

Emergency Preparedness Public Law & Regulatory Process

Atomic Energy Act of 1954

- This Act is the fundamental U.S. law on both the civilian and the military uses of nuclear materials.
- On the civilian side, it provides for both the development and the regulation of the uses of nuclear materials and facilities in the United States, declaring:
 - "the development, use, and control of atomic energy shall be directed so as to promote world peace, improve the general welfare, increase the standard of living, and strengthen free competition in private enterprise."
- The Act is about 200 pages long and largely addresses procedural requirements on how the Act's policies are to be implemented.

Atomic Energy Act of 1954

- The Act does include some formal definitions, e.g.:
 - byproduct material,
 - licensed activity,
 - nuclear incident,
 - production facility & utilization facility,
 - source material, and
 - special nuclear material.
- The Act only contains **limited** technical requirements or standards.
- The Act empowers the NRC to establish by rule or order, and to enforce, such standards to govern these uses as:
"the Commission may deem necessary or desirable in order to protect health and safety and minimize danger to life or property."

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Atomic Energy Act of 1954

- All licensing decisions by the NRC under the Act are required to show that the activity or action is **not detrimental to the common defense and security and that it protects the health and safety of the public.**
 - The Act does not define “reasonable assurance.”
 - This phrase is only an indicator of certainty, or level of confidence.
 - The Act does not require “absolute assurance.”
- The Act establishes Federal preemption regarding the regulation of the processing and utilization of source, byproduct, and special nuclear material.
 - The Act does allow the NRC to enter into agreements with states to allow them to regulate byproduct material, but not production or utilization facilities.

Energy Reorganization Act

Atomic Energy Act of 1954

Made development of
commercial nuclear
energy possible



Atomic Energy Commission (AEC)

- development and production of nuclear weapons
- development and regulation of civilian uses of nuclear materials
- Sought to ensure public health and safety without inhibiting nuclear industry growth

Energy Reorganization Act of 1974

Addressed conflict of interest between
regulating & promoting nuclear power



Nuclear Regulatory Commission

(Independent agency)

- license and regulate civilian nuclear materials
 - may enter into agreements to delegate authority over some materials to states
- license and regulate civilian nuclear facilities
- does not regulate defense nuclear facilities



Department of Energy *(Cabinet agency)*

- development and production of nuclear weapons
- promotion of nuclear power
- other energy-related work

Administrative Policy Act

- This Act is the fundamental law governing the processes of Federal administrative agencies.
- Topics:
 - Public records. (see 10 CFR Part 9)
 - Records on individuals.
 - Open meetings.
 - Rulemaking. (see 10 CFR Part 2 Subpart H)
 - Adjudications. (see 10 CFR Part 2 Subpart G)
 - Hearings. (see 10 CFR Part 2 Subpart C-F, I-O)
 - Sanctions. (see 10 CFR Part 2 Subpart B)
 - Except in cases of willfulness or public health and safety impact, the licensee must be given the facts in writing and given an opportunity to demonstrate or achieve compliance before a license is revoked or suspended.
 - e.g., 120 day clock in §50.54(s)(2)

Price-Anderson Act of 1957

- Covers liability claims of members of the **public** for personal injury and property damage caused by a nuclear accident at commercial nuclear power plant.
- Three tiers of coverage:
 1. Owners of nuclear power plants pay an annual premium for \$375 million in private insurance for offsite liability coverage for each **reactor site**.
 2. In the event a nuclear accident causes damages in excess of the above, each licensee would be assessed a prorated share of the excess, up to \$121.255 million per **reactor**.
 - Currently, this pool is \$12.6 billion.
 - If more than 15% of the pool is expended, a Federal district court will prioritize distributions.
 3. If the second tier is depleted, Congress is committed to determine whether additional disaster relief is required.

Price-Anderson Act of 1957

- During the accident at Three Mile Island, the insurance adjusters:
 - advanced funds to cover living costs of evacuated families,
 - reimbursed some individuals for lost wages, and
 - covered litigation costs for economic losses.
- Claims can include any incident:
 - in transporting nuclear fuel to a reactor site,
 - in storing nuclear fuel or waste at a site,
 - during operation of a reactor, including the discharge of radioactive effluent, and
 - in transporting irradiated nuclear fuel and nuclear waste from the reactor.
- Because the insurance pool covers nuclear accidents, U.S. property and liability insurance policies exclude nuclear accidents.

