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UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

The NRC: Who We Are And What We Do

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Who We Are

- The Energy Reorganization Act of 1974 established the NRC to independently regulate commercial uses of nuclear material, including nuclear power; other duties of the former Atomic Energy Commission were assigned to the Department of Energy.

- The NRC is headed by five Commissioners nominated by the President and confirmed by the Senate for staggered five-year terms. No more than three can be from the same political party.

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Who We Are

The Commission as a whole:

- formulates policies and regulations governing nuclear reactor and materials safety;
- issues orders to licensees; and
- adjudicates legal matters brought before it.

The President designates one member of the Commission to serve as Chairman and official spokesperson.

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Who We Are

As principal executive officer, the Chairman:

- is responsible for conducting the administrative, organizational, long-range planning, budgetary, and certain personnel functions of the agency.
- is governed by the general policies of the Commission, and
- has ultimate authority for all NRC functions pertaining to an emergency involving an NRC license.

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Who We Are

The NRC employs nearly 4,000 people among its suburban Maryland headquarters and four regional offices in Pennsylvania, Georgia, Illinois and Texas. NRC inspectors are also assigned to 65 nuclear power plant sites and three fuel facilities.

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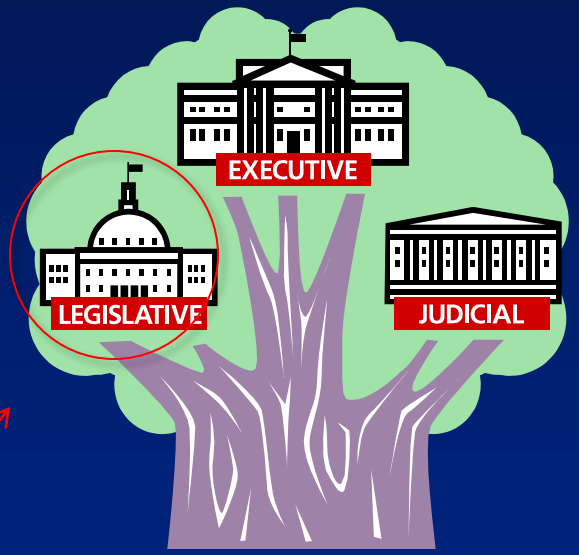
Who We Are

The NRC receives a budget each fiscal year from Congress. As interest in nuclear power has grown, so has the NRC's budget, allowing it to better meet its mission.



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Who We Are

In Fiscal Year 2012, the NRC's budget was just over $1 billion. By law, 90 percent is recovered directly from the fees billed to licensees.

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Our Mission

To license and regulate the nation's civilian use of byproduct, source and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.

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Our Objectives

Safety: Ensure the protection of public health and safety and the environment.

Security: Ensure the secure use and management of radioactive material.

Openness: Ensure openness in our regulatory process.

Effectiveness: Ensure our actions are effective, efficient, realistic and timely.

Management: Ensure excellence in agency management.

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Some Nuclear Facts

- 104 nuclear power plants supply about 20 percent of the electricity in the U.S.
- Nuclear materials are used in medicine for cancer treatment and diagnosis.
- Nuclear materials are widely used in industry, such as in density gauges, flow measurement devices, radiography devices and irradiators.

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Some Radiation Facts

- Radiation occurs naturally in the soil, air and water.
- The average person in the U.S. is exposed to about 620 millirem of radiation a year. Half of that exposure comes from natural sources (also called background radiation). The other half largely comes from nuclear medical exams and treatments.
- Small amounts of radioactive material are also used in common items such as smoke detectors, exit signs and some watches.

