NRC Technology-Neutral Framework

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Goal

- Develop a technical basis to support a new Part 53
  - A risk-informed, performance-based, technology-neutral alternative to 10 CFR Part 50

Objectives

- Enhance safety and security
- Develop framework to use risk information
- Use risk information to provide flexibility in plant design and operation
- Ensure risk-informed activities continue to meet the Commission's PRA Policy Statement
- Allow for different reactor technologies that will promote stability and predictability

Framework

- Defense-in-depth structure
- Risk-informed acceptance criteria
- Technology-neutral
- Integration of safety, security and preparedness
- Performance-based

Policy Issues, Examples

- Level of safety
- Integrated risk
- Containment performance standards
- Mandatory versus voluntary

Technical Challenges, Examples

- Risk-informed licensing basis
- Defense-in-depth – treatment of uncertainties
- Technical acceptability for future PRAs
- Security performance standards
- Technology-neutral criteria

Status

- Working draft to be placed on RuleForum website as part of an advanced notice of proposed rulemaking
  - Tentative date of April 2006
- Final draft Framework to be completed by December 2006, consistent with Commission approved schedule