U.S. Nuclear Regulatory Commission Efforts to Improve the Safety-Security Interface

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U.S. Nuclear Regulatory Commission

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Overview

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- U.S. Nuclear Regulatory Commission Mission and Goals
- USNRC Efforts to Improve the Safety-Security Interface
- Considerations to Improve the Safety-Security Interface

USNRC Overview

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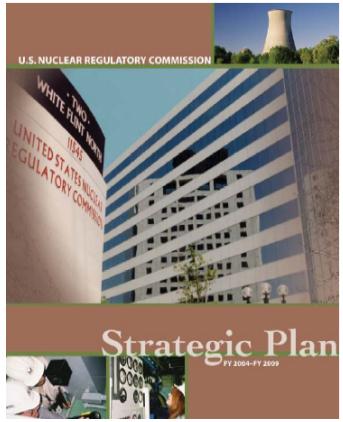
- Mission and Goals

- USNRC's responsibilities include regulation of:
  - Commercial Nuclear Power Plants
  - Research and Test Reactors
  - Use of Radioactive Materials
  - Nuclear Fuel Cycle Facilities
  - Decommissioning of Facilities and Sites
  - Transport, Storage and Disposal of Radioactive Materials and Waste



- Designed to protect both public and occupational workers from radiation hazards

Regulatory Framework

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- Regulations
- Licensing
- Oversight
  - Inspection
  - Enforcement

Improving Safety-Security Interface

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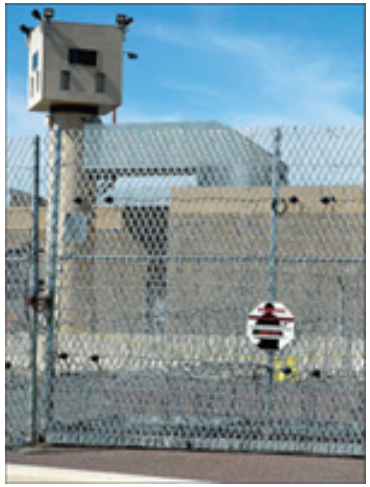
- Regulations and Guidance
- Regulatory Oversight
- Regulatory Processes
- Collaborative Efforts



Regulation and Guidance

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- Revisions to 10 CFR Part 73 – Physical Protection of Plants and Materials
- 10 CFR 73.58 - Safety/security interface requirements for nuclear power reactors
- Draft Regulatory Guide DG-5021, Managing the Safety/Security Interface

Reactor Oversight Process

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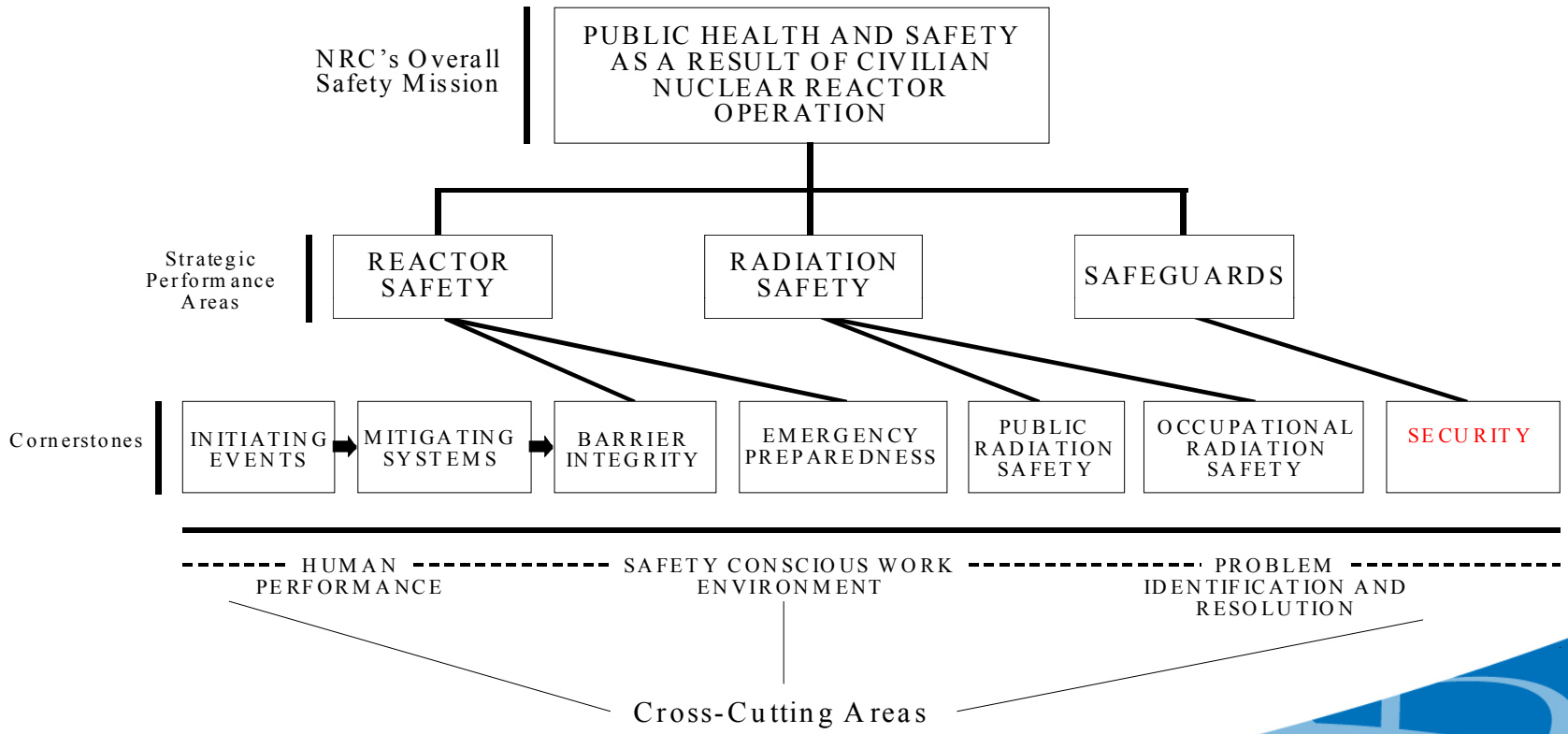
REGULATORY FRAMEWORK