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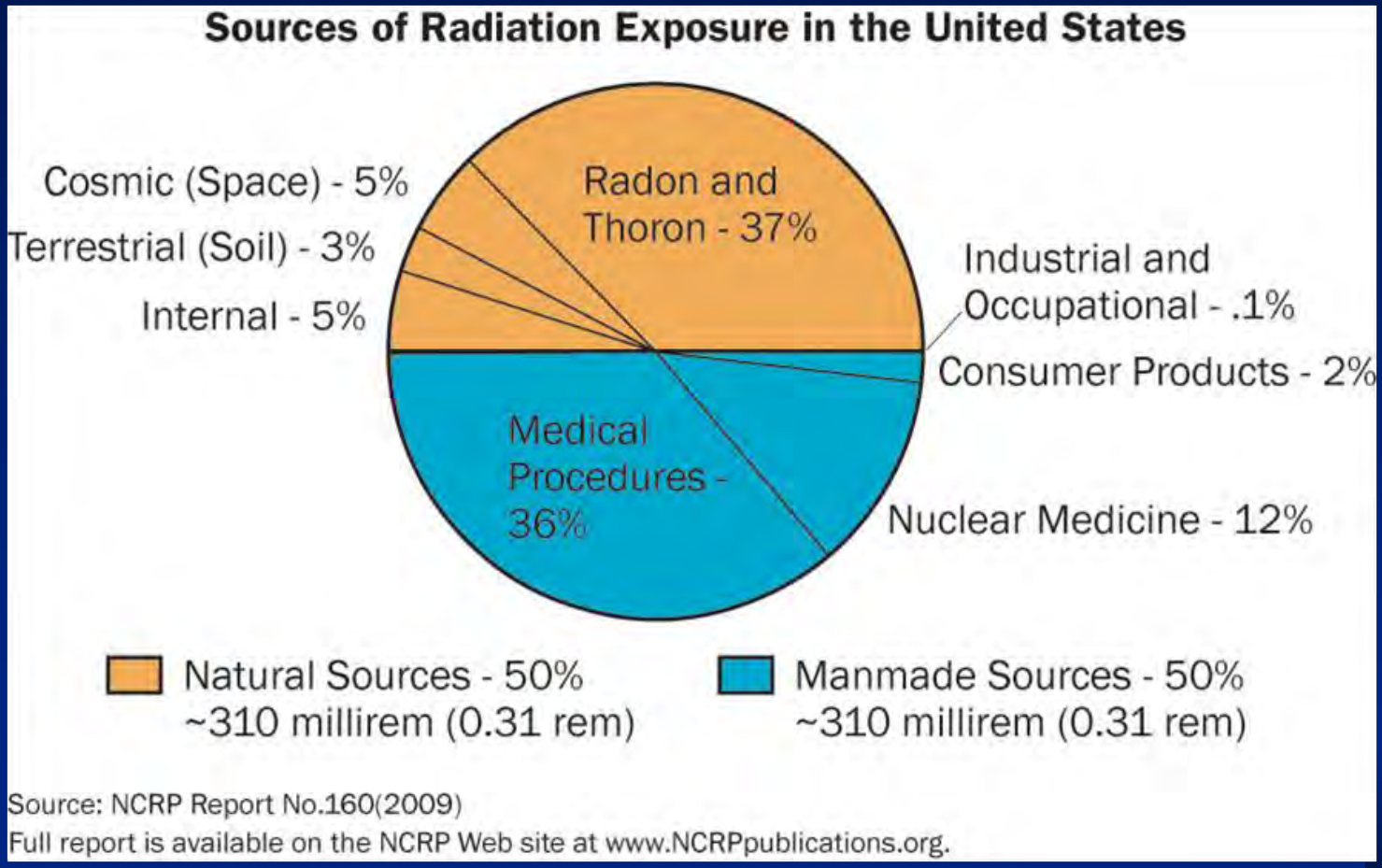
Some Radiation Facts



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The NRC Regulates:

Nuclear reactors – commercial power reactors, research and test reactors, new reactor designs;

Nuclear materials – radioactive materials for medical, industrial and academic use;

Nuclear waste – transportation, storage and disposal of nuclear material and waste, decommissioning of nuclear facilities; and

Nuclear security – physical security of nuclear facilities and materials from sabotage or attacks.

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What We Don't Do:

- Regulate nuclear weapons, military reactors or space vehicle reactors. (These are regulated by other federal agencies.)
- Lobby for nuclear power. (The nation's nuclear agenda is set by the President and the Congress.)
- Own or operate nuclear power plants.
- Regulate naturally occurring radon, X-rays and material produced in particle accelerators. (These are regulated by states or other federal agencies.)

