



Summary of Recent NRC PRA Research Activities

**6th WGRisk Annual Meeting
2 - 4 November 2005**

**Alan Rubin
Probabilistic Risk Analysis Branch
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission**



United States Nuclear Regulatory Commission

- **10 CFR 50.46, Acceptance Criteria for Emergency Core Cooling Systems (ECCS)**
- **Risk-Informing the Pressurized Thermal Shock Rule (10 CFR 50.61)**
- **PRA Quality/Development of PRA Standards**



United States Nuclear Regulatory Commission

- **Fire Risk Research Program**
 - Alternative Fire Protection Rule
(10 CFR 50.48(c))
 - Post-Fire Safe-Shutdown Circuit Analysis
Resolution Program
- **Advanced Reactors**
 - Regulatory Structure for New Plant Licensing
 - PRA Methods Development to Support
Advanced Reactor Regulatory Activities



United States Nuclear Regulatory Commission

- **Risk-Informed Activities for Materials and Waste Safety Arenas**
 - Development of a Framework for Incorporating Risk Information in the NRC Office of Nuclear Material Safety and Safeguards (NMSS) Regulatory Process
 - Dry Cask Storage PRA
- **Human Reliability Analysis (HRA)**