staff to make more timely and better quality decisions vital for accomplishing the agency's safety and security missions. While the transformation does not change the NRC's regulatory framework, stakeholder engagement is important and the agency is communicating its progress through public meetings and conferences, as well as through the NRC Web site.

Figure 3. A Typical Rulemaking Process



The process of developing regulations is called rulemaking. The NRC initiates a new rule or a change to an existing rule when there is a need to do so to protect public health and safety. Additionally, any member of the public may petition the NRC to develop, change, or rescind a rule. The Commission directs the staff to begin work on a new rulemaking activity through approval of a staff rulemaking plan.

Regulatory Basis

A regulatory basis document is an analysis that describes the technical, legal, and policy information that supports changes to the NRC's regulations. It describes why the current regulation needs to be updated, explains how a change in the regulations will resolve the problem, and discusses other regulatory options to potentially address the problem. It provides a high-level discussion of the costs and benefits of each option and identifies any backfitting and forward fitting considerations. For each rulemaking, the NRC determines whether development of a regulatory basis is necessary based on the regulatory issues involved. If development of a regulatory basis is warranted, it is generally published for public comment. Any comments received on the regulatory basis would be considered in the development of the proposed rule.

Proposed Rules
Each proposed rule that involves significant matters of policy is sent to the NRC Commission for approval. Less significant rules may, with Commission approval, be signed by an NRC staff manager. If approved, the proposed rule is published in the *Federal Register* and usually contains the following items:

- the background information about the proposed rule
- an address for submitting comments
- the date by which comments should be received to ensure consideration by the NRC
- an explanation indicating why the rule change is thought to be needed
- the proposed text to be changed

Usually, the public is given 30 to 90 days to provide written comments. Not all rules are issued for public comment. Generally, those excepted from public comment concern agency organization, procedure, or practice or are rules for which delaying their publication to receive comments would be contrary to the public interest and not practical.

Final Rules
Once the public comment period has closed for the proposed rule, the staff analyzes the comments, makes any needed changes, and prepares a final rule for approval by the Commission or delegated NRC manager. Upon approval, the final rule is published in the *Federal Register* and usually becomes effective 30 days later.

Direct Final Rulemakings
When appropriate, the NRC can shorten the traditional rulemaking process by using a direct final rulemaking process. This process is only used for regulatory changes that the NRC believes are noncontroversial. In a direct final rule, a companion proposed rule is published at the same time as the direct final rule. If there are no significant and adverse comments on the proposed rule, the direct final rule becomes effective. If there are significant and adverse comments, the direct final rule is withdrawn and the rulemaking proceeds as a typical final rule addressing public comment.

Advance Notice of Proposed Rulemaking
For especially important or complex rules, the NRC may engage the public at the earliest stages of rulemaking to define the scope and content of the rule. One way of doing this is through an Advance Notice of Proposed Rulemaking. The notice requests public comment well in advance of the proposed rulemaking stage. The notice describes the need for the proposed action but discusses only broad concepts. The NRC may also conduct public meetings at this stage to gather direct input on the rulemaking.

Rulemaking Information
The public can access a centralized, web-based tracking and reporting system, which provides near-real-time updates on all NRC rulemaking activities on the NRC Web site at *https://www.nrc.gov/about-nrc/regulatory/rulemaking/rules-petitions.html*.

Organizations and Functions

The NRC's Commission has five members nominated by the President of the United States and confirmed by the U.S. Senate for 5-year terms. The members' terms are staggered so one Commissioner's term expires on June 30 of each year. The President designates one member to serve as Chairman. The Chairman is the principal executive officer and spokesperson of the agency. No more than three Commissioners can belong to the same political party. The Commission as a whole 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 4. NRC Organizational Chart).