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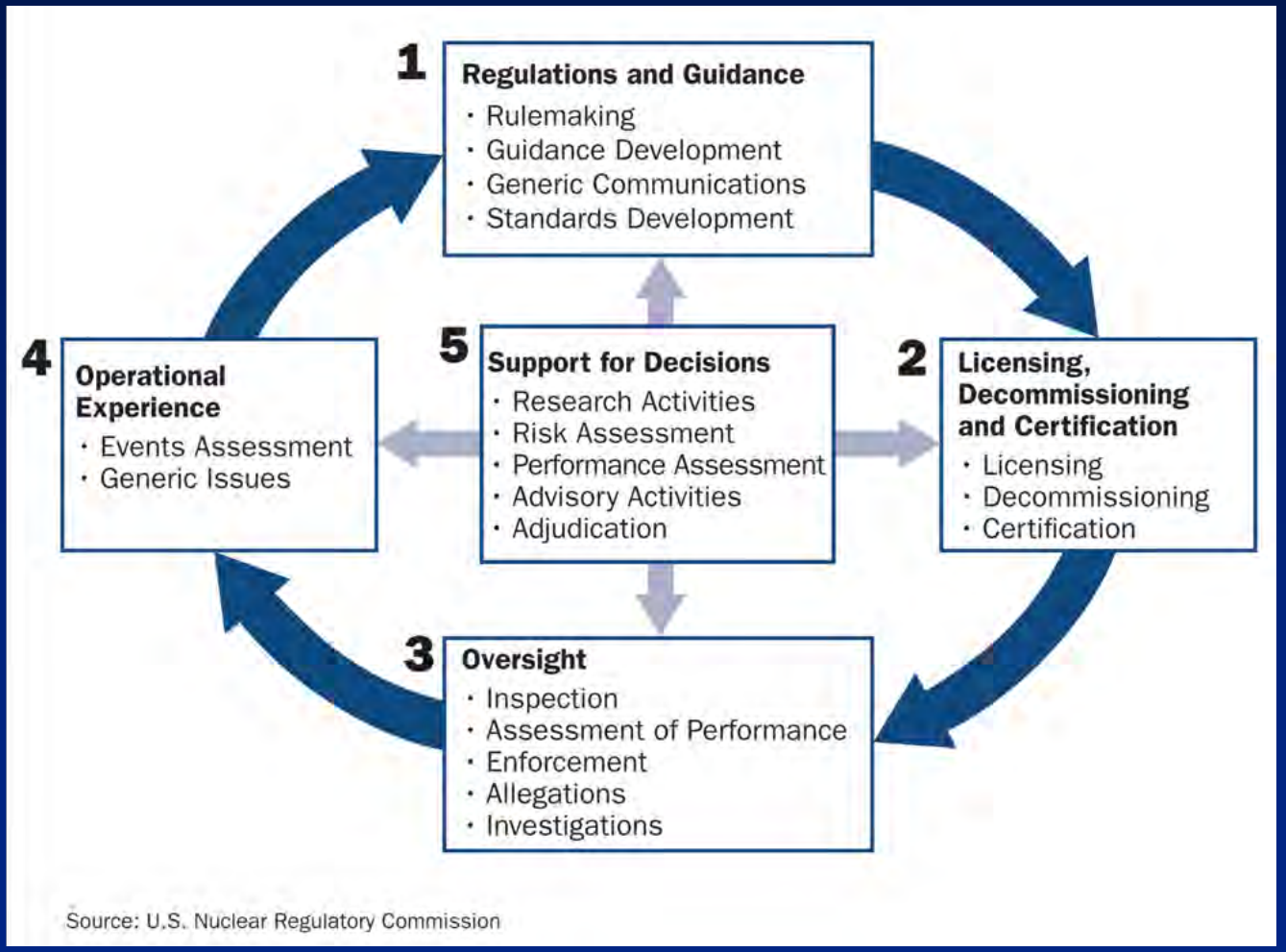
What We Do:



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✓ Create Regulations

NRC establishes rules that users of radioactive material must follow. These rules protect workers and the public from the potential hazards of radioactivity.

Before writing or changing the regulations, NRC solicits and considers the views of the public, industry representatives, researchers, state officials, scientists and technical experts.

