

Mission

The U.S. Nuclear Regulatory Commission (NRC) is an independent agency created by Congress. Its mission is to license and regulate the civilian use of radioactive materials in the United States to protect public health and safety, promote the common defense and security, and protect the environment.

The NRC 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, most Federal agencies' use and possession of radioactive materials, and the export and import of radioactive materials.

Commission

Chairman Stephen G. Burns
Commissioner Kristine L. Svinicki
Commissioner Jeff Baran
Vacant
Vacant

Term ends June 30, 2019
Term ends June 30, 2017
Term ends June 30, 2018

Locations

Headquarters:

U.S. Nuclear Regulatory Commission
Rockville, MD, 301-415-7000, 1-800-368-5642

Regional Offices:

Region I - King of Prussia, PA, 610-337-5000, 1-800-432-1156
Region II - Atlanta, GA, 404-997-4000, 1-800-577-8510
Region III - Lisle, IL, 630-829-9500, 1-800-522-3025
Region IV - Arlington, TX, 817-860-8100, 1-800-952-9677

Headquarters Operations Center:

Rockville, MD, 301-816-5100

The NRC maintains a staffed, 24-hour Operations Center that coordinates incident response with State, local, and Federal agencies.

Training and Professional Development:

Technical Training Center, Chattanooga, TN, 423-855-6500
Professional Development Center, Rockville, MD, 301-287-0556

Resident Sites:

At least two NRC resident inspectors, who report to the appropriate regional office, are located at each nuclear power plant site.

NRC Fiscal Year 2016 Budget

- Total authority: \$1,002.1 million
- Total authorized staff: 3,595
- Estimated fees to be recovered: \$882.9 million
- The Office of the Inspector General received its own appropriation of \$12.1 million
- Total Research Budget: \$51 million with 217 full-time equivalents
 - Reactor Program: \$43 million
 - New/Advanced Reactor Licensing: \$6 million
 - Materials and Waste: \$2 million

What Does the NRC Do?

- Regulation and guidance—rulemaking
- Policymaking
- Licensing, decommissioning, and certification
- Research
- Oversight and enforcement
- Emergency preparedness and response
- Incident response

NRC Governing Legislation

The NRC was established by the Energy Reorganization Act of 1974. The most significant laws that govern the regulatory process of the agency are in Appendix W. The NRC's regulations are found in Title 10 of the *Code of Federal Regulations*. The text of many laws may be found in NUREG-0980, "Nuclear Regulatory Legislation."

NRC by the Numbers

U.S. Electricity Generated by Commercial Nuclear Power

NRC-licensed nuclear reactors generate about 19 percent of U.S. net electricity, or about 771 billion kilowatt-hours.

Nuclear Reactors

- 100 commercial nuclear power plants operating in 30 States at 61 sites
 - 66 pressurized-water reactors and 34 boiling-water reactors
- Four reactor fuel vendors
- 23 parent operating companies
- About 80 different designs
- About 6,500 total inspection hours at each operating reactor site in 2015

Licensees have announced via the media or letter their intent to either shut down or not renew licenses for the following:

- Omaha Public Power District will close Fort Calhoun by end of 2016.
- Entergy's will close Fitzpatrick in 2017 and Pilgrim Nuclear Power Station by end of 2018
- Exelon's Clinton Power Station and its Quad Cities Generating Station will close on June 1, 2017, and June 1, 2018, respectively; and Oyster Creek plans to shut down in December 2019.
- Pacific Gas & Electric, Diablo Canyon nuclear plants will close when their licenses expire by 2025.

Reactor License Renewal

Commercial power reactor operating licenses are valid for 40 years and may be renewed for additional 20-year terms.

- 19 reactors operate under their original license.
- 50 sites comprising 83 reactors were issued renewal licenses.
- Eight sites have license renewal applications in review.
- Four sites have submitted letters of intent to request renewal.

Early Site Permits for New Reactors

- Five early site permits (ESPs) issued and one new application received:
 - System Energy Resources, Inc., for the Grand Gulf site in Mississippi
 - Exelon Generation Company, LLC, for the Clinton site in Illinois
 - Dominion Nuclear North Anna, LLC, for the North Anna site in Virginia
 - Southern Nuclear Operating Company, for the Vogtle site in Georgia
 - PSEG Power, LLC, and PSEG Nuclear, LLC, for the PSEG site in New Jersey
- In May 2016, the NRC received an ESP application from the Tennessee Valley Authority (TVA) for two or more small modular reactor (SMR) modules at the Clinch River Nuclear Site in Roane County, Tennessee.

