



*United States
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Session G2
Research Activities in PRA**

PRA Research and Development: Ongoing Activities and Potential Needs

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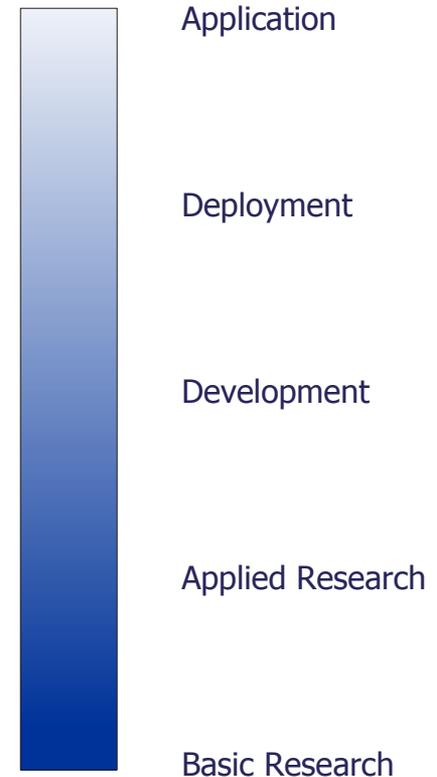
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Major Areas of PRA Support Activity



Risk Methods R&D – Ongoing Activities

- Human reliability analysis (HRA)
- Fire risk analysis
- Digital I&C systems reliability
- Advanced reactors PRA
- Risk due to aging SSCs
- Uncertainty analysis



HRA Methods - Ongoing Activities

- Guidance for performing and reviewing HRA
- Human Event Repository and Analysis (HERA) database
- User's Guide for the ATHEANA (A Technique for Human Event Analysis) HRA method

Fire Risk Analysis Methods - Ongoing Activities

- Risk-informed, performance-based fire protection rule
 - Fire Risk Requantification Study (draft NUREG/CR-6850, EPRI 1008239)
 - Fire Model Verification and Validation (joint with EPRI)
- Fire PRA standard (ANS)
- Review guidance for change analysis

Digital I&C Methods – Ongoing Activities

- Review of currently available methods
- Data analysis
- Method acceptance criteria development
- Case studies
- Tool development

Areas of Potential Interest for Future R&D

- Probabilistic treatment of system dynamics
- Emergency preparedness and response
- PRA information base