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✓ Issue Licenses

Any organization or individual intending to have or commercially use nuclear materials that are covered by NRC's programs must obtain a license from the NRC or an Agreement State (a state that has entered into an agreement with the NRC to regulate nuclear materials).

These licenses specify the types and quantities of material, the activities it may be used for and additional conditions.

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✓ Provide Oversight

The NRC inspects licensed facilities to ensure they meet regulations and the terms of their license. By regularly assessing facility performance, the NRC is able to provide an objective perspective. In 2011, each plant received over 6,500 hours of inspection.

The NRC also investigates any allegations of wrongdoing.

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✓ Enforce Regulations

When violations are uncovered, the NRC can:

- Issue a notice of violation;
- Impose fines of more than $100,000 per violation, per day;
- Modify, suspend or revoke a license, for very serious instances of noncompliance; and
- Refer violations to the Department of Justice for review.

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✓ Evaluate Operations

The NRC collects and analyzes information about events at nuclear facilities to assess plant safety and identify any weaknesses in plant design, operations or equipment.

The NRC also identifies and addresses safety-related issues that are common among plants of similar designs (called generic safety issues).

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✓ Provide Support

- Regulatory research provides technical advice, analytical tools and information to support NRC decisions, focusing on safety and security.
- Two committees provide independent advice and review NRC staff proposals. They are the:
  - Advisory Committee on Reactor Safeguards; and
  - Advisory Committee on Medical Uses of Isotopes

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✓ Respond to Incidents

The NRC maintains an active program to ensure readiness and response to an event at a nuclear facility potentially affecting public health and safety. Through incident response centers at its headquarters and offices, the NRC provides consultation, support, and assistance to licensees and public officials.

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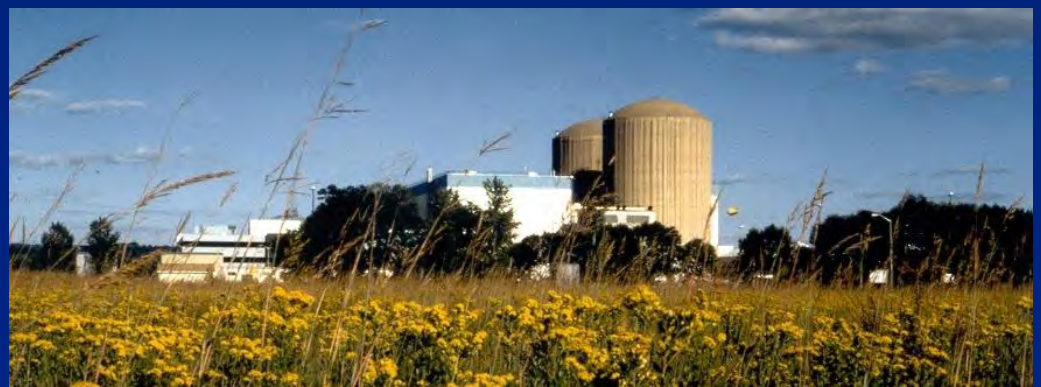
What We Do: Reactors

The NRC ensures plant safety by requiring a design philosophy that includes:

- Multiple, redundant and independent safety systems;
- Multiple physical barriers, including robust reactor containment to prevent radioactive release; and
- Testing of emergency plans.



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What We Do: Reactors

The NRC ensures nuclear plant safety by verifying compliance with regulations. Licensees are required to report plant safety data and events to the NRC.

Each nuclear power plant site has at least two NRC resident inspectors onsite to perform daily inspections. Special inspectors also perform periodic inspections.

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What We Do: Reactors

The NRC also ensures nuclear plant safety by:

- Requiring long-term maintenance to assure equipment is repaired or replaced in a timely manner; and
- Requiring continual training and qualification of nuclear plant operators.

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What We Do: New Reactors

The NRC is currently reviewing about 20 new reactor license applications, the first new applications received in some 30 years. The process for review:

- Ensures public safety by requiring new reactor designs to meet stringent rules on daily operations and emergency conditions;
- Considers potential environmental impacts so they can be properly addressed;
- Provides opportunity for public input.

