

# Emergency Response at Nuclear Facilities



**U.S. NRC**

UNITED STATES NUCLEAR REGULATORY COMMISSION

*Protecting People and the Environment*

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# [ Introduction to the NRC ]

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- Who we are:
  - The Energy Reorganization Act of 1974 established the independent U.S. Nuclear Regulatory Commission to regulate commercial uses of nuclear material.
  - NRC is headed by four Commissioners and a Chairman, all appointed by the President and confirmed by the Senate for staggered five-year terms.
  - NRC employs about 3,700 people in its suburban Maryland headquarters and four regional offices in Pennsylvania, Georgia, Illinois, and Texas.
  - NRC has assigned resident inspectors to 65 nuclear power plant sites and three fuel facilities.

# NRC Locations



- ☆ Headquarters (1)
- Regional Office (4)
- Technical Training Center (1)
- △ High-Level Waste Management Office (1)

# [ Primary NRC Functions ]

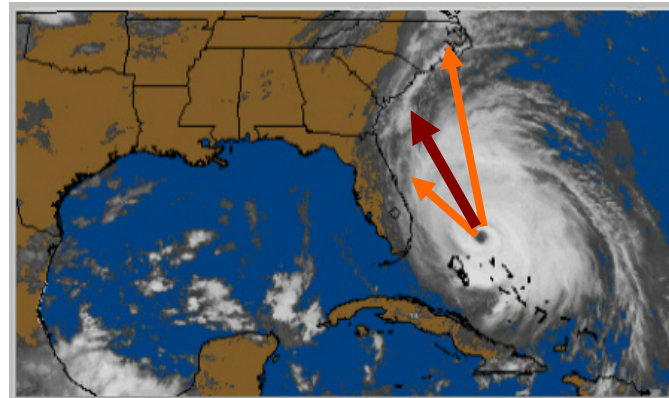
- Establish rules and regulations
- Provide oversight through inspection, enforcement, and evaluation of operational experience
- Conduct research to provide support for regulatory decisions
- Issue licenses
- Respond to emergencies



# Post 9/11 Focus Areas



**Incident Response**



**Emergency Preparedness**



**Security Policy**



**Security Operations**

# [ Emergency Responsibilities ]

- Licensee:
  - Mitigate the accident and its consequences
  - Properly classify and notify off-site officials of the event
  - Prepare and communicate Protective Action Recommendations (PARs) to State and local officials



# [ NRC Event Responsibilities ]

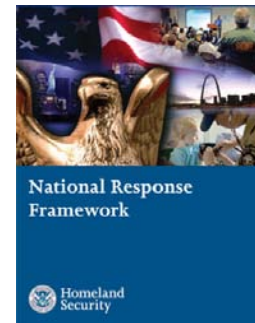
- Activate the agency's response centers
- Assess plant conditions
- Evaluate protective action recommendations
- Support off-site officials
- Keep other agencies informed
- Keep news media informed



# [ NRC Response Modes ]

Based upon NRC's independent assessment:

- Normal Mode
- Monitoring Mode
- Activation Mode
- Expanded Activation Mode



FEMA





# [ NRC Response Organization ]



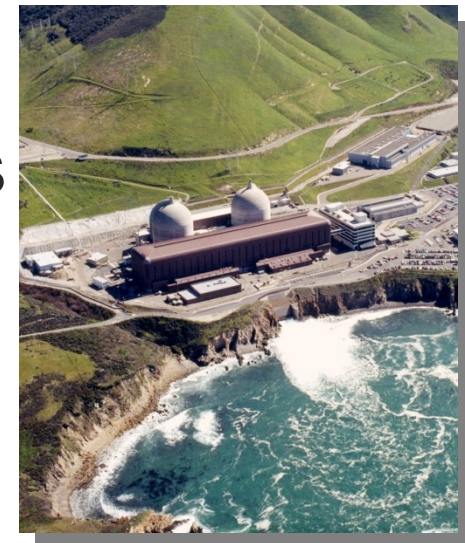
← HQ Operations Officers

Executive Team →



← HQ and Regional Assessment Teams

Site Team →



# [ 24/7 Operations Officers ]



- Headquarters Operations Officers (HOO) and Emergency Response Officers (HERO) staff the NRC Operations Center 24/7. They receive and assess all incoming information, coordinate event-related communications, and facilitate a fast startup of the NRC incident response organization if conditions warrant.

