

# Reactor Oversight Process Enhancement

## Independent Spent Fuel Storage Installations



### Background

The NRC's Office of Nuclear Material Safety and Safeguards (NMSS) oversees the loading and monitoring of Independent Spent Fuel Storage Installations (ISFSIs). NMSS participated in the ROP Enhancement efforts through a working group to assess ISFSI inspections and recommend risk-informed, performance-based changes to increase the program's efficiency.

### Five Safety Focus Areas



Impact to Plant Operation



Occupational Exposure



Confinement/Canister Integrity



Public Exposure



Fuel Damage

### Changes Recommended by Staff

#### Frequency of Routine Inspections



The staff examined insights from similar facilities, probabilistic risk models, subject matter expertise, and operational experience before recommending routine inspections could be changed from every two years to every three years while still ensuring safety.

#### ISFSI Inspector Qualification Program



The staff is recommending enhanced consistency across NRC regions through a training matrix for individuals already fully qualified as a reactor operations inspector or reactor engineering inspector.

#### Focusing ISFSI Inspections



- The review suggested oversight changes in more risk-significant areas.
- Subject matter experts suggested adjusted level of effort estimates based on a line by line review of inspection procedures.
- The review used safety and risk significant information to adjust inspection activity selection and frequencies.