



The Licensing and Regulatory Process

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NRC Mission

NRC's primary mission is to protect the public health and safety, and the environment from the effects of radiation from nuclear reactors, materials, and waste facilities. We also regulate these nuclear materials and facilities to promote the common defense and security.

NRC Organization

- Five member Commission led by the Chairman
- Commissioners serve 5-year terms
- Approximately 4000 employees and an annual budget approaching \$1 billion (FY08)—90% paid by user fees
- Headquarters in Rockville, Maryland
- Four regional offices:
 - Philadelphia, Pennsylvania
 - Atlanta, Georgia
 - Chicago, Illinois
 - Arlington, Texas

The NRC's Regulatory Mission Covers Three Areas:

- **Nuclear Reactors:** Commercial reactors for generating electric power and research and test reactors used for research, testing, and training
- **Nuclear Materials:** Use of materials in medical, industrial, and academic settings and in facilities that produce nuclear fuel
- **Radioactive Waste:** Transportation, storage, and disposal of radioactive waste

NRC Regulates:

- 104 commercial nuclear power plants that provide about 20 percent of the nation's electricity
- 45 fuel facilities involved in the extraction, processing, and fabrication of uranium into reactor fuel
- Approximately 4,000 large and small users of nuclear material for industrial, medical, or academic purposes
- Low-level and high-level waste facilities, interim storage of spent nuclear fuel, containers used in the transportation of radioactive fuel, and decommissioning of nuclear facilities

Primary Agency Functions

- Oversee licensee performance through inspection
- Incident response
- Issue licenses and amend existing licenses
- Define regulations
- Enforcement
- Perform regulatory research
- Decommissioning oversight and license termination

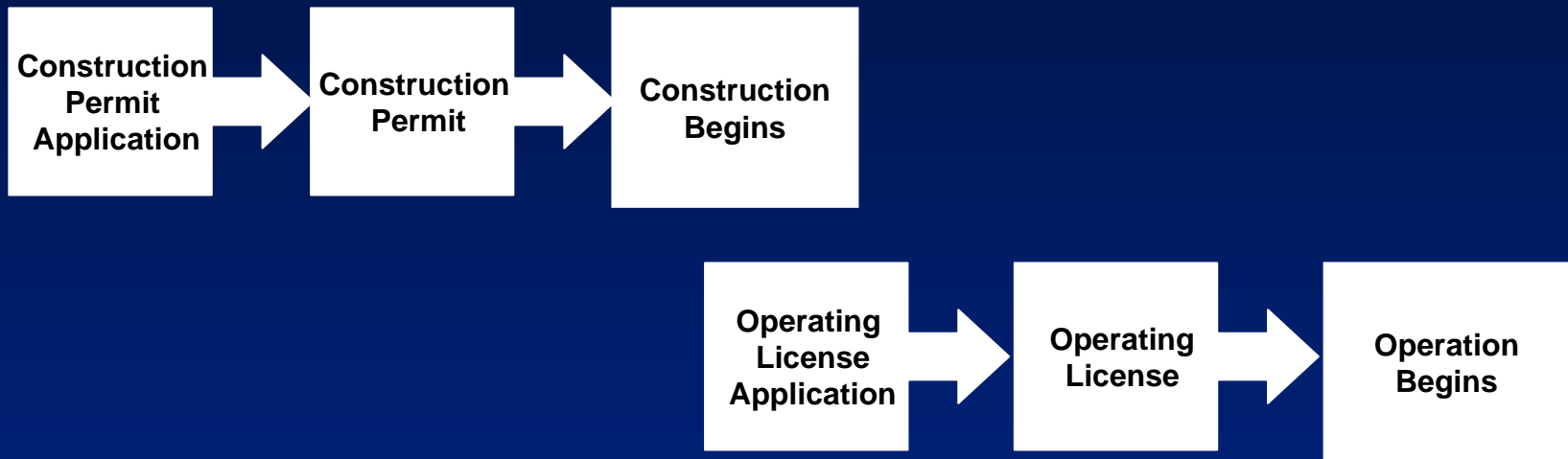
Code of Federal Regulations

- Codification of rules published in Federal Register by agencies of the Federal Government
- Code is divided into 50 titles which represent broad areas subject to Federal regulation.
 - Title 10 – Energy
 - Part 50 – Operating Reactors
 - Part 54 – License Renewal
 - Part 52 – New Reactors

Regulatory Documents

- Licensing Documents
 - Final Safety Analysis Report
 - Technical Specifications
 - Standard Review Plans and Regulatory Guides
 - Bulletins
 - Generic Letters

