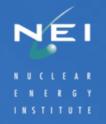
## Lessons Learned Phase III Hostile Action-Based Drills

Marty Hug



### Why Are We Here Today?



Those who forget the past are condemned to repeat it



### NEI 06-04 Revision 0

- Bulletin 2005-02 established criteria and pathway for industry response.
- Revision 0 established the initial framework for the design and implementation of a threat-based drill
  - Scenario development (scope) standards.
  - Performance objective and demonstration criteria standards.

Ensure reasonable assurance standards are maintained.

NEI 06-04 Revision 0 Nuclear Energy Institute Guideline for the Development of EP Drill and Exercise Threat-Based **Scenarios** August 2006 Nuclear Energy Institute, 1776 I St. N.W., Suite 400, Washington, D.C. (202,739,8000)

### **Recap - Phases of the Initiative**

#### Phase I & II – Pilot Phase

- Conduct of tabletops and drill to develop, refine and validate new onsite and offsite guidance and objectives
- Phase III 1st year industry threat-based drills
  - Eight Drills conducted to date in 2007; Susquehanna in November
  - NEI, NRC and FEMA observation
  - NRC feedback from the drills
  - Offsite Agency Feedback
  - Industry Peer Observations and Feedback



### **NEI Task Force**

NEI Task Forces: - Pilot Task Force - Phase III Task Force • NEI 06-04 R1 Goal of Task Forces Evaluate Drill Expectations and Revised **Requirements into a Consistent Demonstration** 





The Goal is to test the interfaces between EP, Security and Ops consistent with Bulletin 05-02.

8/2/07 EP Working Group Meeting Nader Mamish – Deputy Director - NRC





The Goal is to test the interfaces between EP, Security and Ops consistent with Bulletin 05-02.

#### Also to Test Interfaces with Responding Agencies LLEA and Fire Department

Offsite Agency Now Become Part of the Plants Event Mitigation Strategy



### Drills in 2007

#### NEI Observed

- Vogtle
- Quad Cities
- Seabrook
- Point Beach
- Perry
- Brunswick

NEI Received Feedback
 Braidwood
 Prairie Island



### **Facilities NEI Observed**

- Control Room / Central Alarm Station
  - Two Airliner Events
  - One Hostile Force Drill
- Incident Command Post
- Unified Command (UC)
- Alternate Facilities
- Off Site Mustering Location

County Emergency Operation Center (E)

### **Consistency in Drill Process**

NEI 06-04 Revision 0 Not Applied Consistently
Gaps in the Drill Demonstration Identified

NEI Determined the Need
 – Revise NEI 06-04
 – Conduct the Workshop



### Lets Discuss Lessons Learned

And Then Today and Tomorrow We will Hear From

Sue Perkins-Grew Joe Anderson Steve Erickson Jim Tucker Jim Jones

Bruce Fielding Larry Greene Kevin Appel Steve Giannell Diane Coffin Vernon Higaki



### Demonstration of CR / Security Interface

- In Some Cases, Interface between CR and Security Not Demonstrated
  - Security Simulated
  - Time Jump
    - Skipped over Critical Demonstrations
    - May 2007 from NEI Superseded by NEO 06-04 R1



### Communications

NIMS Adds New Communications Paths

 Develop a Road Map
 Example in NEI 06-04 R1
 Discuss in Table Top
 Determine Communication Tools
 Test Tools Before Drill



### Instill a Sense of Event Recovery Urgency Site Area Emergency

GENERAL EMERGENCY: Events are in progress or have occurred which involve actual or <u>imminent</u> <u>substantial core degradation</u> or melting <u>with</u> <u>potential for loss of containment integrity</u> or HOSTILE ACTION that results in an actual loss of physical control of the facility...

Imminent Substantial Core Damage Potential for Loss of Containment



# Radiological Release



# **Potential** for Radiological Release



# **If Event Not Mitigated**





Not Here GENERAL EMERGENCY: Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity \

**Oľ** 

HOSTILE ACTION that results in an actual loss of physical control of the facility...



# Loss of Command & Control



## Loss of Control of Spent Fuel Pool OK



GE = PAR



### **Protective Action Recommendation**

General Emergency

- Two Miles 360 Degrees
- Key Hole Out to 5 Miles
- Possibly not Appropriate
- Security Event Consideration
  - Putting General Public on Road
  - Other Hostile Acts

NEI

- Equipment moving to Site
- Mutual Aid Not in Place

### **Airliner Threat Communications**

- Need for NRC to Familiarize Licensee with Protocols
- Protocol Provided to NEI in August 2, 2007
   Letter
  - "Communications Expectations for an Aircraft Threat Scenario"
  - NRC, August 2, 2007
  - NRC Presentations
- Additional Lessons Learned Being
   Evaluated



Resources Available at ICP Have to Mimic Actual Conditions

- Space
- Communications
- Location Consideration
- Simulation
- Plant Experience
  - Operation, Security and Radiological Experience Needed
  - Examples of Experience
- ICP/UC and EOC Interface
  - Demonstration of UC
  - Location of UC



### **During Hostile Action**

Protection of Site Employees
 – Duck and Cover PA Messages
 – CR Unfamiliar with Procedure



### **After Hostile Action**

Coordination between - Ops, Security, LLEA and ERO - Action Plan Operations to Access Plant Damage LLEA to help Secure the Site – Don't Forget – Security Event Security not Integrated into OSC Crime Scene Preservation



### **Joint Information Center**

Law Enforcement
 Officer Safety
 Investigation
 Prosecution

 Need for Separate Public Information Table Top



### **Controlling the Drill**

Knowledgeable Controllers

 Complex Drill
 May have to Adjust Drill On the Fly
 Fire Demonstrations
 Medical Demonstrations

 Central Drill Control



### Where You Find The Lessons?

### NEI 06-04 R1

- Presentations From the Stars
- Table Top Before Drill
- NEI Web Site
- Send Staff to Drills
- NEI Advice
  - NEI Check List
- NRC



## Now Lets Hear From the Stars of Our Program

### But First Lets Turn Around And Take a Break



#### **Marty Hug**

Sr Project Manager Emergency Preparedness Nuclear Energy Institute Phone: (202) 739-8129 Mobile: (202) 439-0768 Email: mth@nei.org