# [ NRC Executive Team ]

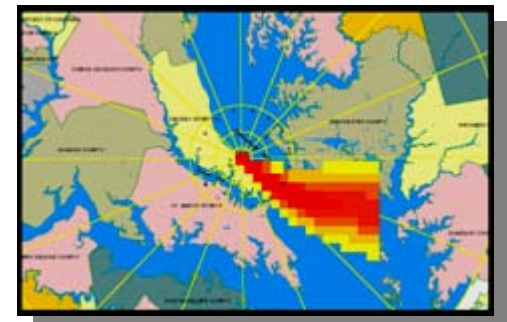
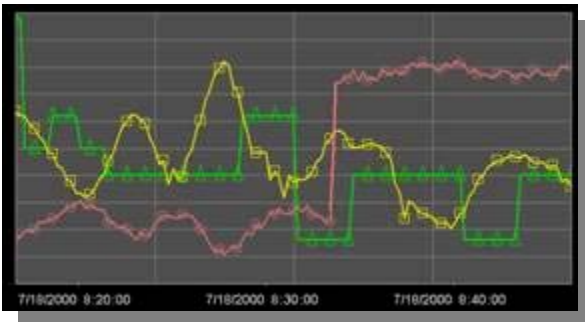
- Directed by the Chairman or another Commissioner
- Assisted by the Executive Director for Operations and other senior managers



# [ NRC Assessment Teams ]



- Reactor Safety Team
- Fuel Cycle Safety Team
- Safeguards Team
- Protective Measures Team



# [ NRC Support Teams ]

- Executive Support Team
- Liaison Team
- News Center Team
- Executive Briefing Team
- Interagency Response Team



# [ NRC Site Team ]

- 10-15 specialists dispatched from regional office.
- Interface directly with licensee, media, and State/ local officials.
- Conduct technical assessment of licensee response.



# Coordination With Other Agencies

- Department of Homeland Security ■ Department of Defense
- Federal Aviation Administration ■ Department of Energy
- Environmental Protection Agency ■ Department of Justice
- Federal Emergency Management Agency ■ States / Locals



# [ Security-Based Event Response ]

- Physical Attack
  - Prompt notification from licensee
  - Authentication code verified
  - Key details provided by licensee
- Aircraft Threat
  - Notification from Department of Defense
  - Inform licensees within 100-mile radius
  - Authentication code verified





# Physical Attack Response

## HOO

### **Federal Agencies**

- DHS National Operations Center
- FBI Strategic Information and Operations Center
- DHS National Infrastructure Coordination Center

### **Internal**

- NSIR Office Director
- All Regional Administrators
- Other Office Directors

## HERO

### **Internal**

- HQ's and all Regions' Information Assessment Teams

### **External**

- Reactor and Fuel Cycle Facilities (Blast dial) – request increase security posture

# [ Aircraft Threat Response ]

## ■ HERO:

- Monitors Defense Red Switch telephone with Department of Defense
- Passes track-of-interest (TOI) information to Headquarters Operations Officer

## ■ HOO:

- Establishes a conference call with licensee control rooms (100-mile radius) and the first Imminent Security Threat Authority manager

## ■ Imminent Security Threat Authority:

- Ensures licensees carry out Imminent Aircraft Attack procedures and, if necessary, issues Orders

# [ Security Enhancements ]

- Added security officers, patrols, and checkpoints
- Increased surveillance of owner-controlled and protected areas
- Modified DBT to reflect current threat
- Upgraded security officer training and qualification programs
- Increased access authorization control
- Enhanced barriers



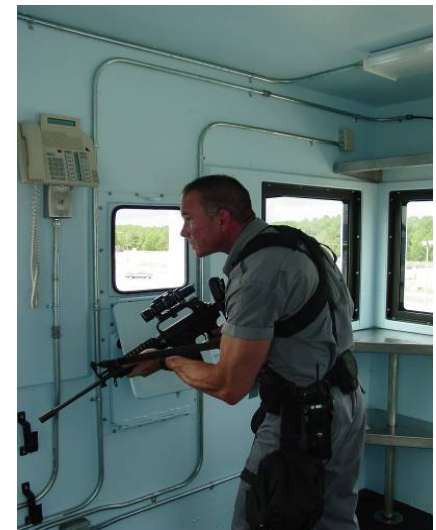
# [ Security Enhancements ]

- Intensified search procedures
- Re-assessed access authorization lists
- Increased awareness of suspicious activities near the plants
- Increased interaction with NRC on security
- Improved liaison with local agencies
- Enhanced coordination with Federal agencies



# [ Force-on-Force Program ]

- Performance-based testing of site security:
  - Part of baseline inspection program
- Three-year cycle legislated by the Energy Policy Act of 2005
- Enhanced exercise realism post-9/11:
  - MILES (Laser Targeted System)
  - Composite Adversary Force



# Proposed EP Rulemaking

#	RULEMAKING TOPIC	ONSITE GUIDANCE
1	On-Shift Multiple Responsibilities	Interim Staff Guidance
2	Emergency Action Levels for Hostile Action Events	Reg. Guide 1.101
3	Emergency Response Organization Augmentation at Alternative Facility	Interim Staff Guidance
4	Licensee Coordination with Offsite Response Organizations	Interim Staff Guidance
5	Protective Actions for Onsite Personnel	Interim Staff Guidance
6	Challenging Drills and Exercises	Interim Staff Guidance
7	Alert and Notification System Backup Means	Interim Staff Guidance
8	Emergency Declaration Timeliness	Interim Staff Guidance
9	Emergency Operations Facility – Performance-Based Approach	Interim Staff Guidance
10	Evacuation Time Estimate Updating	NUREG/CR-XXXX
11	Emergency Plan Change Process	Draft Reg. Guide 1237
12	Removal of One-Time Requirements	N/A

# [ Questions? ]