Part 50 - Licensing Process

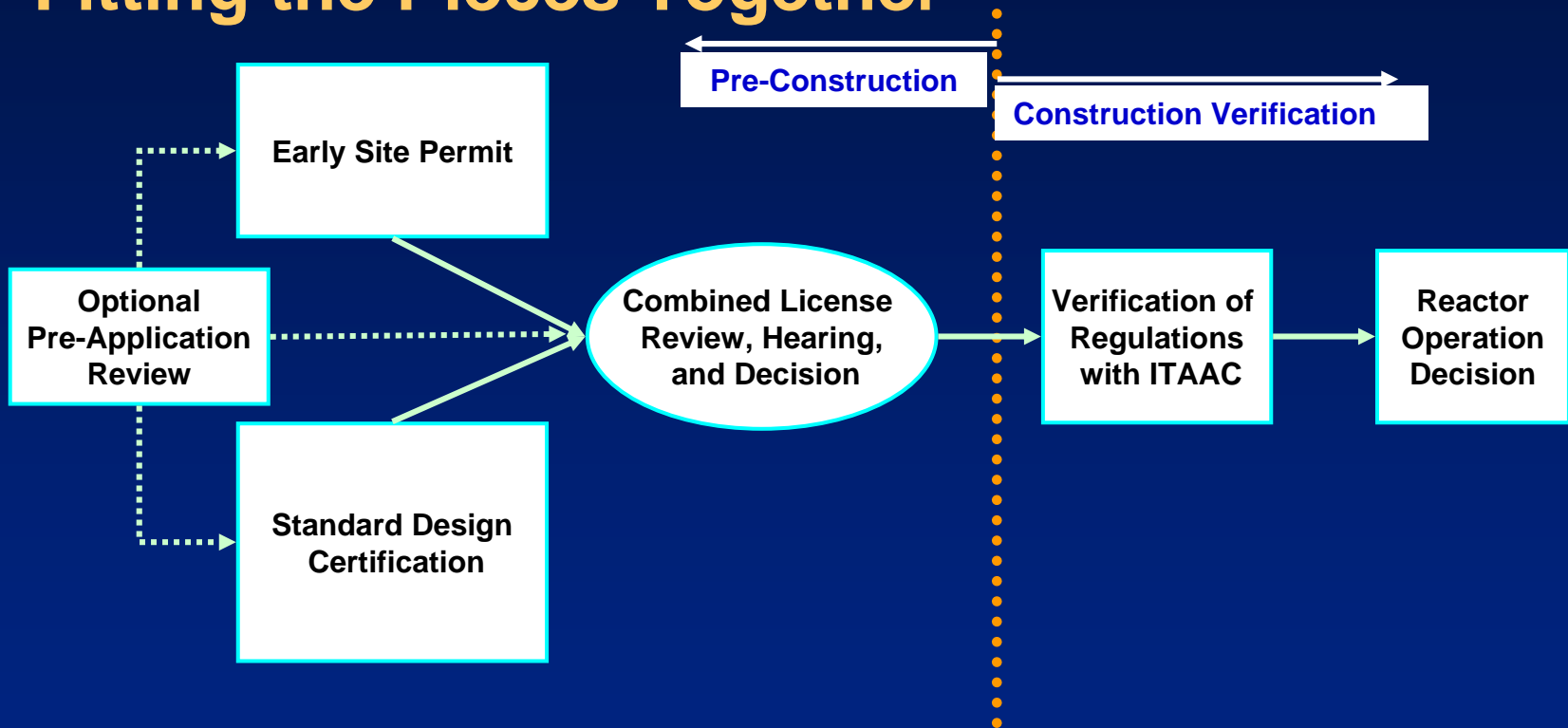


- Design effort proceeded throughout process
- No backfit protection with a CP
- Regulatory standards evolved as construction proceeded

Part 54 - License Renewal

- Atomic Energy Act limits power reactor license terms to 40 years
- NRC regulations in Part 54 allow renewals for up to an additional 20 years
- Two parallel reviews: safety and environmental
- Status
 - Completed – 48 units
 - Under review – 14 units

Part 52 – New Reactors Fitting the Pieces Together



- Licensing decisions finalized before major construction begins
- Inspections w/ITAAC to verify construction
- Limited work may be authorized before COL issuance

Early Site Permits

- Allows Early Resolution of Siting Issues and “Banking” of a Site for 10 – 20 Years
- Review Areas Include:
 - Site safety
 - Environmental impact
 - Emergency preparedness

Design Certifications

- Allows an applicant to obtain preapproval of a standard nuclear plant design
- Reduces licensing uncertainty by resolving design issues
- Facilitates standardization
- Higher degree of regulatory finality with design certification

Combined License Applications

- Combined construction permit and operating license for a nuclear power plant
- May reference an early site permit, a standard design certification, both, or neither
- Objective is to resolve all safety & environmental issues before authorizing construction
- Prior to fuel load, must verify the facility has been constructed in accordance with the license
- The combined license process in Part 52 is fundamental for reducing regulatory risk for companies building nuclear power plants

New Reactor Review Status

- The NRC has issued 3 Early Site Permits (ESPs) and is currently reviewing 1 ESP application.
- The NRC is currently reviewing 3 design certification (DC) applications and 1 amended DC application.
- The NRC has received 9 combined license (COL) applications and expects to receive an additional 14 COL applications.

Conclusions

- NRC adheres to principles of good regulation
- NRC is committed to organizational values
- Safety continues to be our first priority