Price-Anderson Act of 1957

- The Price-Anderson Act is triggered by the NRC declaration of an Extraordinary Nuclear Occurrence (ENO).
- Criterion I
 - Substantial discharge of radioactive material or substantial radiation levels offsite.
 - Total projected radiation doses.
 - Surface contamination greater than 100 square meters as a result of a release.
 - Specific numerical values in 10 CFR 140.84.
- Criterion II
 - Death or hospitalization of five or more people due to radiation or other hazardous properties of source, special nuclear material, or byproduct material.
 - Sustained financial damages to person or persons
 - Specific numerical values in 10 CFR 140.85.

Stafford Disaster Relief and Emergency Assistance Act of 1988

- The intent of Congress was to provide an orderly and continuing means of assistance by the Federal government to **state and local governments** in carrying out their responsibilities to alleviate the suffering and damage that results from disasters by:
 - revising existing disaster relief programs,
 - encouraging development of comprehensive disaster preparedness,
 - achieve greater coordination of disaster preparedness and relief programs,
 - encouraging individuals and governments to obtain insurance coverage,
 - encouraging hazard mitigation measures, and
 - provide Federal assistance for both public and private losses.

Stafford Disaster Relief and Emergency Assistance Act of 1988

- When a major disaster occurs, the Governor executes the state's emergency plan.
- If the disaster is of such a severity that the state and affected local governments cannot possibly handle the effects, the Governor will make a request to the President:
 - the Governor explains the amount of resources available, and
 - the Governor commits to the cost-sharing requirements of the Act.
- The President can then declare a major disaster or emergency in the affected area.
 - The President has many powers under the Act.
 - The president can declare an emergency without the Governors request if the emergency falls within the primary responsibility of the Federal government.
- The use of DOD resources is limited to 10 days.

Homeland Security Act of 2002

- The Act was introduced in the aftermath of September 11 and subsequent mailings of anthrax spores.
- The Act created the Department of Homeland Security.
 - The new cabinet department merged a large number of services, offices, and other organizations conducted in other departments.
 - Mission to protect the United States from terrorists and natural disasters.
- FEMA was incorporated into DHS.
 - The merging was less successful than desired as evidenced by the Federal response to Hurricane Katrina.
 - Concerns that DHS focus on terrorism reduced preparedness for natural events.
 - Concerns that FEMA's professional capabilities had atrophied in DHS.



Post-Katrina Emergency Management Reform Act of 2006

- Amended the Homeland Security Act of 2002 to make extensive revisions to emergency response provisions while keeping FEMA within DHS:
 - both preparedness and response were vested in FEMA,
 - Preparedness had been assigned elsewhere in DHS
 - the FEMA Administrator reports directly to the Secretary, DHS
 - Previously reported to an under secretary for preparedness.
 - established professional qualifications for the FEMA Administrator, and
 - directed the Secretary, DHS, through the Administrator, to employ National Incident Management System (NIMS) and National Response Plan (NRP) as the framework for emergency response and domestic incident management



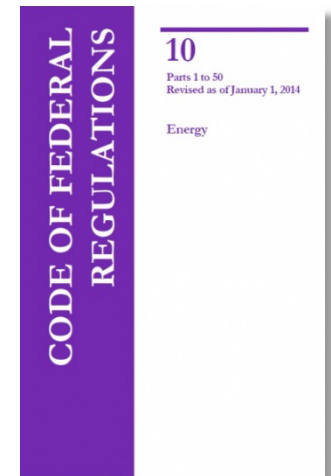
Federal Register

- The Federal Register is the official journal of the federal government (executive branch) of the United States.
- Published daily, except on federal holidays.
- The final rules published in the Federal Register are ultimately codified in the Code of Federal Regulations (CFR), which is updated annually.
- What is published:
 - proposed new rules and regulations;
 - final rules;
 - changes to existing rules;
 - notices of meetings and adjudicatory proceedings; and
 - presidential documents including Executive orders, proclamations and administrative orders.
- Publically available.



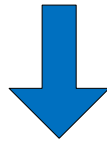
Code of Federal Regulations

- The Code of Federal Regulations is the codification of the general and permanent rules published in the Federal Register by the departments and agencies of the Federal Government.
 - It is divided into 50 titles that represent broad areas subject to Federal regulation.
 - The 50 subject matter titles contain one or more individual volumes.
 - Each title is divided into chapters, which usually bear the name of the issuing agency.
 - Each chapter is further subdivided into parts that cover specific regulatory areas.
 - Large parts may be subdivided into subparts.
 - All parts are organized in sections.



