Nuclear Industry
Defense In Depth

Nuclear plant operation built around concept of ‘Defense in Depth’

- Philosophy to protect public health and safety
- Multiple, independent, reinforcing layers of defense:
  
  1. Design & Construction
  2. Operations & Training
  3. Maintenance
  4. Security
Dry Cask Storage Defense in Depth

Regulatory Oversight

Design

Fabrication

Operations, Maintenance & Security

Inspection

Remediation

Aging Management
ISFSI and Canister Improvements

• Highest seismic design of any ISFSI in U.S.
• Upgraded 316L stainless steel material for corrosion resistance
• Selected 5/8” canister thickness
Canister Improvements

- Initiatives driven by CEP feedback:
  - Fabrication
    - Improved weld design
    - Weld rolling technique to minimize residual stresses
    - Stress relieving of canister welds by laser peening
    - Improvements increase corrosion resistance
Canister Improvements

- Initiatives driven by CEP feedback:
  - Spare canister for inspection tool development
  - Spare cavity enclosure container for future use
  - Industry and vendor participation to develop inspection and mitigation techniques
Current Monitoring

✓ 24/7 Monitoring by Highly Trained Operations and Security Force
✓ Continuous Temperature Monitoring
✓ Daily Walkdowns of ISFSI
✓ Radiation Surveys
✓ Periodic Inspections