Combined License—Construction and Operating for New Reactors

- Since June 2007, the NRC has received and docketed 18 combined license (COL) applications for 28 new, large light-water reactors.
- The NRC suspended or canceled 10 COL application reviews at the request of the applicants, because of changes to their business plans (Bell Bend, Bellefonte, Calvert Cliffs, Comanche Peak, Grand Gulf, Callaway, Nine Mile Point, River Bend, Shearon Harris, and Victoria County Station).
- The NRC has issued COLs for seven reactors at Vogtle, V.C. Summer, Fermi, and South Texas Project.
- As of June 2016, the NRC is actively reviewing four applications for seven new reactors: North Anna (VA), William States Lee III (SC), Levy County (FL), and Turkey Point (FL).

Reactor Design Certification

- Five reactor design certifications (DCs) were issued:
 - General Electric Nuclear Energy's ABWR (Advanced Boiling-Water Reactor)
 - Westinghouse Electric Company's System 80+
 - Westinghouse Electric Company's AP600
 - Westinghouse Electric Company's AP1000
 - General Electric-Hitachi Nuclear Energy's ESBWR (Economic Simplified Boiling-Water Reactor)
- Two DC applications are currently under review for the APR1400 and US-APWR designs.
- One DC application is suspended at the request of the applicant (US EPR).
- One DC renewal application is under review for the ABWR design.

Nuclear Research and Test Reactors

- 31 licensed research and test reactors are operating in 21 States.

Nuclear Materials

Materials Licensing

- The NRC and the Agreement States have approximately 20,000 licensees for medical, academic, industrial, and general users of nuclear materials.
 - The NRC administers approximately 2,700 licenses.
 - 37 Agreement States oversee approximately 17,300 licenses.
- Two States have letters of intent to become Agreement States: Vermont and Wyoming.
- The NRC issues approximately 2,000 new licenses, renewals, or amendments for existing materials licenses annually. The NRC conducts approximately 900 health, safety, and security inspections of materials licensees each year.

Nuclear Fuel Cycle

- 10 uranium recovery sites licensed by the NRC:
 - Nine in situ recovery sites
 - One conventional mill in standby status with the potential to restart in the future
- One application for a new uranium recovery facility is under review.
- Two applications for renewal are under review; a third has been received.
- Seven applications for facility expansion have been received. Five of those applications are under review.
- 13 fuel cycle facilities:
 - One uranium hexafluoride conversion facility
 - Five uranium fuel fabrication facilities
 - Four gas centrifuge uranium enrichment facilities (one operating, one test and development, and two construction pending)
 - One mixed-oxide fuel fabrication facility (under construction and review)
 - One laser separation enrichment facility (construction decision pending)
 - One uranium hexafluoride deconversion facility (construction decision pending)
- The NRC issues about 75 fuel cycle facility licensing actions per year, including amendments; renewals; new licenses; and safety, environmental, and safeguards reviews.

National Source Tracking System

The National Source Tracking System (NSTS) tracks more than 80,000 sources held by about 1,400 NRC and Agreement State licensees. Of those sources, about 46 percent are Category 1 sources and 54 percent are Category 2. The majority are cobalt-60, the most widely used isotope in large sources.

Domestic Safeguards

The NRC has issued licenses authorizing some 180 facilities to possess special nuclear material in quantities ranging from a single kilogram to multiple tons.

Radioactive Waste

Low-Level Radioactive Waste

- 10 regional compacts
- Four licensed disposal facilities

High-Level Radioactive Waste Management

Spent Nuclear Fuel Storage

- 75 licenses for independent spent fuel storage installations in 34 States:
 - 15 site-specific licenses
 - 60 general licenses

Transportation—Principal Licensing and Inspection Activities

- 1,000 safety inspections of fuel, reactor, and materials licensees are conducted annually.
- 65 new, renewal, or amended container-design applications for the transport of nuclear materials are reviewed annually.
- 150 license applications for the import and export of nuclear materials from the United States are reviewed annually.
- More than 3 million packages of radioactive materials are shipped each year in the United States by road, rail, air, or water. This represents less than 1 percent of the Nation's yearly hazardous material shipments.

Decommissioning

Approximately 150 materials licenses are terminated each year. The NRC's decommissioning program focuses on the termination of licenses that are not routine and that require complex activities.

- 19 nuclear power reactors in various stages of decommissioning (DECON or SAFSTOR)
- Four research and test reactors permanently shut down and in various stages of decommissioning
- 13 complex material sites in various stages of decommissioning
- Two fuel cycle facilities (partial decommissioning)
- 11 NRC-licensed uranium recovery facilities in various stages of decommissioning

Security and Emergency Preparedness

- Once every 2 years, each operating nuclear power plant performs a full-scale emergency preparedness exercise inspected by the NRC and evaluated by the Federal Emergency Management Agency.
- Plants conduct additional emergency drills between full-scale exercises to maintain their preparedness and proficiency in responding to emergencies.
- Once every 3 years, each nuclear plant undergoes a force-on-force security inspection. These inspections include mock combat drills. The NRC spends about 16,000 hours a year scrutinizing security at nuclear power plants, including 8,000 hours of force-on-force inspections.