

Overview of the U.S. NRC Decommissioning Guidance – Challenges and Issues

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RC's Mission



- NRC's mission is to ensure plant safety, whether the plant is operating, or transitioning from operating to decommissioning, and through the entire process until the plant has been radiologically decommissioned and the license is terminated.

Present Status

- 13 Power Plants in active decommissioning
- 10 Power Plants in SAFSTOR
- 8 Announced shutdowns

Decommissioning Program Regulatory Framework

Decommissioning Program

Atomic Energy Act of 1954, as Amended, Statutory authority

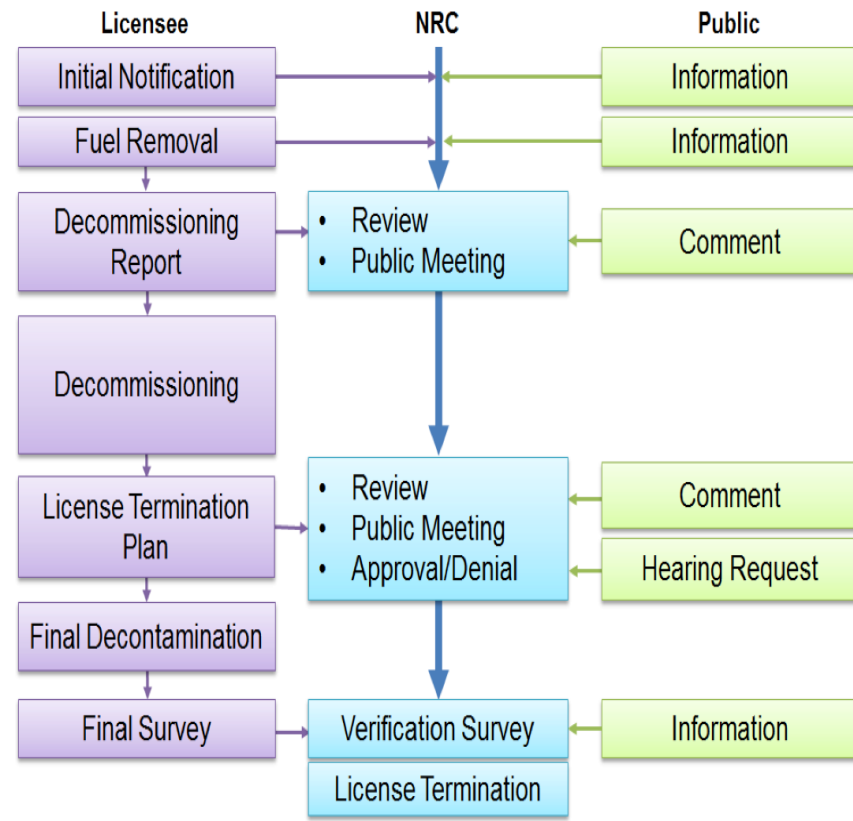
- Integrated Decommissioning Program

Comprehensive regulations:

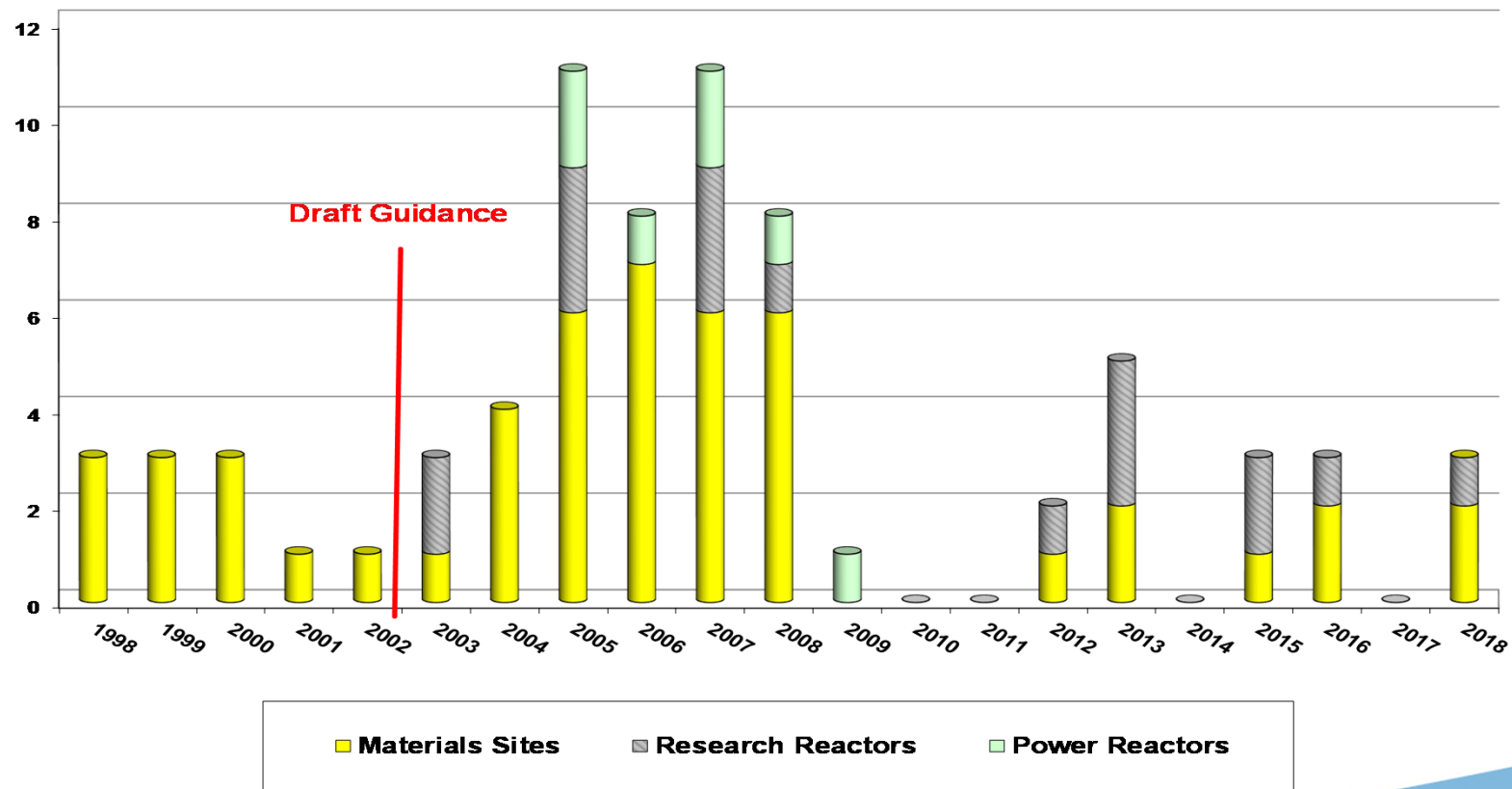
- Public involvement
- Environmental review
- Financial assurance
- Site characterization
- Site remediation/Radiological clean-up
- Final site surveys

