Overview of Regulatory Development Structure

- **Regulatory Development** is one part of the DOE's Advanced Reactor Demonstration Program
  - Advanced Reactor Demonstration Projects (funded via DOE's OCED)
  - Risk Reduction for Future Demonstrations
  - National Reactor Innovation Center
  - Regulatory Development
  - Advanced Reactor Safeguards

- **Regulatory Development** has four major components:
  - Regulatory Framework Modernization
  - Fast Reactor Regulatory Development R&D
  - Molten Salt Reactor Regulatory Development R&D
  - Gas Reactor Regulatory Development R&D

Regulatory Framework Modernization Program

- This portion of DOE's Advanced Reactor Demonstration Program (ARDP) directly engages and supports the industry and Nuclear Regulatory Commission (NRC) in addressing and resolving key regulatory framework issues that directly impact the "critical path" to advanced reactor demonstration and deployment

- This area focuses on risk-informing and adapting ("modernizing") the regulatory framework for commercial reactor facilities, including:
  - Developing adaptations of light water reactor (LWR) based regulations for advanced non-LWRs
  - Establishing risk-informed performance-based NRC license application content and review criteria guidance
  - Establishing risk-informed regulatory approaches for key parts of the plant operations phase

- Identified scope also includes the establishment of key licensing technical requirements that have been identified by industry as areas of regulatory uncertainty when pursuing commercial facility deployments

- These program efforts are focused on achieving formal NRC endorsement or approval, where applicable, so that these areas of regulatory uncertainty are clearly resolved

- Program activities are primarily aligned with Strategies 3 and 5 from the NRC's Implementation Action Plan

Strategy 1 Knowledge, Skills and Capability	Strategy 2 Computer Codes & Review Tools	Strategy 3 Flexible Review Processes	Strategy 4 Consensus Codes and Standards	Strategy 5 Policy and Key Technical Issues	Strategy 6 Communication