Commissioner Term Expiration*

Kristine L. Svinicki
Chairman
June 30, 2022

Jeff Baran
June 30, 2023

Annie Caputo
June 30, 2021

David A. Wright
June 30, 2025

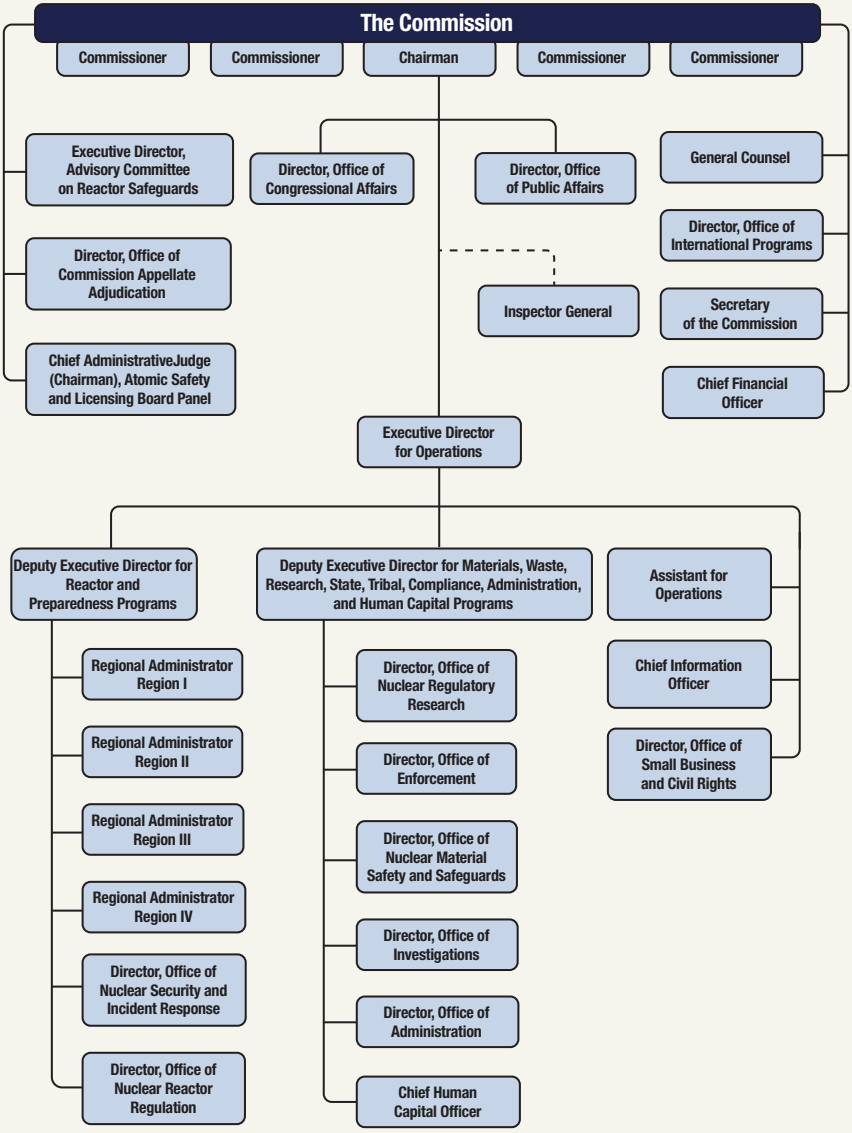
Christopher T. Hanson
June 30, 2024

** Commissioners listed by seniority.*

The NRC is headquartered in Rockville, MD, and has four regional offices. They are located in King of Prussia, PA; Atlanta, GA; Lisle, IL; and Arlington, TX. The NRC's corporate offices provide centrally managed activities necessary for agency programs to operate and achieve goals. Corporate support is needed for a successful regulatory program. The NRC has the following major program offices:

- The **Office of Nuclear Reactor Regulation** handles all licensing and inspection activities for existing nuclear power reactors and research and test reactors. This office also 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.