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What We Do: Materials

The NRC protects public health, national security and the environment by regulating:

- Medical and industrial use of nuclear materials. About 22,000 licenses have been issued and inspected by the NRC and Agreement States.
- Mixed-oxide (MOX) fuel fabrication facilities, which mix uranium with surplus weapons-grade plutonium to make fuel for commercial nuclear power plants. A MOX plant is under construction at the Department of Energy's Savannah River Site in South Carolina.

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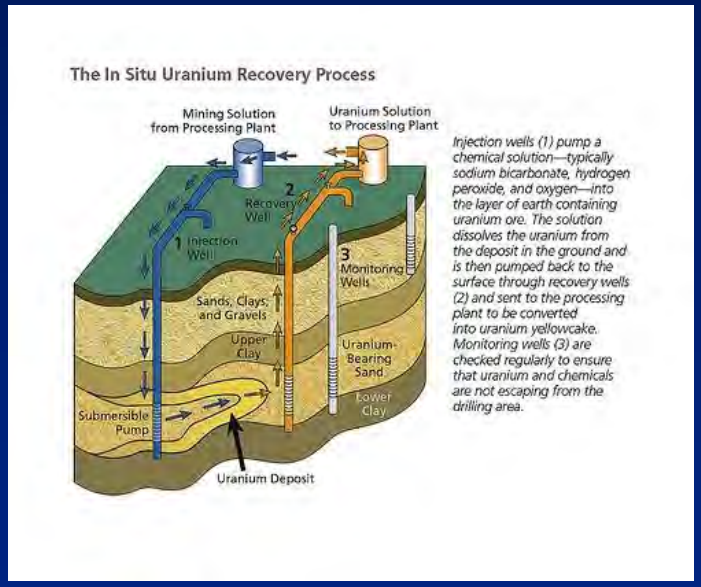
What We Do: Materials

The NRC also regulates uranium facilities:

- Uranium milling and in situ or solution mining facilities
- Uranium conversion and fuel fabrication facilities
- Uranium enrichment plants



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What We Do: Waste

The NRC ensures public safety through the licensing of nuclear waste. Some facts:

- About 67,000 metric tons of spent fuel are stored at reactor sites either in spent fuel pools or dry casks.
- In 2010, President Obama directed the Secretary of Energy to establish the Blue Ribbon Commission on America's Nuclear Future to conduct a review of policies for managing spent fuel.

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What We Do: Waste

The NRC also certifies:

- Spent fuel storage and transportation cask designs; and
- Transportation packages for nuclear materials and waste.

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What We Do: Security

- The NRC has long recognized the importance of securing nuclear facilities and materials; security requirements were significantly increased after 9/11.
- Nuclear power plants are built to withstand disasters both natural and man-made, and are among the best-protected commercial facilities in the U.S.
- The NRC works closely with DHS, the FBI and others to monitor threat conditions.

