The NRC Perspective

Patricia A. Milligan, CHP, RPh NRC Office of Nuclear Security and Incident Response 301-415-2223 pxm@nrc.gov



Nuclear Emergency Planning Harvard School of Public Health August 10, 2004

Nuclear Regulatory Commission Mission

 protect public health and safety, and the environment from the effects of radiation from nuclear reactors, materials, and waste facilities.

 regulate these facilities to promote the common defense and security.

Post 9-11

- increased focus on security at nuclear power plants and the impact of terrorism on both onsite and off-site response
- NRC, (and other agencies/organizations) has been conducting comprehensive evaluation of NRC security & emergency preparedness programs
- NRC conducted vulnerability assessments for a broad range of threats to nuclear facilities.

Vulnerability Assessments

- National experts conducted detailed engineering studies using state-of-the-art structural and fire analyses and enhanced methodologies to predict realistic accident progression / radiological consequences
 - Large aircraft attack for at Indian Point unlikely to damage reactor core, release radioactive material
 - Studies confirm there would be time to prevent or minimize any radiological release, and, time to take actions to protect the public.
 - Fast release of radioactive materials is highly unlikely at Indian Point.

Exercise Requirements

- Licensee is required to periodically exercise the emergency plan
- NRC and FEMA evaluate a large scale exercise every two years (scheduled six years in advance):
 - FEMA evaluates offsite planning and response by State and local organizations
 - NRC evaluates onsite response and reviews FEMA findings.
 - Significant coordination effort by FEMA, State and Counties, and plant owner
 - Logistics in NY typically involve over 80 organizations and 500 people

June 8, 2004 Exercise

- NRC and FEMA evaluated emergency preparedness exercise at IPEC on June 8, 2004.
- Preliminary findings of FEMA and NRC: exercise was successful in testing various emergency plan functions and performance of offsite and onsite organizations

Exercise Scenario

- Realistic and challenging:
 - Large jet crashed into facility
 - Electrical power lost
 - Other equipment problems led to emergency declarations (ultimately a General Emergency) requiring protective actions off-site
 - Coordination with off-site law enforcement, fire fighters, other emergency responders
- NRC's vulnerability studies
 - Likelihood of both damaging the Indian Point reactor core and releasing radioactivity that could affect public health and safety is low.
 - Significant time would be available to implement plant mitigating measures and offsite emergency plans.
 - NRC vulnerability studies confirm that emergency planning basis remains valid.

Exercise Evaluation

- Lessons learned strengthen overall preparedness:
 - Areas identified where plans can be improved
 - Lessons learned from exercise incorporated into plans/training
- Preliminary observations from exercise:
 - Licensee and offsite responders demonstrated proficiency in decision making and implementing plans.
 - Review/enhance initial processing and communication of threat information

Outreach Activities

- Many events/history that has shaped public opinion regarding Indian Point in the post 9/11 environment.
- Large volume of information before the public:
- What does it all mean? How does it come together?

Old NRC studies need to be put in context
Plant operating history/maintenance
Prior EP exercises
Prior NRC inspections
Reports by non-governmental organizations and individuals
Post 9/11 NRC evaluations

Outreach Activities

- Training for State and County emergency management staff
- Briefings for State ,County and local officials
- Integrated response tabletop exercise
- Commission met with NY County Executives and Congressional Delegation
- "Information Center" established on exercise day to discuss EP issues raised by media, congressional staffs and others.
- Participated with FEMA at public exit meeting
- Briefing with staff from Congressional offices following public exit meeting

Elements of Effective Security and Emergency Preparedness

- Onsite Security Response
 - NRC issued security orders to licensees
 - Force-on-Force exercise at Indian Point July 2003.
 - Plant security-local law enforcement examined.
 - Force-on-Force exercise to be performed every three years.
- Integrated Response/Crisis Management
 - Onsite security interface with local, State, and Federal response.
 - HSC/DHS integrated response tabletop exercise at Indian Point in April 2004, key players from Federal, state and Local agencies.
 - This is a pilot effort, two completed, several additional exercises planned.
- Consequence Management
 - Exercises conducted to ensure site, local, and State responders can implement their emergency plans
 - June 8th exercise included a terrorist scenario.
- Indian Point first nuclear power plant to exercise all three elements

Summary

- Indian Point and all NPPs meet strict safety, security, and emergency preparedness performance requirements.
- Indian Point is the first site in the country to have three security/emergency preparedness elements completed: forceon-force exercise, integrated response tabletops, and emergency planning exercise with a terrorist scenario.
- June 8th emergency preparedness exercise was realistic and challenging, and IPEC and responders demonstrated proficiency.
- NRC, IPEC, and emergency preparedness responders will address lessons learned from exercise.
- NRC will continue to assess potential threats to ensure that elements are adequately tested.

QUESTIONS?