Regulatory Processes

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- Security Findings Review Panel
- Implementation of Increased Controls Working Group
- Rulemaking Process

Collaborative Efforts

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- Nuclear Government Coordinating Council
- Nuclear Sector Coordinating Council
- Nuclear Security Working Group/Executive Steering Committee
- Public Meetings and Soliciting Public Comment

Considerations

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- Formation of a Senior-Level Working Group
- Enhanced Coordination During Document Preparation
- Formation of Security Document Review Organization

Considerations

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- Identifying or Adding Linkages between Safety and Security documents
- Develop Safety/Security Guide

Summary

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- USNRC has taken measurable steps to improve safety-security interfaces both at the facilities it regulates and internally
- IAEA is well positioned to make similar advances

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For more information please see our website:

http://www.nrc.gov/security.html

A Practical Approach to Assessing Nuclear Threats

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Introduction

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- Need for a consistent and transparent approach to assessing nuclear threats
- Process needs to already be in place
- Requires multi-disciplined team approach
- Ensures assessment is timely and effective

The Information Assessment Team

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- Focal point for assessing all reported threats
  - **A threat is defined as information - explicit or implied that a malevolent act may be committed**
- Available 24/7 through NRC Operations Center
- Consists of threat analysts, security specialists, and reactor, materials and cyber technical experts
- Coordinates outreach to licensees, law enforcement and other government agencies
- Provides recommendations for follow-on actions

Handbook of Potential Scenarios

- Handbook developed to facilitate discussions and guide potential actions
- General categories of scenarios include
  - Suspected tampering, vandalism, sabotage
  - Suspected or actual intrusion
  - Nuclear extortion threat
  - Suspected theft of Special Nuclear Material
  - Bomb threat

Handbook of Potential Scenarios

- General categories of scenarios include
  - Suspected Arson
  - Radiological Dispersal Device Threat
  - Radioactive Contamination threat
  - Non-specific threats
  - Computer System or cyber threat

Handbook of Potential Scenarios

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- Initial assessment evaluates from safety, operational, security and investigative perspective
- Goal to identify any immediate threat to safe operation
- Identify underlying security issues
- Primary responsibilities for response belong to licensee and law enforcement
- NRC provides oversight of licensee actions

Database Development

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- Post 9/11 password-protected database developed to record actions regarding threats and security events
- Available to licensees and appropriate government agencies
- Used for development of trend reports
- Feeds into National-level evaluations of threats to all elements of critical infrastructure

Conclusion

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- IAT process has proven to be an effective process for quickly assessing threats
- Can be adapted to member state's regulatory, legal and organizational structure
- Key element is having process in place
- Should have small group of experts available 24/7
- Look at safety as well as security concerns
- Enhances information-sharing between regulatory authority and other key elements of government

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