Figure 4. NRC Organizational Chart

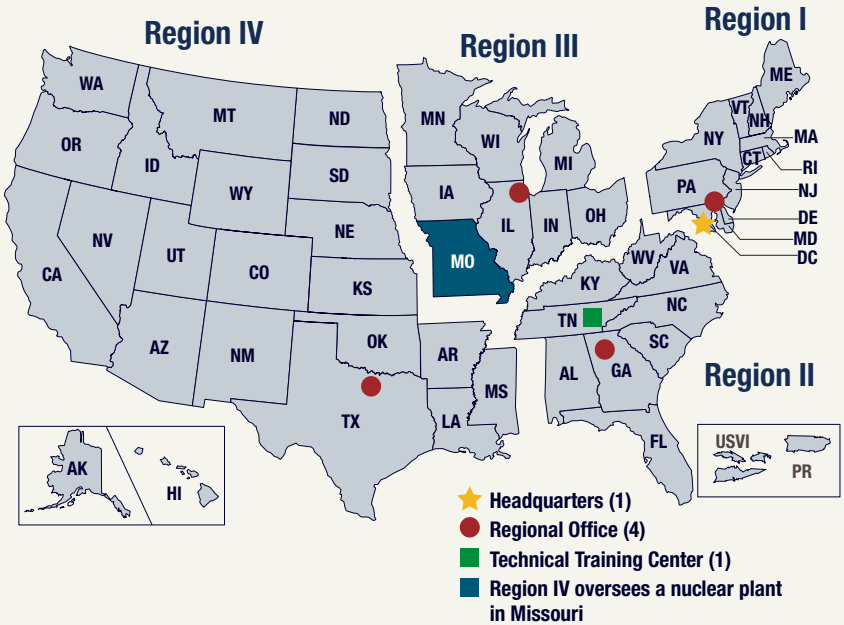


Note: For the most recent information, go to the NRC Organization Chart at *https://www.nrc.gov/about-nrc/organization.html.*

- The **Office of Nuclear Material Safety and Safeguards** regulates 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 low- and high-level radioactive waste and spent nuclear fuel. The office also works with other Federal agencies, States, and Tribal and local governments on regulatory matters.
- The **Office of Nuclear Security and Incident Response** initiates and oversees 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 NRC **regional offices** conduct inspections and investigations, take enforcement actions (in coordination with the Office of Enforcement), and maintain incident response programs for nuclear reactors, fuel facilities, and materials licensees. In addition, the regional offices carry out licensing for certain materials licensees (see Figure 5. NRC Regions).
- The **advisory committees,** including the Advisory Committee on Reactor Safeguards (ACRS) and the Advisory Committee on the Medical Uses of Isotopes (ACMUI), are independent of the NRC staff. The ACRS reports directly to the Commission, which appoints its members. The advisory committees are structured to provide a forum where experts representing many technical perspectives can provide independent advice that is factored into the Commission's decision-making process. Most committee meetings are open to the public, and any member of the public may request an opportunity to make an oral statement during committee meetings.

The NRC Headquarters complex is located in Rockville, MD.

Figure 5. NRC Regions



Region I
King of Prussia, PA

Region II
Atlanta, GA

Region III
Lisle, IL

Region IV
Arlington, TX

Technical Training Ctr.
Chattanooga,, TN

Nuclear Power Plants

- Each regional office oversees the plants in its region—except for the Callaway plant in Missouri, which Region IV oversees.

Materials Licensees

- Region I oversees licensees and Federal facilities located in Region I and Region II.
- Region III oversees licensees and Federal facilities located in Region III.
- Region IV oversees licensees and Federal facilities located in Region IV.

Nuclear Fuel Processing Facilities

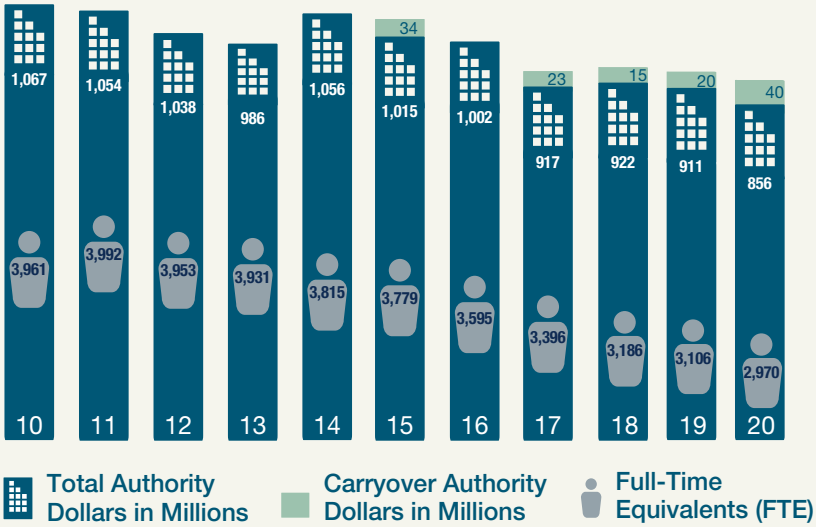
- Region II oversees all the fuel processing facilities in all regions.
- Region II also handles all construction inspection activities for new nuclear power plants and fuel cycle facilities in all regions.

Fiscal Year 2020 Budget

For fiscal year (FY) 2020 (October 1, 2019, through September 30, 2020), the NRC's budget is $856 million. The NRC has 2,970 full-time equivalents (FTE) in FY 2020; this includes the Office of the Inspector General (see Figure 6. NRC Total Authority, FYs 2010–2020). The Office of the Inspector General received its own appropriation of $13.3 million. This amount is included in the total NRC budget.

