Overview of the Spent Fuel Management

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Region I
U.S. Nuclear Regulatory Commission (NRC)
Nuclear Power Plants
- Each regional office oversees the plants in its region—except for the Callaway plant in Missouri, which Region IV oversees.

Materials Licensees
- Region I oversees licensees and Federal facilities located geographically in Region I and Region II.
Why the need for Dry Cask?

- Reprocessing of spent fuel not an option
- No national repository for spent fuel to date
- Pools meant for temporary storage encounter capacity issues
Dry Cask Storage Overview

- ISFSI – Independent Spent Fuel Storage Installation
- A complex designed and constructed for the interim storage of spent nuclear fuel, greater than Class C waste; and other associated radioactive materials.
Dry Cask Storage Purpose

- Concrete storage bunker
- Bundle of used fuel assemblies
- Canister
- Storage cask

United States Nuclear Regulatory Commission
Protecting People and the Environment
Roles and Responsibilities

- Licensing
  - General or Site-Specific
- Certification
  - Approximately 12 Certificates of Compliance (CoCs)
- Inspection
- Public Outreach on storage and transportation activities
Independent Spent Fuel Storage Installations (ISFSIs)

U.S. Independent Spent Fuel Storage Installations (ISFSI)

- Reactor sites operating a general licensed ISFSI
- Specific licensed ISFSI (at or away from reactor site)
- Standalone ISFSIs
- Sites are pursuing a future specific licensed ISFSI
- Reactor sites have not announced intentions regarding ISFSI
- States have at least one ISFSI

Current as of March 2019
NRC Inspection Program

- Inspections cover all activities related to ISFSIs from design to operation
Spent Fuel Security

- ISFSI security is maintained as part of the overall reactor security program during the plant operations.
- During decommissioning, the security posture is focused on the Spent Fuel Pool and the ISFSI.
- After decommissioning, the security posture of the ISFSI is maintained.
Consolidated Interim Storage

• Interim Storage Partners (ISP) in Texas
  – June 2018 – ISP requested restart of application review
  – August 2018 - Staff resumed the safety and environmental reviews
  – November 2018 – Staff issued Requests for Additional Information (RAIs)

• Holtec International & Eddy Lea Energy Alliance in New Mexico
  – February 2018 - Staff accepted application for docketing, began detailed review
  – April, May 2018 - Staff held 6 environmental scoping meetings in New Mexico and Maryland
  – March, September, October 2018 - Staff issued RAIs
  – Atomic and Safety Licensing Board was established and held an oral argument on contention admissibility and standing in January, 2019 and a decision on admissibility is expected in mid-May.