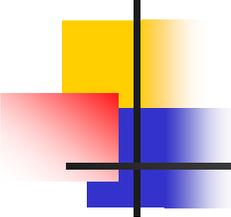


# Enhancements in Emergency Preparedness (EP) Drills and Exercises – A State Perspective

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Martin Vyenielo  
PA Bureau of Radiation Protection  
Chief -Emergency Response Section  
Commonwealth of Pennsylvania



# Hostile Action-Based Emergency Response Drills

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- NEI 06-04, Rev. 1, October 2007,  
“Conducting a Hostile Action-Based  
Emergency Response Drill
  - Based on feedback from the pilot drills and stakeholders
  - Definite enhancement to NEI 06-04 Rev. 0

# NEI 06-04 Rev. 1

## Enhancement - Example

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- Exercise Timeline (NEI-06-04 Rev. 1)
  - Now discourages use of two-phase scenario with time jump
  - Offsite agency concerns with “time jump”
    - Confusing to Exercise Participants
    - Unnecessary Artificiality



# Hostile Action-Based Emergency Response Drills

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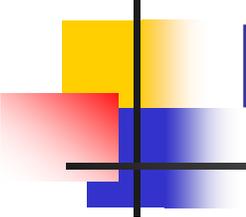
- NEI 06-04, Rev. 1 Calls for Potential for Radiological Release, but Not Actual Release
- BRP Believes Radiological Releases Should be Permitted
  - Should Not be Absolutely Required
  - Should Not be Absolutely Excluded



# Hostile Action-Based Emergency Response Drills

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- Pilot Drills are LEARNING EXPERIENCES
  - Scenario Development Needs to Involve All Stakeholders
  - Question use of drills to satisfy Performance Indicators – intended as “no fault” opportunity to challenge program
  - Apply Lessons Learned from Pilot drills consistently across all utilities and share with offsite agencies.



# Enhancements needed to Hostile Threat based drills

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- Standard Guidance needed for NPP
  - Command and Control
  - Staging Areas for Offsite Responders
  - Communications
  - Credentialing
  - Incident Command System Training



# Biennial EP (Plume Exposure) Exercises

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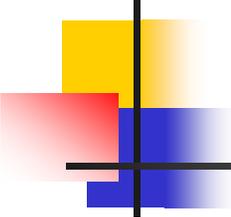
- Current road blocks – Some FEMA regions mandating that PAGS always be exceeded at 5 miles.
- Based on outdated REP-14 and Interim Draft REP Manual that never received stakeholder involvement.
- Stakeholder involvement is needed in evaluating radiological release options



# Problems with requiring PAGS to be exceeded at 5 miles

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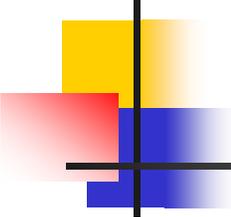
- Negative Operator Training – mitigative actions cannot have significant impact, may require as high as 30% core melt.
- Negative ERO training
- Negative impact on Field Teams
- False Public perception
- Negates use of realistic and more challenging accident scenarios



# Radiological Releases exceeding PAGs

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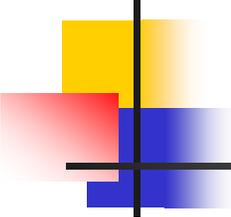
- Currently under review by NRC, NEI and FEMA
- Must have stakeholder input - ORO's and ERO's prior to publishing proposed changes in Federal Register.
- Stakeholder involvement was a vital component of the current Evaluation Methodology Criteria and was performed prior to FR publication



# Biennial EP (Plume Exposure) Exercises

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- Scenario development currently only includes licensee, State, local and FEMA Representatives
- Potential Enhancement : Include NRC representation at scenario development meetings.
- Add realism and challenging aspects to scenario and minimize potential for negative Operator, ERO and ORO Training.



# FEMA REP Program Manual

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- Changes Needed with Stakeholder involvement
  - Input During Formative Phase of Process
  - Provide for Timely Input
  - Exercise Methodology
  - Extent of Play – Release magnitudes
  - Objectives
  - Evaluation Criteria
  - Incorporate Lessons Learned