Code of Federal Regulations

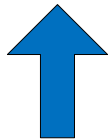
§50.47 is entitled “Emergency Plans”



There are 20 appendices to Part 50
Appendix E is entitled “Emergency
Planning and Preparedness for
Production and Utilization Facilities”



Title 10, Section 50.47(a)(1), *Code of Federal Regulations*, Part 50 [10 CFR 50.47(a)(1)]



- There are currently 50 titles
 - Title 10 is entitled “Energy”
 - Title 44 is “Emergency Mgmt and Assistance”
 - There are four volumes in Title 10
 - Parts 1-50 in Volume 1
 - Parts 51-199 in Volume 2
 - Parts 200-499 in Volume 3
 - Parts 500-n in Volume 4
- Chapter I - NRC
Chapter II, III, X – DOE
Chapter XIII – NWTRB
Chapter XVII -- DNFSB

- Currently 172 parts in Chapter I, e.g.,
 - 1 Organization
 - 2 Rules of practice and procedure
 - 20 Radiation protection standards
 - 30-39 Byproduct licensing
 - 40 Source material licensing
 - 50 Production & utilization facility licensing
 - 52 Nuclear power plant licenses and design certifications
 - 73 Physical protection
 - 100 Reactor site criteria

How NRC Issues Regulations

- Staff identifies a need to issue or amend regulations.
 - e.g., to establish or enhance adequate public protection to address unanticipated situations, new plant designs, etc.
- NRC may issue an Advanced Notice of Proposed Rulemaking (ANPR) in the Federal Register.
 - Usually done for potentially contentious rules for which the NRC seeks stakeholder comments ahead of time.
- Staff prepares a rulemaking plan for Commission approval.
- Staff prepares a proposed rulemaking package:
 - regulatory analysis (e.g., cost versus benefit),
 - environmental impact statement or analysis,
 - Federal Register announcement of public comment opportunity,
 - letters advising Congress of proposed rule, and
 - press release.

How NRC Issues Regulations

- Staff obtains no legal objection from Office of General Counsel.
- Staff obtains review by Advisory Committee on Reactor Safeguards.
- Staff obtains Commission approval to publish proposed rule.
- Staff disposes public comments and makes necessary changes to the proposed rule.
- Staff prepares a final rulemaking package for Commission approval:
 - updated regulatory analysis,
 - comment disposition,
 - environmental impact statement or analysis,
 - Federal Register announcement final rule,
 - letters advising Congress of final rule, and
 - press release,

How NRC Issues Regulations

- Staff obtains no legal objection from Office of General Counsel.
- Staff obtains review by Advisory Committee on Reactor Safeguards.
- Staff obtains Commission approval to publish final rule.
- NRC publishes final rule in Federal Register
- The same process is followed for amended rules.
- Abbreviated process followed for rulemakings that administrative in nature.
- NRC can go to direct final rule, bypassing the proposed rule stage, if necessary (rare other than for errata).
- The full process can take 2-3 years depending on the complexity of the rule.

- A final rule cannot be issued without the solicitation and disposition of stakeholder comments on the rule.
 - Some exceptions.
- Once a final rule is published:
 - The public can petition the Commission to issue, amend, or rescind any regulation under 10 CFR 2.802.
 - Parties to a licensing proceeding (hearing) cannot raise contentions that challenge an existing regulation.
- NRC decisions can be challenged in court once the individual has exhausted available administrative means to gain relief.
 - Courts will generally give relief only if the NRC decision can be shown to be arbitrary or capacious.

Significant EP Rulemakings

Date Final	Federal Register	Subject
Jul 17, 1979	44 FR 41183	ANPR on EP Regulations
Nov 23, 1979	44 FR 61123	Policy statement on EPZ size
Dec 16, 1980	45 FR 82713	NRC-FEMA Memorandum of Understanding
Aug 19, 1980	45 FR 55402	Final EP Rule
Dec 30, 1980	45 FR 85862	Announce NUREG-0654 availability
Nov 03, 1987	52 FR 42078	Final “realism rule”
Mar 25, 1994	59 FR 14087	Removed NUREG-0654 Incorp. by Reference
Jun 14, 1996	61 FR 30129	Exempt licensee renewals from §50.47(a)
Jan 26, 2001	66 FR 5427	Added potassium iodine to PAR options
Aug 28, 2007	72 FR 49352	Amended EP aspects of ESPs, COLs
Nov 23, 2011	76 FR 72560	Final EP Rule