



RIC 2008 Industry Perspective on Risk Applications

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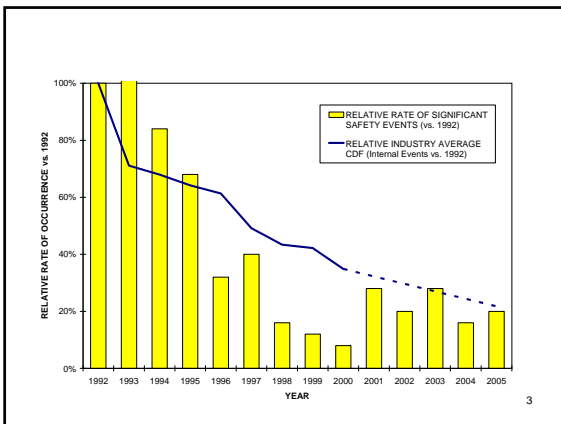
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Industry Goals

- Achieve widespread implementation of risk-informed regulatory improvements
- Demonstrate business and safety case for improved PRAs
 - Consensus standards
 - Broader scope of initiators
- Continue demonstrated trend in safety and operational improvements

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Current Situation

- After 10 year, effort, most envisioned regulatory improvements have been achieved
 - Notable exception is 10 CFR 50.46a
 - Some major improvements implemented only by pilots so far
- Industry activities will shift from development of applications to implementation

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“Mandatory” Risk Applications

- Maintenance Rule
 - Expect revisions to configuration control provisions to address broader scope of initiators
- Reactor Oversight Process
 - Performance indicators
 - Significance Determination Process

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Voluntary Risk-Informed Regulatory Applications

- 10 CFR 50.69, Scope of special treatment regulations
- 10 CFR 50.46a, Large break Loss of Coolant Accident redefinition
- 10 CFR 50.48c Risk-informed fire protection
- Risk-informed Inservice Inspection
- Risk-informed Containment leak rate testing interval

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Applications (Continued)

- Risk-Informed Technical Specifications
 - Completion times (Initiative 4B)
 - Surveillance test intervals (Initiative 5B)
 - End States (Initiative 1)
 - Missed surveillance (Initiative 2)
 - Mode restraints (Initiative 3)

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PRA Consensus Standards

- Enable acceptance of more significant voluntary applications
- Provide enhanced capability for “mandatory” applications
- Must undergo piloting and feedback process to be usable
- Are resource intensive to meet and peer review

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Industry Challenges

- PRA infrastructure consumed
 - Reactor Oversight Process/MSPI
 - Fire PRA development
 - Reg Guide 1.200 compliance efforts
 - Peer review
- Industry executive support
 - Strategic considerations, new plants
 - Value proposition paper developed by EPRI

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Industry Challenges (Cont)

- Achieving acceptance of “non PRA”
NRC staff can still be challenging
 - PRA policy statement needs to be instilled
- Decisionmaking on very small risk thresholds within uncertainty band
 - Consumes industry resources on matters of small risk significance
- “Design basing” of PRA

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Conclusions

- Applications are the driver for improved PRAs
- Most major applications have been approved for pilots
- Now widespread implementation is the goal
- PRA standards will require time to meet
- Some challenges remain

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