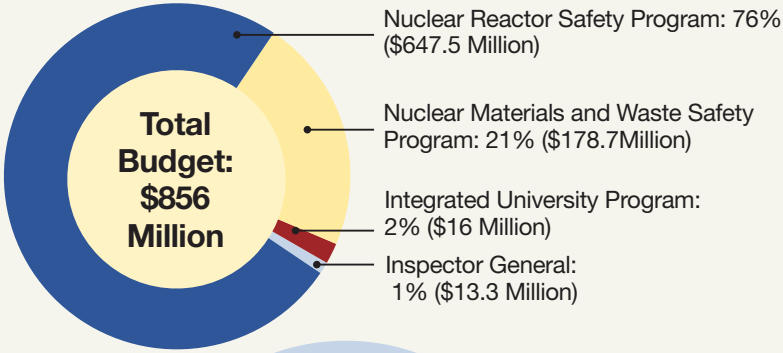
The breakdown of the budget is shown in Figure 7. NRC FY 2020 Distribution of Enacted Budget Authority; Recovery of NRC Budget. The Omnibus Budget Reconciliation Act of 1990, as amended, requires the NRC to recover, through fees billed to licensees and applicants, approximately 90 percent of its new budget authority, less certain amounts excluded from the fee-recovery requirement; in FY 2020, the following amounts are excluded from the fee-recovery requirement: to Waste Incidental to Reprocessing, generic homeland security activities, advanced reactor regulatory infrastructure activities, international activities, and the Office of the Inspector General services for the Defense Nuclear Facilities Safety Board. The NRC collects fees each year by September 30 and transfers them to the U.S. Treasury. The agency estimates that it will recover $728.1 million in fees in FY 2020.

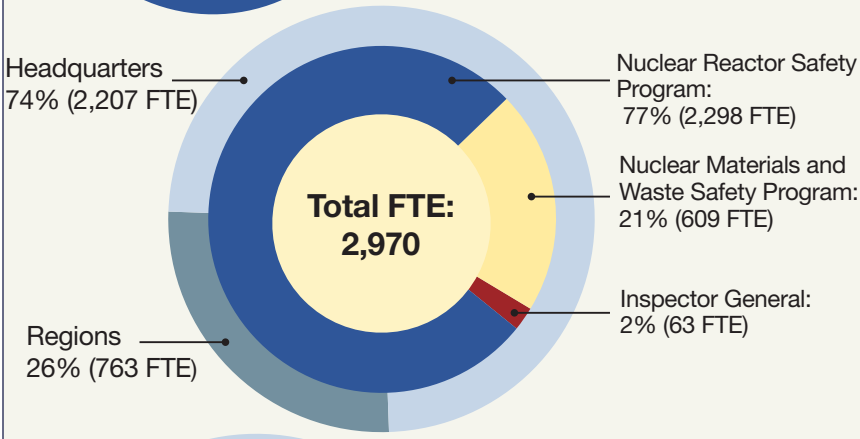
Figure 6. NRC Total Authority, FYs 2010–2020

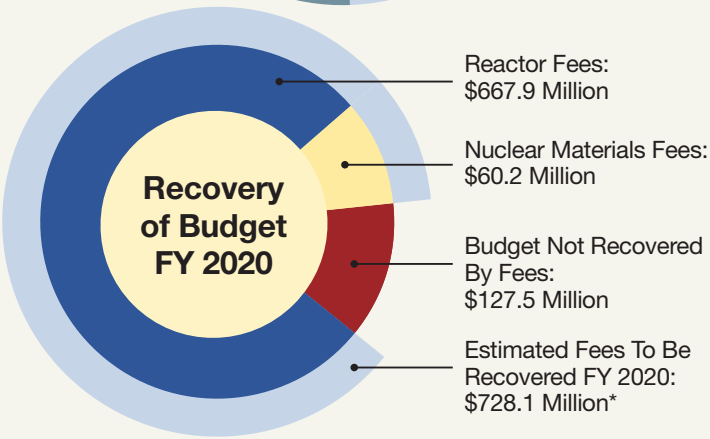


Note: Dollars are rounded to the nearest million.

Figure 7. NRC FY 2020 Distribution of Enacted Budget Authority; Recovery of NRC Budget







* Recovered fees do not include the use of prior-year carryover where fees were previously collected.
Notes: The NRC incorporates corporate and administrative costs proportionately within programs. Numbers and percentages are rounded. Enacted budget for FY 2020. More budget information available in the Congressional Budget Justification at *https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1100/v36/*