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A New Comprehensive Site Level 3 PRA to Update NUREG-1150

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Staff PRA: NUREG-1150

- Five PRAs conducted to examine severe accidents in nuclear power plants.
- Issued December 1990.
- One of the major sources of technical information that supports risk-informed regulation.

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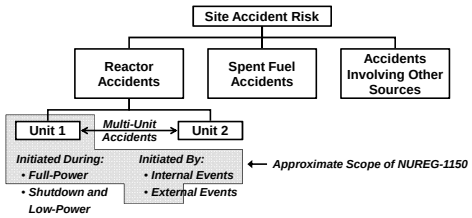
Why Update NUREG-1150?

- Since NUREG-1150 was completed:
  - Many advances in PRA methods, models, tools, and data.
  - Many plant changes that affect risk.
- SOARCA insights indicate lower consequences for the most likely sequences.
- We are acting to address near-term real regulatory needs.

Proposed Scope



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Objectives

- Improve our understanding of nuclear power plant site accident risk
- Develop a “risk toolbox”
- Provide training opportunities

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Our Vision Includes. . .

- Completeness
  - All plant operating modes
  - All radiological hazards
  - All hazards (internal and external events)
  - Onsite and offsite consequences
- Consistency
  - Common assumptions, methods and data
  - Meaningful ranking of risk contributors

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… And …

- State-of-the-art
  - Current best practice, as appropriate to specific near-term uses of project output
  - Conformance with PRA standards
- 21st century documentation
  - Project results, methods, models, tools, and data
  - Support for a wide variety of regulatory applications

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Tentative Schedule

- Scoping Study (FY11)
  - Finalize objectives and scope
  - Select sites
  - Select PRA methods; develop or expand methods as needed
- Pilot Site Study (FY12)
- Follow-On Site Studies (to be determined)

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