NRC's Emergency Preparedness Regulations: The Need for a Performance-Based Approach

December 8, 2009

Deborah Brancato
Staff Attorney, Riverkeeper, Inc.

Indian Point

- Uniquely situated
- Existing Emergency Plan:
  - Completely Unworkable
  - Notable lack of confidence in effectiveness of plan
- And yet, consistent NRC and FEMA approval

The Fundamental Problem

Lack of performance based standards to assess and ensure the effectiveness of nuclear power plant emergency plans

Drills & Exercises

- NRC's Rule Change: inclusion of hostile-based events, more realistic, unpredictable scenarios
- The Failure: too vague to ensure accurately varied future drills
- Need: more precise, measurable criteria requiring consideration of relevant site-specific factors

ORO Coordination

- NRC's Rule Change: ensure ORO availability during hostile events
- The Failure: changes are procedural in nature, would not assure needed coordination mechanisms are actually in place
- Need: enforceable criteria requiring licensees to show various response abilities

Alert & Notification Systems

- NRC's Rule Change: demonstrate backup ANS capabilities
- The Failures:
  - no back-up power requirement
  - no standard to guarantee equal effectiveness of backup system
- Need: enforceable requirements for functional primary and backup systems

Evacuation Time Estimates

- NRC's Rule Change: update ETE's based on 10% population changes
- The Failures:
  - Inaccurate estimates due to flawed methodology
  - ETE's play no meaningful role in decision-making process
- Need: impose ETE's as performance-based standards

Conclusion

- NRC's Proposed Rule*: Overall, fails to e*nsure workability of emergency plans in light of realistic site-specific factors
- The Solution: Adopt standards by which the effectiveness of individual emergency plans can be accurately evaluated

ACRONYMS

- ANS: Alert and Notification Systems
- ETE: Evacuation Time Estimates
- ORO: Offsite Response Organizations