Post-9/11 EP Initiatives

Nader L. Mamish

U.S. Nuclear Regulatory Commission

W. Craig Conklin

Department of Homeland Security
Federal Emergency Management Agency

National Radiological Emergency Preparedness Conference
Harrisburg, PA
April 11, 2005

FEMA

Purpose

- **FEMA & NRC Seeking Stakeholder Comments & Suggestions**
- **Open to Revising Challenges**
- **Open to Creative Solutions**
- **Desire Stakeholder Views on Offsite Response Communication**

Meeting Format

- **Introduction of Challenge**
- **Introduction of Solutions**
- **Discussion of Solutions & Alternatives**
- **All Ideas Noted for Consideration**

Town Hall Session:
Response to Security Events

- **Security Scenarios at Nuclear Power Plants (NPPs)**
- **Challenges & Proposed Enhancements to Onsite Response**
- **Challenges & Proposed Enhancements to Offsite Response**
- **Additional Initiatives**

INTRODUCTION:
What Do We Know?
What Have We Done?

- **Post-9/11 Changes**
  - **Supplemented Design Basis Threat**
  - **Federal Agency Coordination (Including Creation of Department of Homeland Security (DHS) & State DHS Offices)**
  - **National Response Plan**

Post-9/11 Challenges

- **Terrorist Attack Scenarios Present Challenges**
  - **Safety Basis Does Not Change**
  - **Challenges to Response**
    - **Challenges to Resource Deployment**
    - **Loss of Resources Possible**
  - **Differences in Accident Precursors**

Enhancements to Nuclear Power Plant EP

- Onsite Changes
- Evaluation of EP Planning Basis
- Force-on-Force Exercises
- Consideration of Aircraft Threat

Onsite Changes

- **Alternative Facilities**
- **Onsite Evacuation Routes**
- **Onsite Protective Actions**
- **Staffing Review**

Evaluation of EP Planning Basis

- **EP Planning Basis for Nuclear Power Reactors Remains Valid**
- **Implementation Can Be Enhanced**

Implementation of Enhancements

- **Notification to Offsite Response Organizations (OROs)**
- **Offsite Resources**
- **Examination of NRC Protective Action Recommendation (PAR) Guidance**
- **Terrorist Scenario Based Drill & Exercise Program**

Force-on-Force Exercises

- **NRC Conducting Force-on-Force (FOF) Exercises with EP Participation**
- **Tests EP-Operations-Security Interface**
- **NRC Exercises Conducted Every 3 Years**
- **Lessons Learned by Site EP Programs**

Consideration of Aircraft Threat

- **NRC Communications**
- **Operational Issues**
- **Personnel Safety Issues**

Questions … Comments

- **Questions on Overview?**
- **Onsite Enhancements Are Next …**

Onsite EP Enhancements

- **NRC Staff Met With the Commission Regarding Enhancements**
- **Staff Seeking Feedback at NREP**

Onsite EP Enhancements

- **Emergency Action Levels (EALs)**
- **Prompt NRC Notifications**
- **Onsite Protective Actions**
- **Drill & Exercise Program**

Emergency Action Levels (EALs)

- **Proposed Armed Attack EALs Made More Proactive**
  - Owner Controlled Area Incursion - **Alert**
  - Protected Area Incursion – **SAE**
  - **General Emergency** Remains the Same

NRC Notifications

- **Prompt Notification to NRC of Armed Attack**
- **NRC Will Notify DHS & Warn Other NPPs**
- **Implementation of the National Response Plan (NRP) for Incident of National Significance**

Onsite Protective Actions

- **Onsite Protective Actions (PAs) for Armed Attacks**
- **Enhancements for PAs for Aircraft Attack**

Drill & Exercise Program

- **Pilot Drills at 4-6 Plants**
- **Results to Commission**
- **Conduct Observed Exercise (Off-Year?) at Every Site Over Next 3 Years**
- **Terrorist Scenarios Part of Routine Program Thereafter**

Questions?

Comments?

Offsite Enhancements Next …

- Break -

Offsite Enhancements

- **Abbreviated Notifications**
- **Protective Actions**
- **Activate Fully at Alert**

Abbreviated Notifications

- **Early Notification of OROs?**
- **EALs Anticipating Impact of Terrorist Acts**
- **Notify OROs of Incidents of National Significance**

Abbreviated Notifications

- **Timing of Response May Not Allow Typical Notification Process**
  - **Notification Could Take 4-7 Minutes**
  - **Control Room May Not Have That Time**
- **Follow-Up Notification Performed ASAP**

Proposed Notification

- **One Point of Contact**
- **Site & Classification**
- **Verification?**

Questions?

Comments?

Offsite Protective Actions

- **Security Events Cannot Change Core Physics BUT Events May Not Progress in Logical, Diagnosable or Stepwise Manner**
- **Enhanced Public PAs May be Appropriate in Such Scenarios**
- **Many Sites Already Implement These Types of Actions**

Site Area Emergency
Offsite Protective Actions

- **Sound Sirens**
- **Activate EAS With Instructions**
- **Shelter-in-Place Within 2 Miles**
- **Evacuate Special Needs, Schools, Parks**
- **Prepare for Additional Actions, as appropriate**

Questions?

Comments?

Additional Initiatives

- **Considering Update to NUREG-0654/FEMA-REP-1 to Capture Security Event Enhancements**
- **Potential Review of NUREG-0654/FEMA-REP-1**

Questions?

Comments?

Additional Initiatives

- **DHS & FCC Rolling Out Enhanced Version of Reverse-911 Warning Systems**
- **Systems Could Warn Public Via Multiple Channels: TV, Radio, Phone & Cell Phone**
- **21st Century Notification**

Questions?

Comments?

Additional Initiatives

- **NPP Notifications to OROs & NRC Have Used Telephone & Paper Systems Successfully for Over 25 Years**
- **Procedures Could be Replaced With Rapid Electronic Systems**
- **Notifications Verified by the System Itself**

Questions?

Comments?

What Other Initiatives …

Enhancements …

Should the NRC & FEMA Consider?

FEMA

In Closing ….

- **Summarize & Document Concerns**
- **Summarize & Document Areas Where There Are No Issues**
- **Discuss Future Opportunities for Comment & Input Into the Process**

Conclusion

- **EP Planning Basis Remains Valid**
- **Initiatives & Enhancements Identified for Security Events**

Thank You for Participating

Craig Conklin
Craig.Conklin@dhs.gov

Nader Mamish
nlm@nrc.gov