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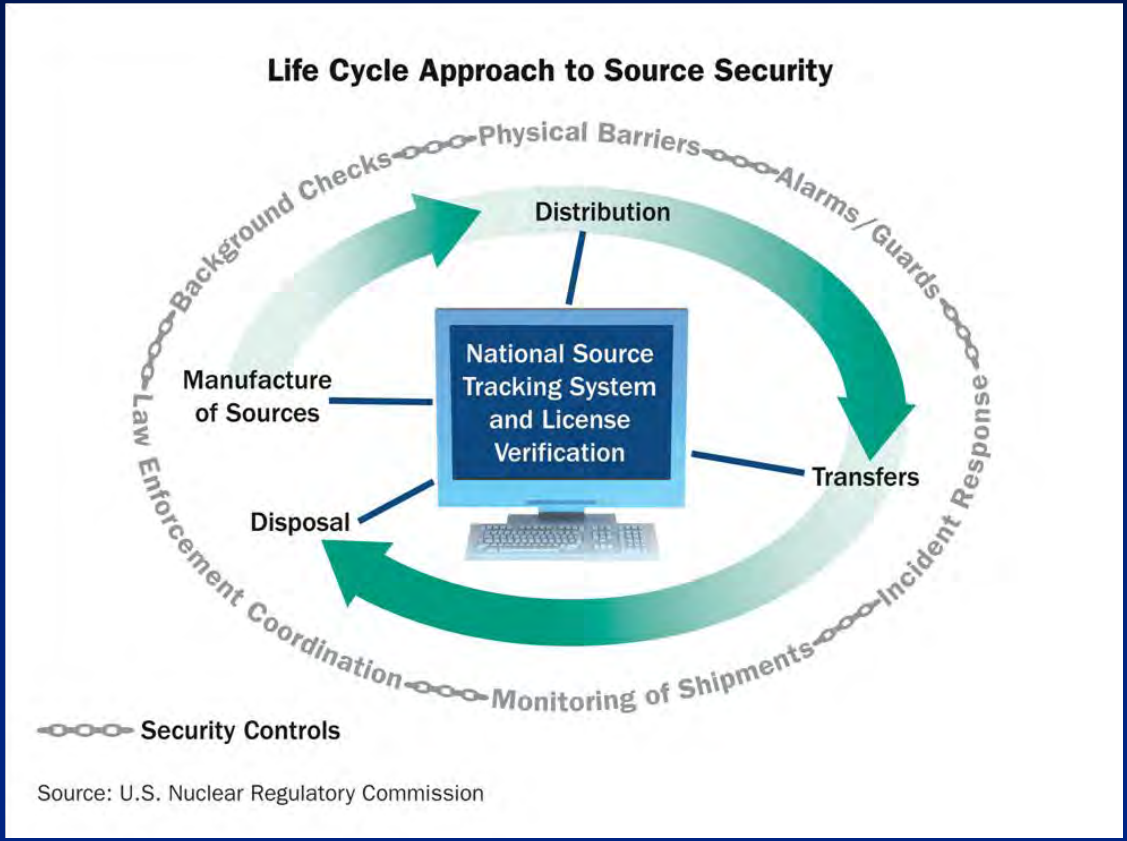
What We Do: Security



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What We Do: Security

In order to ensure plant security and safety, the NRC requires such measures as:

- Well-armed and well-trained security forces;
- Surveillance and perimeter patrols;
- State-of-the-art site access equipment and controls;
- Physical barriers and detection zones; and
- Intrusion detection systems and alarm stations.

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What We Do: Security

The NRC Operations Center is staffed 24 hours a day to monitor events and initiate response activities. The staff is prepared to work with other federal agencies under the National Response Framework to respond to significant incidents involving NRC licensees. In addition, the NRC conducts regular exercises to test licensee emergency response and uses mock adversaries to test security response.

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What We Do: Daily Life

- Regulate radioisotopes used in common nuclear medicine such as brachytherapy, gamma knife, and bone mineral analysis for diagnosing and treating cancer.
- Monitor and label radioactive materials.
- Issue licenses to regulate civilian use of source material, special nuclear material, and byproduct material. The NRC administers about a quarter of the active radioactive materials licenses across the US; 37 Agreement States administer the rest.

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Partners in Regulation

The NRC grants 37 Agreement States authority to regulate:

- Source material (natural uranium or thorium ores);
- Byproduct material, such as uranium mill tailings;
- Small amounts of special nuclear material (enriched uranium and plutonium);
- Evaluation of radiation safety information on sealed radioactive sources and devices; and
- Commercial disposal of low-level radioactive waste.

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Partners in Regulation

The NRC works with many other agencies and organizations including:

- Department of Energy
- Environmental Protection Agency
- Department of Homeland Security
- Federal Bureau of Investigation
- Department of Health and Human Services
- U.S. Congress
- International Atomic Energy Agency

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Open To The Public

The NRC places a high priority on keeping the public and stakeholders informed of its activities. At www.nrc.gov, you can:

- Find public meeting dates and transcripts;
- Read NRC testimony, speeches, press releases and policy decisions; and
- Access the agency's Electronic Reading Room to find NRC publications and documents.

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NRC and Social Media

The NRC also uses social media to increase its outreach and information to the public.

- External Blog
- YouTube channel
- Twitter account
- Flickr account

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For More Information

- Nuclear energy and energy policy: www.doe.gov
- Radiation and health effects: www.epa.gov
- U.S. homeland security initiatives: www.dhs.gov
- International nuclear affairs: www.iaea.org
- Being prepared for any emergency: www.ready.gov

You can also contact the NRC at 1-301-415-7000, 1-800-368-5642, or by e-mail at OPA.Resource@nrc.gov.