The NRC Reactor Decommissioning Program

San Onofre Community Engagement Panel Meeting
May 11, 2017

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Chief, Reactor Decommissioning Branch
Office of Nuclear Material Safety and Safeguards
NRC’s Mission and Goal

The NRC’s mission is to ensure plant safety, including safe plant operations, a safe transition from operations to decommissioning, and the completion of radiological decommissioning.

Our goal is to ensure the decommissioning is conducted safely and compliantly:
- Within the Licensing Safety Bases
- Inspection and oversight programs
2017 is the 20th Anniversary of the NRC Decommissioning Regulations
Reactor Decommissioning Program

• 20 Power Reactors in Decommissioning
  ✓ 6 Active DECON
  ✓ 14 in SAFSTOR
  ✓ 7 expected to cease operations by 2024

• 4 Research Reactors in Decommissioning
  ✓ 4 Active DECON
Decommissioning

As defined in 10 CFR 50.2 “Decommission” means to remove a facility or site safely from service and reduce residual radioactivity to levels that permits either:

- Release of the property for unrestricted use and termination of the license;

or

- Release of the property for restricted conditions and termination of the license.
Reactor Decommissioning Branch

- Licensing amendments
- Exemptions
- Rule Making
- Guidance Development
- Inspection Program
- Technical Support for Inspections
- Knowledge Management
- International Support
NRC’s Regulatory Oversight Continues

- License Amendments
  - Federal Register Notice/Website
  - Public Comment
  - Opportunity for Hearing
- Exemptions
- Orders
NRC’s Regulatory Oversight Continues

Decommissioning Inspection Program

• Inspection Manual Chapter 2561
• Core Inspection Procedures annually
• Special and Discretionary Inspection Procedures
• Inspection Program is adjusted to site activities
Inspection Program Goals

The goals of the oversight program for decommissioning safety are through **Onsite Inspection**:

- Direct observation and verification;

- Ensure the licensees controls comply with regulatory requirements; and

- Identify any declining performance trends and verify that the licensee has taken actions to reverse any trend.
NRC Inspection Program for Decommissioning Reactors and Spent Fuel Storage

May 11, 2017
Laguna Hills, CA
Ray L. Kellar, P.E., Chief
Fuel Cycle and Decommissioning Branch
Region IV, Division of Nuclear Materials Safety
How to safely get from this to this

Connecticut Yankee, CT

Maine Yankee, ME

Trojan, OR
How NRC Ensures Safety

- Establish and ensure compliance with requirements contained in:
  - Regulations
  - License Base Documents (License Conditions, Technical Specifications)
  - Guidance Documents
- Perform licensing reviews and safety evaluations
- Inspection and enforcement
Inspection Activities

- Inspections of Spent Fuel Pool Safety and Independent Spent Fuel Storage Installation (ISFSI)
- Inspections of Decommissioning Activities
  - Generally scheduled during periods of higher risk activities
  - During and after remediation activities, NRC conducts independent radiological measurements to confirm licensee survey methodologies
  - Security and Emergency Preparedness
Objectives of the NRC Inspection Program

- Objectively verify safe conduct of licensee activities and oversight
- Verify adequacy of licensee controls
- Ensure safety problems and violations are promptly identified and corrected and effective actions are taken to prevent recurrence
- Examine trends in licensee safety performance
Inspection Planning and Reports

- Routine inspection schedule
  - Planned about a year in advance
  - Coordinated with the program office in NMSS
- Inspection planning and execution
  - Inspection Plans
  - Inspection Procedures
  - Exit Meetings
- Enforcement
  
  NRC enforcement policy
  
  [http://pbadupws.nrc.gov/docs/ML0934/ML093480037.pdf](http://pbadupws.nrc.gov/docs/ML0934/ML093480037.pdf)
Inspection Planning and Reports

- Decommissioning Inspections governed by Manual Chapter 2561 - Decommissioning Power Reactor Inspection Program
- Core Inspection Procedures
  - Includes over a dozen procedures
- Discretionary Procedures
  - Includes over 30 procedures
- ISFSI Inspection procedures (MC1246)
  - Includes over 5 procedures for different phases of construction and loading operations
Post Inspection Activities

- Prompt inspection debrief with NRC management
- Determination of any significant findings and enforcement related issues
- Issue inspection report

Most NRC inspection reports are publicly available. To locate reports, go to ADAMS web page (http://www.nrc.gov/reading-rm/adams.html), use advanced search feature with docket numbers 05000361, 05000362, and 07200041 for SONGS
Comments/Questions