Regulatory guidance
Oversight and inspection

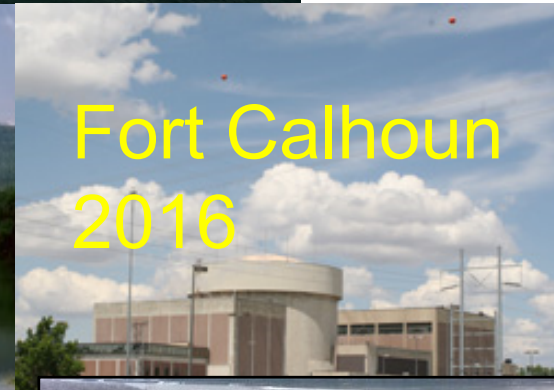
Decommissioning Process



Safe Decommissioning Leads to License Terminations



Recent Power Reactor Shutdowns



2013 Internal Reactor Decommissioning Program Evaluation



Evaluated human resources needed to meet the increase in expected power reactor shutdowns

Evaluated the status of decommissioning regulations, guidance and inspection procedures

Evaluated the potential impact if additional reactors were to enter decommissioning

Evaluated the NRC's Training and Knowledge Management Programs



Reactor Decommissioning Evaluation Program Actions

- Aligned all power and research reactor decommissioning in the Reactor Decommissioning Branch
- Transferred all Complex Material decommissioning and Uranium Recovery licensing work
- Prioritized a plan for revising NUREGS, regulatory guides and inspection program

2013 Inter-Office Decommissioning Transition Working Group (DTWG)



- Tasked to evaluate previous reactor transitioning from operations to decommissioning
- Comprehensive review of the licensing and exemption requirements
- Produced the DTWG Lessons Learned Report that serves as the current Decommissioning Rulemaking with the Commission

2015 NRC Project AIM Challenges



Directed changes to the Reactor Decommissioning Inspection Manual Chapter (IMC 2561)

Eliminated funding for using contractors to update guidance documents such as NUREGs.



Reactor Decommissioning Inspection Manual 2561

- 35 reactor decommissioning inspection procedures (IPs)
- Minimum annual inspection - 12 core procedures are required each year
- Continues until the license is terminated
- In 2018, IMC 2561 revised per Project AIM
- Inspection procedure revisions in progress, two left to do in 2020
- Revise IMC 2561 at completion of IP revisions.

Regulatory Guides

- RG 1.179, Standard Review Plan for Decommissioning Reactors, revised 2018
- RG on the Decommissioning Planning Rule in development
- RGs 1.184 (Reactor Decommissioning) and 1.185 (Post Shutdown Decommissioning Activities Report) revisions are ready for publication consistent with the Proposed Decommissioning Regulations

NUREGS - Guidance for Implementing Regulations

- NUREG 1700, “Standard Review Plans for License Termination Plans”
- NUREG 1507, “Minimum Detectable Concentrations with Typical Radiation Survey Instruments for Various Contaminants and Field Conditions”
- NUREG 1757, Volume 1, “Decommissioning Process for Materials Licensees”
- NUREG 1757, Volume 2, “Consolidated Decommissioning Guidance”

RC Challenges

- Managing a growing decommissioning reactor program
- Rightsizing the NRC with an aging workforce, consolidating organizations at HQ and Region Offices
- Being more Innovative, efficient and Risk-Informed Decision Making
- Reactor Decommissioning Rulemaking and Maintaining Regulatory Guidance
- Ensuring consistency between NRR and NMSS internal procedures for transitioning sites

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Questions?